



**DISTRICT BOARD**

Megan Clark  
Rabi Elias  
Russ Greenfield  
Craig K. Murray  
Judy Schriebman

**DISTRICT ADMINISTRATION**

Chris DeGabriele,  
General Manager  
Michael Cortez,  
District Engineer  
Mel Liebmann,  
Plant Manager  
Susan McGuire,  
Administrative Services Manager  
Greg Pease,  
Collection System/Safety Manager

**ADDENDUM NO. 1**

Date: August 29, 2018  
Project: **Secondary Treatment Plant Upgrade & Recycled Water Expansion**  
Job No.: 12600-07/16650-02

To: All Planholders and Prospective Bidders

This addendum consists of **one hundred thirteen (113) pages** including this page and all attachments with cover sheets broken down as follows:

- Main Addendum #1 Document (including cover, signature page, and this sheet) – 14 pages
- Attachment A – 4 pages (including cover sheet)
- Attachment B – 70 pages (including cover sheet)
- Attachment C – 11 pages (including cover sheet)
- Attachment D – 9 pages (including cover sheet)
- Attachment E – 3 pages (including cover sheet)
- Attachment F – 2 pages (including cover sheet)

Acknowledge receipt of this addendum in the space provided on page 2-5, Proposal Cover Page and Bid Schedule, of the Bid Forms, and by signing in the space provided below. Submit original copy of this addendum cover page along with the bid. Failure to do so may disqualify the bidder.

Las Gallinas Valley Sanitary District: Bidder: \_\_\_\_\_

Michael P. Cortez, PE, District Engineer  
Tel. No. (415) 472-1033, ext. 18

\_\_\_\_\_  
(Authorized Signature)

\_\_\_\_\_  
(Date)

The following changes and/or clarifications are hereby made to the Contract Documents, and shall become a part of the Contract Documents dated July 2018.

**General Information:**

1. For the convenience of bidders and plan holders, the District will post the preliminary pre-bid construction schedule to aid with the bidding and planning process. These files are available to download from the District's website.

In addition, other Reference Material has been requested and will be posted to the same location as soon as it is available, including spreadsheet copies of the tables from Volume 4B (refer to the comments for Volume 4B for additional details) and CAD files of the site grading with existing and proposed contours. Please note that this document and any other future Reference Material or Information is for reference purposes only and is subject to the following conditions:

- a) Additional Information may include, but not be limited to, CAD and BIM files, geotechnical information, prebid construction schedule, and other Reference Material used by the Design Engineer and/or District in preparing the Contract Documents. The Additional Information, and/or Reference Material, is provided solely as a convenience and shall NOT be considered "Bid Documents", "Contract Documents", "Construction Documents", or any type of contractual document.
- b) The Additional Information, and/or Reference Material, may not be used in lieu of obtaining information by other means required, such as by site reconnaissance or physical or aerial survey or other procedures or sources. Any conclusions or information obtained or derived from the Additional Information and/or Reference Material will be at user's sole risk. By providing information in this format, District and Design Engineer make no representations, whether express or implied, whether user's means, methods, techniques, sequences, or procedures are adequate, appropriate, or approved, and whether the use of the information obtained or derived from the Additional Information and/or Reference Material, is appropriate for such use.
- c) To the maximum extent permitted by law, District and Design Engineer disclaim any and all liability, claims, or loss of any kind that may relate or be attributable to Bidder's reliance on the Additional Information or Reference Material. In addition, Bidder agrees to the fullest extent permitted by law, to indemnify, defend, and hold the Design Engineer, and District harmless from any damage, liability, cost, or loss, including, but not limited to, attorney's fees and cost of defense, arising from the use or re-use of the Additional Information and/or Reference Material by Bidder or anyone who has gained access to the Additional Information and/or Reference Material from Bidder.
- d) Bidder shall promptly report to District any apparent inconsistencies between the Additional Information and/or Reference Material, and the Contract Documents or Bid Documents.
- e) The prebid construction schedule was developed solely for the use of the District to provide an estimate of total contract time needed to complete the total work. The schedule was not prepared in sufficient detail to meet the requirements of DIVISION 1 (of volume 3A) regarding scheduling and project progress. The District and the Design Engineer assume

no responsibility whatsoever with respect to the sufficiency or accuracy of the prebid construction schedule, and no compensation or time extension shall be granted as a result of its availability to bidders. Using or relying upon any part or all of the prebid construction schedule is done at the Contractor's own risk and cost.

- f) The Additional Information and/or Reference Material be retrieved electronically from the District's project website (the same location where other bidding material is available). In accepting or using any of the Additional Information and/or Reference Material generated or provided by Design Engineer and District, Bidder agrees that Design Engineer and/or District shall be deemed the authors of the Additional Information and/or Reference Materials and shall retain all common law, statutory law, and other rights, including copyrights for same. Bidder further agrees not to sue the Additional Information and/or Reference Material, in whole or in part, for any purpose or project other than the project for which the Additional Information and/or Reference Material was prepared.
2. For reference, American Iron and Steel (AIS) requirements are not in effect for this project.
  3. The sign in sheet from the August 21, 2018 site walkthrough is provided as an attachment to this addendum for reference.

**Volumes 1 & 2:**

1. Bids are now due at **2:00 PM** local time on 9/27/2018 rather than 11:00 AM as indicated in paragraph 2 of the Instructions to Bidders in Volume 1.
2. Bid Schedule (Volume 2):
  - a) To facilitate the final price escalation in January 2019, suppliers of Owner Selected equipment were contacted and asked to adjust the price based on the latest available Index associated with their equipment. This provides an updated price, reducing the change between bid-opening and the issuance of the PO as well as ensuring that all parties are in agreement regarding the precise index and method for calculating price escalation. Accordingly, the following adjustments are made for Owner Selected Equipment Bid Items:
    - i. **Bid Item #16.a** - Hybrid FFAS by H<sub>2</sub>O Innovations USA:  
Updated Net Amount Remaining valid as of **July 2018\*** is: **\$2,152,746.66**  
(\*Index value is listed as preliminary in the reference material and has not been finalized by the governing agency)
    - ii. **Bid Item #16.b** – Eductor Tube Mixers by JDV Equipment Corporation:  
**No price escalation is anticipated** (as currently stated in Section 151100).
    - iii. **Bid Item #16.c** - After additional correspondence with the supplier (Ovivo), the cost basis for Bid Item #16.c valid as of July 23, 2018 as noted in the Bid Schedule is incorrect. The updated reference price for **July 23, 2018** is **\$370,464** as currently

detailed in Section 151100 (Owner Selected Equipment). Page 2-19 of Volume 2 (Bid Schedule) has been revised to account for this updated price.

- iv. **Bid Item #16.d** – GE Pressure Membranes:  
Updated Net Amount Remaining valid as of **July 2018** is: **\$1,606,086.26**
- v. **Bid Item #16.e** – While no price escalation is anticipated for this equipment, due to the supplier’s error in calculating applicable sales tax for Bid Item #16.e (Owner Selected Equipment – Mechanical Thickeners), page 2-20 of Volume 2 (Bid Schedule) has been revised to include the updated total cost for Item #16.e. **The updated Bid Schedule page is included as an attachment to this addendum.** Note that the associated table in Section 151100 has also been updated accordingly as described below.
- vi. **Bid Item #A.3 (Bid Alternate Item)** – Suez UV Equipment Package:  
Updated Net Amount Remaining valid as of **June 2018** is: **\$509,485.03**

**Revised pages of the impacted bid schedule sheets are provided as an attachment to this addendum.**

### **Volume 3A**

- 1. **Volume 3 Appendix.** A “Pre-Demolition Asbestos and Lead Survey Report” was conducted and the results furnished as a report to the District on August 3, 2018. This report contains findings regarding asbestos and lead-containing materials associated with the demolition and upgrade work for this project. A summary of the findings has been added to Section 024100 (as described below in this addendum), and the complete report is hereby added as Appendix B to the Volume 3 Appendix. **A copy of the report is also provided as an attachment to this addendum for reference.**
- 2. **Section 011000 – Summary of Work:**
  - a) For reference, item p of paragraph 1.5.B.1 (Phase 1 Summary) for the Recycled Water Distribution Pump Station Modifications involves replacing the existing distribution pumps and will commence in Phase 1 but might not be completed until the beginning of Phase 2. The phasing drawings (general sheets) indicate this work being completed in Phase 2 (see sheet G-24 of Volume 4A).
  - b) In paragraph 1.5.B.2 (Phase 2 Summary):
    - Item f.2 should reference removal Item #4 rather than Item #11 (in reference to the demolition schedule listed on Sheet G-23 of Volume 4A).
    - Item f.8 the removal of the 30” SC influent line should be removal Item #1 (not #26) and the secondary biofilter recycle line removal should be Item #8 (not #15) as referenced on sheet G-23 of Volume 4A.
  - c) In paragraph 1.5.B.3 (Phase 3 Summary):
    - Item a.3 should reference removal Item #4 rather than Item #24 (in reference to the demolition schedule listed on Sheet G-25 of Volume 4A).

Item a.6 - removal of effluent water pumps (at CCC box) and pneumatic tank should be listed as part of Phase 2 (in paragraph 1.5.B.2 section f) and not as part of Phase 3.

3. **Section 024100 – Demolition, Salvage, and Reconstruction.** This section has been updated to include the results from a recent hazardous materials survey as it pertains to the construction activity associated with this project. Multiple structures that are to be removed or impacted during this project have been identified as containing asbestos or lead materials. As noted in the revised section, the Contractor is responsible to properly contain, handle, remove, and dispose of hazardous materials in accordance with local and state requirements including Cal-OSHA requirements for asbestos and lead.

**A revised version of this section is included as an attachment to this addendum.** Note that updated text is shown in red colored font to facilitate identifying the changes and new language.

4. **Section 151100 – Owner Selected Equipment**

- a) To clarify regarding index-linked price escalation and Owner selected equipment, more detail for certain indices is provided as follows:
- i. 1.3.A – **Hybrid FFAS** By H<sub>2</sub>O Innovations USA (Item 16.a in the Bid Schedule) – The specific Products Produced Price Index (PPI) that will be utilized is the **Metals and Metal Products PPI**. The cost table has been updated in this section to reflect the price escalation through July 2018.
  - ii. 1.3.C – **Secondary Clarifier Mechanisms** by Ovivo USA, LLC (Bid Item # 16.c in the Bid Schedule) – The specific indices and amounts to be utilized for price escalation purposes are further detailed as follows:
    - ATI Metals surcharge index for **Stainless Steel (316 SS)** at 9,182 pounds estimated weight.
    - North American Composite Carbon Steel for **A36 Carbon Steel** at 39,621 pounds estimated weight.
  - iii. 1.3.D – **UV Disinfection System** by Suez Treatment Solutions, Inc. (Bid Item #A.3 in the Bid Schedule) – The specific PPI commodity code index is already listed in Section 151100. The cost table has been updated in this section to reflect the price escalation through June 2018.
  - iv. 1.3.E – **RWTF Pressure Membrane Filter Expansion Package** by GE/Suez (Bid Item #16.d in the Bid Schedule) – The specified Consumer Price Index (CPI) is specifically they **CPI-U (for Urban Consumers)** as provided by the U.S. Department of Labor Bureau of Labor Statistics. The cost table has been updated in this section to reflect the price escalation through July 2018.

- b) Due to the supplier's error in calculating sales tax for Bid Item #16.e (Owner Selected Equipment – Mechanical Thickeners) as discussed above in Volume 2, the "Summary of Contract Price" table for the mechanical thickeners provided in paragraph 1.3.F is has been updated.

**A revised version of Section 151100 – Owner Selected Equipment is provided as an attachment to this addendum.** The revised version includes the updated cost tables as described herein.

## Volume 3B

### 1. Section 312000 – Earth Moving

For clarification, the results of the Miller Pacific report (see Section 319000) regarding stockpile material onsite have been reviewed with the Geotechnical engineer. Per the report, material from areas where composite samples #2 and #3 were taken are reasonably close to requirements for certain type of site backfill material. Accordingly, stockpile material from areas near these sample locations may be used for the following applications:

- a) Backfill beneath and adjacent to caisson-pier foundation structures (e.g. anoxic/aeration basins, electrical building, and UV building).
- b) Subgrade for roadways (**excluding** the 12" of road base required directly beneath the paved surface).
- c) Raising grade on site that is not otherwise beneath roadways, structures, or other improvements.
- d) In any application, the material must still meet the minimum density, moisture content, and compaction requirements as noted in this section for each application and its installation is subject to the same inspection and approval as required for any material.

This stockpile material is **not** approved for the following applications:

- a) Structural backfill beneath structures/slabs that are not on caisson/pier foundation structures (e.g. slabs on grades, shallow foundations, etc.).
- b) Road base beneath pavement.

**Note that stockpile material from the area near composite sample 1 (refer to report in Section 319000) has a much higher plasticity index (49%) and may only be used to raise grade on site that is not beneath structures, roadways, or other improvements. In addition, this material should only be utilized if other sources of available backfill material have already been utilized (e.g. over excavation material, crushed rock, other stockpile material, etc.). This higher plasticity material appears to represent roughly 1/3 of the stockpile material.**

### 2. Section 319000 – Geotechnical Reports

The first report provided in the section, by DAC Associated, Inc., was a draft version and has undergone some minor edits. The changes do not appear to impact the scope, intent, or

recommendations outlined in the report but address issues with clarity, consistency, and grammar. The following list summarizes the changes that were made:

- a) Page 2 – table of contents page numbers are corrected.
- b) Page 4 – minor edits and corrections to grammar and punctuation.
- c) Page 5 – line spacing/formatting issue has been corrected.
- d) Page 7 – added “2018” to list of previous work in the final paragraph of the “PREVIOUS WORK” section.
- e) Page 8 - minor edits and corrections to grammar and punctuation.
- f) Page 10 – Corrected the number of borings from 7 to 10 in the first paragraph of the “Bedrock Surface Contours and Outcrop Pattern” section.
- g) Page 11 - minor edits and corrections to grammar and punctuation.
- h) Page 12 –Language has been updated for better clarity and detail. The first two paragraphs of this page are updated as follows:
  - i. “However, the surcharge typically consisted of a 3-foot layer of fill over the peripheral access road starting from the entrance to the treatment facility and ending just southeast of the overflow parking area. In addition, surcharging was performed within the area currently accommodating the filtered water storage facility. No surcharging was documented to the south, where the proposed new secondary clarifier #1, @1, as well as where the aeration and anoxic basins will be constructed.
  - ii. Therefore, we anticipate considerable total and differential settlements as a result of raising grades by about 5 feet, especially south of the 1982 surcharge program . The anticipated magnitude of bay mud settlement under 5 feet of fill ranges from 6 to 18 inches.”
- i) Page 13 – Line spacing has been updated for consistency. The final sentence of the last paragraph on the page (second paragraph of the “Surcharging” section) is updated as follows:
  - i. “The final grades would then be underlain by less-compressible materials.”
- j) Page 14 - minor edits and corrections to grammar and punctuation.
- k) Figure 6: “Report Date” on figures is updated to the correct revision date of July 2018.
- l) Appendix A: “Report Date” on boring logs is updated to the correct revision date of July 2018.
- m) Appendix B: Page numbers are corrected to begin with page “B-1” rather than “B-2”. The “Report Date” on these pages is updated to the correct revision date of July 2018.

These changes will be issued with the conformed set for construction but are noted here for reference.

## Volume 4A

1. **Sheets MMD-4 & MMD-6:** Note 10 on each of these sheets should read “ASSOCIATED W/ PHASE 1” rather than Phase 2.

**2. Sheet C-2:**

- a) Note that the sludge thickener pad (point numbers 35 and 36) will be a new concrete pad as shown in the mechanical thickening drawings (sheet MTS-1 of Volume 4A) replacing the existing concrete pad currently in place. These points are marked as “existing” in the horizontal control schedule as they reference the coordinate of the existing pad, but this pad is to be removed and replaced per sheet MTS-1.
- b) The meter vault corners (points # 29 and #30) are updated to the following coordinates:

PNT	Northing	Easting
29	2201866.64	5980430.25
30	2201870.81	5980448.21

This matches the detail shown on sheet C-16, where the pipe is not centered in the meter vault. The updated meter vault position will be corrected on all applicable sheets in the conformed set.

**3. Sheet C-4:**

- a) Catch Basin #6 (noted CB#6) is a new catch basin and is not replacing an existing catch basin. Accordingly, the note to “Match EX Rim” for this catch basin is removed.
- b) Note that there are two (2) risers shown on this sheet that are not identified by specific callouts. One is located on the south end of the CCC basin between the CCC Weir box and the generator pad. The second riser is just south of the proposed dechlorination dosing facility.

**4. Sheet C-5:**

- a) The “Site Grading Legend” item “New Permeable Sidewalk” should read “New Pervious Concrete” to match sheet C-4 and the associated detail/callouts.
- b) The retaining wall callouts (item 8-1 and 8-3) should reference two different details. The retaining wall along the public road (8-1) should reference sheet C-43; the retaining wall extension around the digester supernatant pump station (8-3) should reference sheet C-41.

**5. Sheets C-4 and C-5:**

- a) Note #5 (Asphalt paving over base course) is updated to require a minimum of 3” thick asphalt paving over the base course. In other words, all asphalt paving at the site is anticipated to have a minimum thickness of 3-inches.
- b) Note #11 (Type A curb) should reference Detail #116 on sheet CD-3.
- c) The hatching for the new pervious concrete between primary clarifiers #2 and #3 should be dark (to match the legend for new) rather than lighter hatch for existing. Note #6 is already provided in this area indicating new pervious concrete is required.
- d) Lengths for the slide gates indicated on sheets C-4 and C-5 (item #16 in the legend) are intended to match their associated roadways but are not specifically called out in the drawings. For reference, the slide gate located between the north end of the anoxic/aeration basin structure and the bid-alternate UV building is 30-feet long. The slide gate towards the north end of the plant, near the proposed dechlorination dosing facility is 21-feet long.



Note that at the contractor’s discretion, one of the sliding gates to be removed (near the RWTF membrane building and hypochlorite facility) is 22-feet long and could potentially be reused for the 21-foot long gate mentioned above. The gate would need to be removed and reinstalled in good condition in order to be acceptable to Owner.

**6. Sheet C-6:**

- a) Pipes #118, #119, #120, and #124 should be HDPE **SDR 17** rather than SDR 26.

**7. Sheet C-7:**

- a) In the second sentence of Note 1 located at the bottom left corner of the drawing, the phrase should read “due **to** seasonal changes” rather than “due it seasonal changes.”
- b) The new storm drain line located in the upper left corner of the site (near primary clarifier #1) is 12-inch DWV SDR 35.
- c) The manhole table (upper right corner) is updated as follows to match the rim elevations with the grading plan and final yard piping plan. Revised items in the table are highlighted with bold red text:

MANHOLE NO.	TYPE	RIM ELEV	DIAMETER	PIPE CONNECTIONS								
				SIZE	INVERT	ANGLE	SIZE	INVERT	ANGLE	SIZE	INVERT	ANGLE
1	DOGHOUSE	<b>13.55</b>	48"	6"	5.19	S	6"	5.17	NE	6"	<b>7.70</b>	W
2*	DOGHOUSE	<b>14.50</b>	48"	6"	4.93	S	6"	4.91	N	--	--	--
3	DOGHOUSE	<b>13.63</b>	48"	6"	3.20	SW	6"	3.18	N	<b>6"</b>	<b>8.30</b>	<b>E</b>

- 8. **Sheet C-11:** The tag for the analyzer referenced in Note 1 should be **43-ME-1640** rather than 52-ME-1250; the 52-ME tag references an analyzer to be installed in the RWTF membrane building.

**9. Sheet C-12:**

- a) A 1-inch potable water line (Pipe #107) is required for the emergency eyewash showers associated with the Dechlorination Dosing Facility. This 1” line will originate from the new 2.5” potable water main to be installed adjacent to the dechlorination facility and will require approximately 35-feet of 1” HDPE per yard piping schedule pipe #107. This additional line will be shown in the conformed set for construction.
- b) Note that the “GENERATOR” leader should point to the generator pad at the south end of the electrical building rather than the access road.

- 10. **Sheet C-17:** The opening for the 6” air vent shown on the plank & guardrail plan of the meter vault is not required and removed from the project.

- 11. **Sheet C-18:** The yard piping identifier for Pipe #100 near the generator pad should point to the new 18” line to the left of the tag. Note this is the same Pipe #100 as indicated on other yard piping plan sheets.

- 12. **Sheet C-24:** Pipe Connection Detail 4 on this sheet is not referenced on sheet C-8 and is no longer used.

13. **Sheet C-25:** The “Note 1” referenced in detail 14 on this sheet is missing and should read “Coat, line, and protect all WS pipe in accordance with technical specifications.” In addition, valve **51-V-1130** as identified in this detail is missing from the valve schedule and is here by added to the valve schedule as follows:

Tag: 51-V-1130; Location: Yard Piping; Service: MMWD Clearwell Bypass;  
Type: Butterfly; Size: 18”; Materials SS; Connection: FLxFL; Actuator: NUT;  
Remarks: Dezurik Butterfly Valve Model 18-F1-S2 for Buried Service w/ Valve  
Box, Nut, and Stem.

The valve will be included with the valve schedule in the conformed set.

14. **Sheet C-26:**

- a) For pipe connection detail 21 on this sheet, the existing 12” sewer main may be steel pipe or HDPE (there are conflicting records). The current detail assumes HDPE but this may not be the case. As with all existing pipes and utilities, contractor is to verify and confirm actual conditions.
- b) The strut support called out on connection detail 23 on this sheet should reference “similar to” detail 543/MD-7 rather than repeating the air/vac valve mechanical detail.

15. **Sheet AS-8:** This sheet (namely Section ‘G’) has been revised to correctly show the relationship of the grade beams and floor slabs relative to the channel structure. This section now matches the design intent and the dimensions/configuration shown in the related sections J & K on sheet AS-9. **A revised version of sheet AS-8 is provided as an attachment to this addendum.**

16. **Sheet UVS-1:** The finished floor “FF” callout of 21.52 on the raised exterior and UV channel wall on this sheet is errant is hereby removed. Note that the top elevation of this wall is 19.85 as indicated in multiple sections.

17. **Sheet UVS-9:** In Section ‘C’, the “FF” elevation callout for the UV basin channel floor of 14.52 is errant and should be removed. All elevations are as dimensioned from the TOW elevation of 19.85 as indicated in this section.

## **Volume 4B**

1. **Correction on the total number of sheets:** Per the drawing index (sheet GI-02), volume 4B has a total of 158 sheets. The sheet number tabulation in the bottom right corner of each sheet incorrectly stats “ of 159.” Each sheet should read “of 158”; **this will be corrected in the conformed construction set.**
2. For convenience, the tables associated with sheets E-20 thru E-35, E-44, and E-45 have been uploaded in Excel format and is available at the District’s website for download. These tables are for the Bidder’s reference and convenience only and do not supersede or replace the complete information provided in Volume 4B.

**Questions:**

The following questions were submitted on 08/22/2018; questions that were not able to be addressed in time for this addendum will be addressed in future addenda.

1. The bid submittal time was changed on the previous bid to standard bid submittal time of 2 PM. Will the District consider changing the bid submittal time to 2 PM.

**Bid time has been updated as discussed above.**

2. Please clarify the need for prequalified primes to submit qualification information with the bid. All 9 prequalified firms have submitted extensive prequalification packages in order to be allowed to bid this project.

**It is not necessary for pre-qualified general contractors and electrical subcontractors to resubmit this information. However, pre-qualified parties must submit the pre-qualification confirmation page as was distributed in June 2018.**

3. Confirm what gridlines border the Primary Pump Station. Sheet PSS-3 identifies GL 11 and 12, and AS-2 uses GL 9 and 10; which one is correct?

**The gridline numbers are GL9 and 10.**

4. Drawing AS-3 does not appear to indicate any construction joints in the Aeration Basin floor slab. Please confirm.

**Under review, additional clarification to be released in a future addendum.**

5. Drawing AS-3 has notations on the drawing: TYPE "A", TYPE "B", TYPE "C" without any reference to what they mean. Please clarify.

**Under review, additional clarification to be released in a future addendum.**

6. Drawings AS-5 and AS-6 do not appear to indicate any wall construction joints. Please confirm.

**Under review, additional clarification to be released in a future addendum.**

7. Drawing AS-2 indicates an East-West grade beam at centerline "D". On Drawing AS-5 the median wall along this same centerline, between the Anoxic and Aeration Basins, appears to be in conflict with the grade beam at the step. Is this median wall to be constructed on top of the lower slab, El 4.00, on top of the upper slab, El 9.50, or encased by the grade beam step? Section "E" AS-5 appears to indicate constructing on top on the slab @ El 9.50.

**As shown in sections A and E on sheet AS-5, the reinforcement associated with the wall is to continue into and through the grade beam. This could be considered the wall being constructed to the lower FF (FF elevation of 4.00) and encased in the grade beam.**

8. Drawing AS-2 implies the grade beams from the Aeration Basin through the Effluent Channel remain at a constant elevation. Drawing AS-3, Sections A/B/C, all indicate the top of grade beam elevation to be 9.50 in the Aeration Basin. Drawing AS-8 indicates the top of the grade beam at elevation 14.0. Is there a transition detail missing for the grade beams transitioning from elevation 9.5 to 14.0 and back down to 9.5 as it moves across the channel? Is there a conflict between Section J & K/AS-9 and Section G/ AS-8?  
**The grade beams from the aeration basin into the effluent channel should remain at the same elevation as shown in Sections J and K on sheet AS-9. As discussed above, a revised version of Sheet AS-8 (with section G) is provided with this addendum.**
  
9. Drawing AS-12, Section S, confirm the walkway width is 5'-0" wide in the area of the Anoxic Basin as the wall thickness is 2'-0". Confirm the walkway width is 4'-4" wide in the area of the Aeration Basin as the wall thickness is 1'-4". This will keep the outside edge of the walkway constant.  
**Correct, the design intent is for the outside edge of the walkway to remain constant. Sheets AS-1 and AS-4 show that the outside edge remains constant while the inside edge changes to account for the different wall thicknesses.**
  
10. Drawing UVS-1, Note 1, indicates to Place Control and Construction Joints as Shown on Plans. None appear to be indicated in the concrete work, except at wall to floor connections. Are these the only ones required? We are not supposed to add or take away any throughout the project.  
**Under review, additional clarification to be released in a future addendum.**
  
11. Drawing UVS-1 indicates a FF ELEV 21.52 just to the left of caisson T1. Sections on UVS-7,-9,-10 all indicate the elevation to be 19.52. Which is correct?  
**This is addressed above in the comments for Volume 4A.**
  
12. Drawing UVS-9 indicates, Section C, indicates a sub floor elevation of 14.52, just left of the "steps". A dimension in the left side pit indicates a 7'-0" drop from the top of grating to the top of the sub floor. With a top of grating elevation of 19.52, this would make the sub floor 12.52, not 14.52. Which is correct?  
**This is addressed above in the comments for Volume 4A.**
  
13. Drawing UVS-9, if the channel invert in the question above is confirmed to be at elevation 12.52, can the top of floor elevation in Section D for the Cleaning Tank be poured at 12.52 also? The current elevation is 12.85.  
**The 6'-8" depth for the tank (as shown in Section D) references the actual height of the tank insert that will be furnished with the UV equipment package. The recommended installation drawings from the supplier show an additional concrete lip of 6" to 10" above the top of this tank. Installing the tank bottom at the same elevation as the adjacent channel floor would provide a concrete edge 4" above the top of the tank which is acceptable.**

14. Drawing EBS-1, Note 10, indicates the contractor shall place control joints per detail 347/SD-8 so as to limit cracking. EBS-2, Note 4, says to pour the slab monolithically. Specification section 032900 3.3.C.1 says to make control joints at locations shown on the Drawings. Do not eliminate or relocate control joints. As none are shown, none will be added. This shall be the case for all joint types on all structures. Please add to all structures so they can be included in the bid cost.

**Under review, additional clarification to be released in a future addendum.**

15. Drawing RPM-1 indicates to “Extend/ Modify Existing Pad to Accommodate New Pump as Required (Typ)”. I do not see in the RPM drawings, any details of the existing pads. Please provide. Also, provide details on what are acceptable extension/ modification options.

**Pads will need to be modified based on the actual contractor-furnished pumps. Installation drawings of the existing pads are currently not available, however the Contractor may visit the site and measure/inspect the pads if desired. As with any existing improvement, contractor is to field verify dimensions and locations.**

16. Drawing LE-01 indicates new electrical panels in the refurbished MCC-3 Building. Do any/ all have to be placed on housekeeping pads? If so, provide details.

**New panels to be installed in MCC-3 do not require new housekeeping pads as this may be difficult/impractical to implement.**

17. Drawing LE-02 indicates two boxes outside the building for the SES and ATS. Do any/ either have to be placed on housekeeping pads? If so, provide details.

**Yes, this equipment requires standard housekeeping pads as shown in detail 610 on sheet GE-07.**

18. Drawing LE-04 indicates “Cable Trays” along the West/ Center/ East walls. Drawing AS-4 only indicates a Cable Tray down the center wall. Provide details if the West and East walkway walls are to have cable trays also on AS-4.

**Only the center wall has imbedded cable tray at the top of the wall (see sheet AS-4). Cable tray along the exterior walls will be wall-mounted beneath the cantilevered concrete walkways as shown in details 920, 922, and 926 (for 16/JB-31-1000 and JB-31-4000) on sheet GE-06.**

19. Drawing LE-14 indicates VFD’s and other units. Do any/ all have to be placed on housekeeping pads? If so, provide details.

**Yes, this equipment requires standard housekeeping pads as shown in detail 610 on sheet GE-07.**

20. Drawings C-4 and C-5 indicate locations for Gauntlet Slide Gates, Note 16. These drawings and Drawings CD-7 does not appear to provide details on the actual width of the

slide gate required. Please provide. Also, this width will determine how much track length is needed to fully open the gates.

**Discussed above with the items for sheet C-4/C-5.**

21. Drawing C-5 indicates a retaining wall is to be built around the Digestate Pump Station, between the two new clarifiers. Note 8 refers to a detail on Sheet C-43. This detail is a profile for Retaining Wall #1. The elevations around the DPS do not support the use of the detail on C-43. Are you sure this is the one to use for the DPS? Drawing C-41 indicates the use of Slump stone block. Which is correct?

**Discussed above with the items for sheet C-5.**

22. Secondary Clarifiers #1 and #2 are to be built in two different phases, with #2 constructed first. Drawing C-13 indicates a lot of underground piping running between Aeration Basins and SC #2. CS #1 will require shoring to be used to protect piping in place, but there may not be enough room to install this shoring. Will you reconfigure this piping to make the project constructible?

**The site has very limited space and this project requires special consideration to accommodate limited space and site access issues. This area will be reviewed but at this point we do not anticipate any significant changes to the current design or layout. Any updates or changes will be provided in a future addendum.**

23. Drawing D-10 indicates rock media can be crushed on site and re-used as backfill. What type of rock is it so a crusher can determine how difficult it will be to crush?

**The 25 page report by the Miller Pacific Engineering Group includes a description and recommendations for the biofilter rock media – this report is already included as the second report in Section 319000 - Geotechnical Report of Volume 3B. The Contractor may schedule a site visit to inspect the rock media if desired.**

#### **END OF QUESTIONS SECTION FOR ADDENDUM #1**

#### **LIST OF ATTACHMENTS**

- Attachment A:** Volume 2 Page 2-20 (revised pages of the bid schedule)  
**Attachment B:** Pre-Demolition Asbestos and Lead Survey Report (Appendix B of Volume 3)  
**Attachment C:** Revised version of Section 024100 – Demolition, Salvage, and Reconstruction  
**Attachment D:** Revised version of Section 151100 – Owner Selected Equipment  
**Attachment E:** Sign in sheet from August 21<sup>st</sup> site walkthrough  
**Attachment F:** Revised drawing sheets from Volume 4A; total of one (1) sheet:  
Sheet AS-8

#### **END OF ADDENDUM #1**

See following Sheets for Attachments

# **Attachment A**

## **Volume 2 – Revised Bid Schedule Sheets**

Item No.	Description	WBS Code	Units	Cost
16.a	<b>Owner Selected Equipment Item (FFAS)</b>	N/A	LS	<b><u>\$2,152,746.66</u></b>
	Item #16.a, in Written Form			
16.b	<b>Owner Selected Equipment Item (Eductor Tube Mixers)</b>	N/A	LS	<b><u>\$77,206.50</u></b>
	Item #16.b, in Written Form			
16.c	<b>Owner Selected Equipment Item (Secondary Clarifiers)</b>	N/A	LS	<b><u>\$370,464.00</u></b>
	Item #16.c, in Written Form			
16.d	<b>Owner Selected Equipment Item (GE Pressure Membranes)</b>	N/A	LS	<b><u>\$1,606,086.26</u></b>
	Item #16.d, in Written Form			



Item No.	Description	WBS Code	Units	Cost
16.e	<b>Owner Selected Equipment Item (Mechanical Thickeners)</b>	N/A	LS	<b><u>\$309,801.31</u></b>
	Item #16e, in Written Form			
17	<b>Sheeting, Shoring, &amp; Bracing</b>	N/A	LS	\$ _____
	Item #17, in Written Form			
18	<b>Dewatering</b>	N/A		\$ _____
	Item #18, in Written Form			
19	<b>Buried Utility Exploration</b>	N/A	LS	<b><u>\$50,000.00</u></b>
	Item #19, in Written Form			

**BID SCHEDULE – BID ALTERNATE ADDITIVES**

Item No.	Item	WBS Code	Units	Cost
A.1	UV Building (excluding caissons)	270 (excluding caissons)	LS	\$ _____
	_____ Item #A.1, in Written Form			
A.2	UV Building Drilled Pier Caissons	270 (Caissons)	LS	\$ _____
	_____ Item #A.2, in Written Form			
A.3	Owner Selected Equipment Item (UV)	N/A	LS	<b><u>\$509,485.03</u></b>
	_____ Item #A.3, in Written Form			
A.4	<u>Deduction</u> of Dechlorination Chemical Storage & Dosing Facility (Excluding Electrical)	360	LS	\$ _____
	_____ Item #A.4, in Written Form			

## **Attachment B**

### **Pre-Demolition Asbestos and Lead Survey Report (Appendix B of Volume 3)**



August 3, 2018

## Pre-Demolition Asbestos and Lead Survey Report

**Secondary Treatment and RW  
Expansion  
300 Smith Ranch Road  
San Rafael, CA 94903-1929**

Prepared for:

**Mike Cortez**  
**Las Gallinas Valley Sanitary District**  
300 Smith Ranch Road  
San Rafael, CA 94903-1929  
415-472-1033 | mcortez@lgvsd.org

Prepared By:

**Jonathan Curtis**  
**Forensic Analytical Consulting Services**  
7625 Sunrise Boulevard, Suite 104  
Citrus Heights, CA 95610  
(916) 726-1303 | jcurtis@forensicanalytical.com

FACS Project #PJ38352

# Contents

**Executive Summary** ..... 1

**Introduction**..... 2

**Scope of Work** ..... 2

**Site Characterization** ..... 2

**Survey Methods** ..... 2

**Findings and Recommendations** ..... 5

**Limitations**..... 6

**Appendix A: Sample Location Drawings**

**Appendix B: Asbestos Results Table, Laboratory Reports and Chain of Custody**

**Appendix C: Lead Results Table, Laboratory Reports and Chain of Custody**

**Appendix D: Employee Certifications**

## Executive Summary

Forensic Analytical Consulting Services, Inc. (FACS) was retained by Las Gallinas Valley Sanitary District to perform a pre-demolition asbestos and lead inspection for the Secondary Treatment and RW Expansion project. This survey was limited to suspect asbestos-containing building materials and lead-containing coatings that may be disturbed during the planned renovation. A list of all structures and suspect materials identified and sampled are included in Appendix B and C of this report. The survey was performed July 18 and 19, 2018.

### Asbestos

Asbestos-containing materials identified in this inspection included:

#### Existing Clarifier

- Gray/black gasket

#### Hydropneumatic Tank

- Gray/black gasket

#### Chemical Building

- Gray caulking
- Tan caulking
- Gray/black gasket

#### Tanks 8-11

- Gaskets presumed to contain asbestos

#### MCC #3 Building

- Cementitious panels (i.e. Transite® panels)

### Lead

Lead-containing coatings identified in this inspection included most surfaces. Please refer to Appendix C for specific types and locations.

Any suspect materials not included in this inspection must be presumed to be asbestos-containing materials or lead-containing materials until such time as they are tested and proven not to contain asbestos or lead.

FACS recommends that the results of this report be incorporated into any renovation/demolition plans for this building.

## Introduction

Forensic Analytical Consulting Services, Inc. (FACS) was retained by Mike Cortez of Las Gallinas Valley Sanitary District to perform a pre-demolition asbestos and lead inspection for the Secondary Treatment and RW Expansion project located at 300 Smith Rancho Road in San Rafael, California. This survey was limited to suspect asbestos-containing building materials and lead-containing coatings that will be disturbed during the planned renovation. A list of all suspect materials identified and sampled are included in Appendix B and C of this report. The survey was performed on July 18 and 19, 2018.

## Scope of Work

The purpose of this survey was to identify all asbestos-containing materials and lead-containing coatings within the project area. The visual inspection, bulk sample collection, and survey documentation were performed by James Rich. Mr. Rich is an EPA accredited Building Inspector and Department of Occupational Safety and Health Certified Asbestos Consultant (CAC# 96-2035). In addition, Mr. Rich is a California Department of Public Health certified Lead Inspector/Assessor (CDPH# 5500). The scope of the survey and the services provided by FACS included:

- Review of project drawings and applicable inspection reports to develop the project sampling plan;
- Performing a visual inspection of the project areas to identify accessible suspect asbestos-containing materials (ACMs) and lead-containing coatings;
- Collection of bulk samples for analysis by polarized light microscopy (PLM);
- Collection of coating samples for analysis by flame atomic absorption spectrometry (Flame AA);
- Ensuring the technical quality of all work by using Asbestos Hazard Emergency Response Act (AHERA) accredited Inspectors and Management Planners;
- Consolidating data and findings into a report format.

## Site Characterization

The area surveyed in support of the Secondary Treatment and RW Expansion project consisted of portions of the Marin Municipal Water District and Las Gallinas Valley Sanitary District property. A list of structures surveyed is included in Appendices B and C. Typical construction of structures surveyed included concrete pools and pads; metal tanks, piping, walkways and frameworks; pre-fabricated single room structures; and buildings with drywall, roofs, and various mastics and sealants. Sample location drawings are presented in Appendix A.

## Survey Methods

### Document Review

The asbestos and lead survey was intended to assist Las Gallinas Valley Sanitary District in compliance with EPA-NESHAP, local Air Quality Management District and Cal/OSHA regulations.

FACS reviewed project diagrams provided to us by Las Gallinas Valley Sanitary District to help identify the project scope and impacted areas.

## Asbestos Inspection

### Visual Inspection

Accessible building materials were visually inspected using the methods presented in the federal AHERA regulations (40 CFR, Part 763) as a guideline. While AHERA is only directly applicable to public schools, the principles presented under the Final Rule are generally accepted as the industry standard for ACM inspections. Suspect ACMs were also physically assessed for friability, condition and possible disturbance factors.

No rooms were inaccessible during this inspection. Please note that portions of the MCC #3 Building and the Outfall Box were not inspected because they were confined spaces.

### Asbestos Bulk Sample Collection

Bulk samples of identified homogeneous areas were collected in building areas that may be impacted by the planned renovation/demolition activities. Samples were collected of each separate homogeneous area. A homogeneous area is defined as a surfacing material, thermal system insulation, or miscellaneous material that is uniform in use, color and texture. Examples of homogeneous areas could include:

- Floor tile
- Ceiling tile
- Gypsum wallboard and joint tape compound
- Linoleum

The specific number of samples collected was primarily determined by using the methods presented in the federal AHERA regulations (40 CFR, Part 763.86):

- 1) For Surfacing Material:
  - 1,000 ft<sup>2</sup> or less - collect 3 samples
  - 1,001 to 5,000 ft<sup>2</sup> - collect 5 samples
  - 5,001 ft<sup>2</sup> or greater - collect 7 samples
- 2) For Thermal System Insulation:
  - "In a randomly distributed manner" - collect 3 samples
  - 6 linear feet of patching or less - collect 1 sample
  - cementitious pipe fittings - "In a manner sufficient to determine"
- 3) For all Miscellaneous Material:
  - Collect samples "In a manner sufficient to determine whether material is ACM (asbestos-containing material) or not ACM..."

The suspect ACMs were sampled using a knife or other similar coring device suitable to the type of material sampled to cut through its entire thickness and to ensure that a cross-section of the material was obtained. The material was then placed in an appropriately labeled container that was sealed and submitted to Forensic Analytical Laboratories, Inc. for analysis. A unique sample number (e.g. 38352-101-01) was assigned to each sample.

Bulk samples will be retained by the laboratory for one month unless otherwise instructed. After this period, the samples will be disposed of appropriately.



### Asbestos Bulk Sample Analysis

One hundred and thirty-two (132) bulk samples were collected. Bulk samples were analyzed by Forensic Analytical Laboratories, Inc. in Hayward, CA. Forensic Analytical Laboratories, Inc. is accredited by the California Department of Public Health (CDPH) and the National Institute of Science and Technology's (NIST) National Voluntary Laboratory Accreditation Program (NVLAP). Forensic Analytical Laboratories, Inc. participates in the National Institute for Occupational Safety and Health (NIOSH) Proficiency Analytical Testing Program, and has substantial experience in the analysis of asbestos.

All of the samples were analyzed using Polarized Light Microscopy with Dispersion Staining (PLM/DS) techniques in accordance with the methodology approved by the U.S. Environmental Protection Agency (EPA). The percentage of asbestos present in the samples was determined on the basis of a visual area estimation. As set forth in the Code of Federal Regulations, 40 CFR Part 763, the lower limit of reliable quantification for asbestos using the PLM method is approximately one percent (1%) by volume, but regulations in California (CAL/OSHA Title 8 CCR 1529) define asbestos-containing materials as those materials having an asbestos content of greater than one tenth of one percent (> 0.1%). Therefore, for the purpose of this survey, any amount of asbestos detected will be considered positive. In addition to the percentages, the types of asbestos minerals are also reported. The PLM method is the standard method used to analyze asbestos bulk samples.

When "None Detected" (ND) appears in the laboratory results, it should be interpreted as meaning no asbestos was observed in the sample material.

### **Lead Inspection**

The lead survey was not a comprehensive lead-based paint or building material survey as detailed in the "*Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*" by The National Center for Lead-Safe Housing for HUD.

Cal/OSHA, in Title 8 California Code of Regulations (CCR) Section 1532.1, Lead in Construction Standard which implements California labor code 8716-6717, regulates all construction work where an employee may be occupationally exposed to lead. Paint or materials with any detectable level of lead is considered lead-containing by Cal/OSHA.

For purposes of this report, materials containing lead shall be defined as materials that contain lead at levels greater than the limit of detection for lead by weight using Flame AA laboratory analysis. Construction work impacting materials with detectable levels of lead is subject to Cal/OSHA requirements.

Construction activities, sometimes referred to as trigger tasks, impacting materials containing any amount of lead require an initial exposure assessment. Trigger tasks are defined in Cal/OSHA 1532.1, section (d) (2) and include but are not limited to such tasks as: manual demolition, manual scraping, manual sanding, lead burning, abrasive blasting, welding, cutting and torch burning.

### Visual Inspection

Accessible building materials were visually inspected using the methods presented in the federal HUD guidelines. While the HUD guidelines are only directly applicable to public housing, the principles presented are generally accepted as the industry standard for lead paint inspections.

Samples were collected from representative components, not every individual component. Lead results are assumed to be the same on like components in the same general area of the representative component that was sampled.

### Paint Sample Collection

The types, number, and locations of samples were determined based on available information about the renovation provided to FACS, visual observations, regulatory requirements, and other project management considerations.

Forty-eight (48) paint chip samples were collected. The paint chip samples were collected by scraping paint from the surface down to the substrate while taking care not to include substrate in the sample. All paint layers were included in each sample collected. A razor, knife or other similar tool was used and the tools were cleaned after sample collection. The samples were individually packed, labeled and transported following proper chain-of-custody procedures to the analytical laboratory for flame atomic absorption analysis.

### Paint Sample Analysis

The detection limit is determined by factors including the size and matrix of each individual sample. The samples were analyzed by Forensic Analytical Laboratories, Inc. (FALI) in Hayward, California. FALI is accredited by the AIHA Environmental Lead Laboratory Accreditation Program (ELLAP) and the California Department of Public Health (CDPH). Also by the National Institute of Science and Technology's (NIST) National Voluntary Laboratory Accreditation Program (NVLAP). FALI participates in the National Institute for Occupational Safety and Health (NIOSH) Proficiency Analytical Testing Program, and has substantial experience in the analysis of metals including lead. The samples were analyzed using EPA method 3050B/7420, flame atomic absorption analysis.

## Findings and Recommendations

FACS conducted a pre-demolition inspection of select structures at the Marin Municipal Water District and Las Gallinas Valley Sanitary District property located at 300 Smith Ranch Road in San Rafael, California for the presence of asbestos-containing building materials and lead-containing coatings that may be impacted by the Secondary Treatment and RW Expansion project. Survey findings are presented below.

### **Asbestos**

Asbestos-containing materials identified in this inspection included:

#### Existing Clarifier

- Gray/black gasket

#### Hydropneumatic Tank

- Gray/black gasket

#### Chemical Building

- Gray caulking
- Tan caulking
- Gray/black gasket

#### Tanks 8-11

- Gaskets presumed to contain asbestos

MCC #3 Building

- Cementitious panels (i.e. Transite® panels)

**Lead**

Lead-containing coatings identified in this inspection included most surfaces. Please refer to Appendix C for specific types and locations.

For a detailed description of the materials sampled and analyzed see the lead sample results table in Appendix C.

Any suspect materials not included in this inspection must be presumed to be lead-containing materials until such time as they are tested and proven not to contain lead.

**Limitations**

This investigation is limited to the conditions and practices observed and information made available to FACS. The methods, conclusions and recommendations provided are based on FACS' judgment, expertise and the standard of practice for professional service. They are subject to the limitations and variability inherent in the methodology employed. As with all environmental investigations, this investigation is limited to the defined scope and does not purport to set forth all hazards, nor indicate that other hazards do not exist.

Please do not hesitate to contact our offices at 916-726-1303 with any questions or concerns. Thank you for the opportunity to assist CPFC promoting a more healthful environment.

Respectfully,  
FORENSIC ANALYTICAL



Jonathan Curtis  
Project Manager, Sacramento  
Certified Asbestos Consultant No. 04-3562  
Lead Inspector/Assessor No. 18779

Reviewed by:  
FORENSIC ANALYTICAL

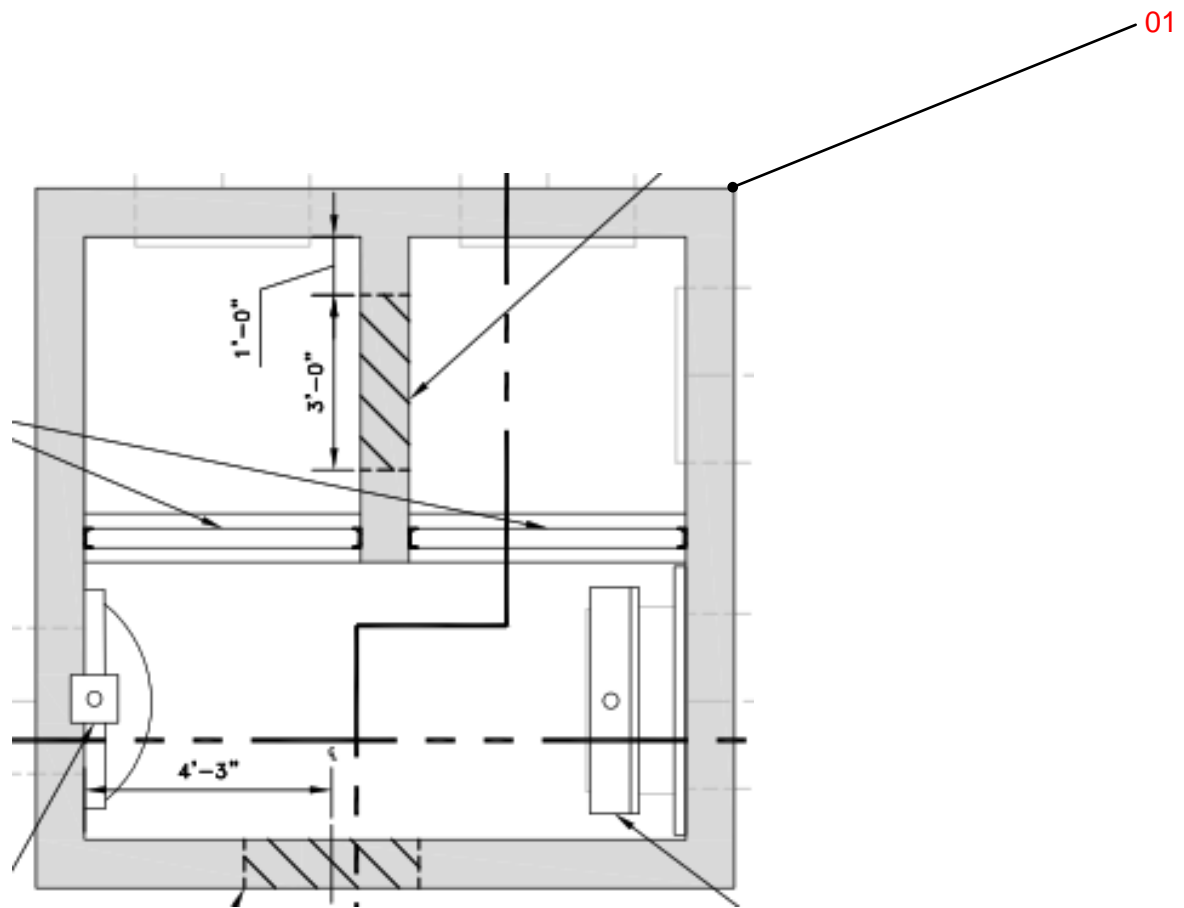


James Rich  
Project Manager, Sacramento  
Certified Asbestos Consultant No. 96-2035  
Lead Inspector/Assessor No. 5500

## Appendix A

### Sample Location Drawings

NOTE: Sample ID numbers are followed by a plus sign to indicate an ACM material or a minus sign to indicate a non-detect lab result or point count analysis resulting in <1% asbestos for that sample.



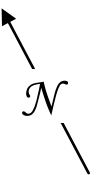
**SAMPLE LOCATION DRAWING**

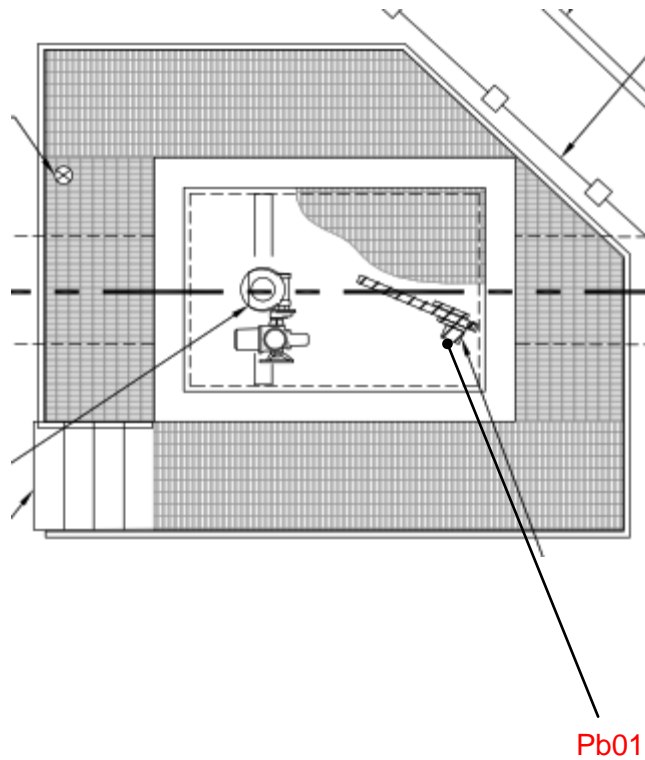
Las Gallinas Valley Sanitary District  
 Demolition Plan Page C-27 (Contact Chamber Weir Box)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos Bulk Sample Location: -01 -

NOT TO SCALE





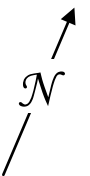
**SAMPLE LOCATION DRAWING**

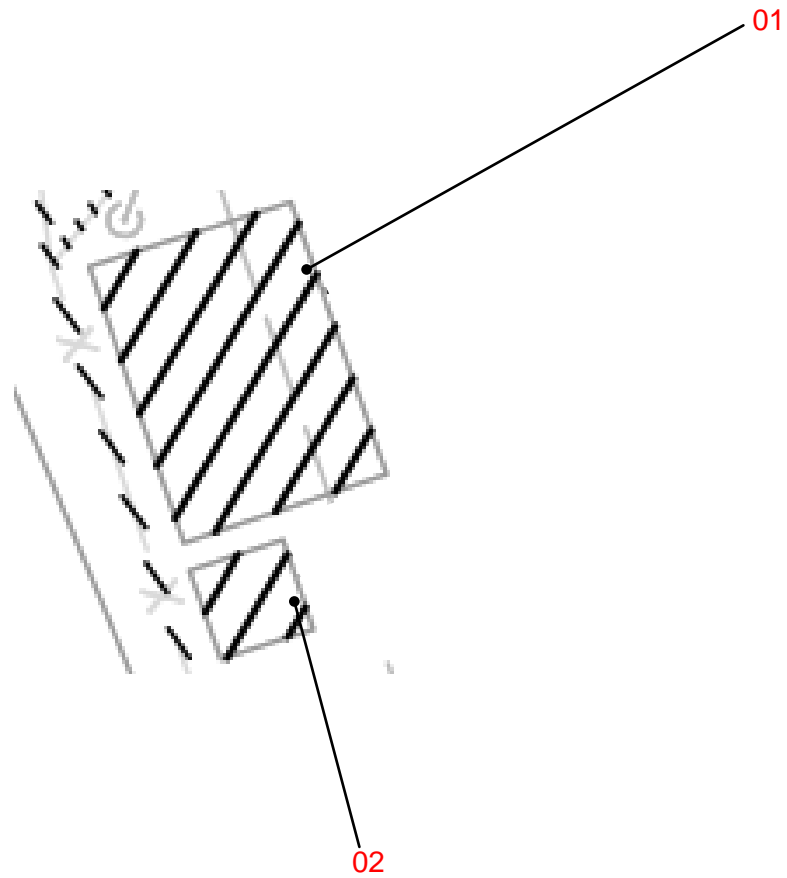
Las Gallinas Valley Sanitary District  
 Demolition Plan Page C-32 (Outfall Box)  
 FACS # PJ38352  
 July 20, 2018

**LEGEND**

Lead Bulk Sample Location: -01 -

NOT TO SCALE





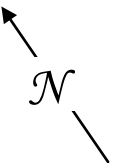
**SAMPLE LOCATION DRAWING**

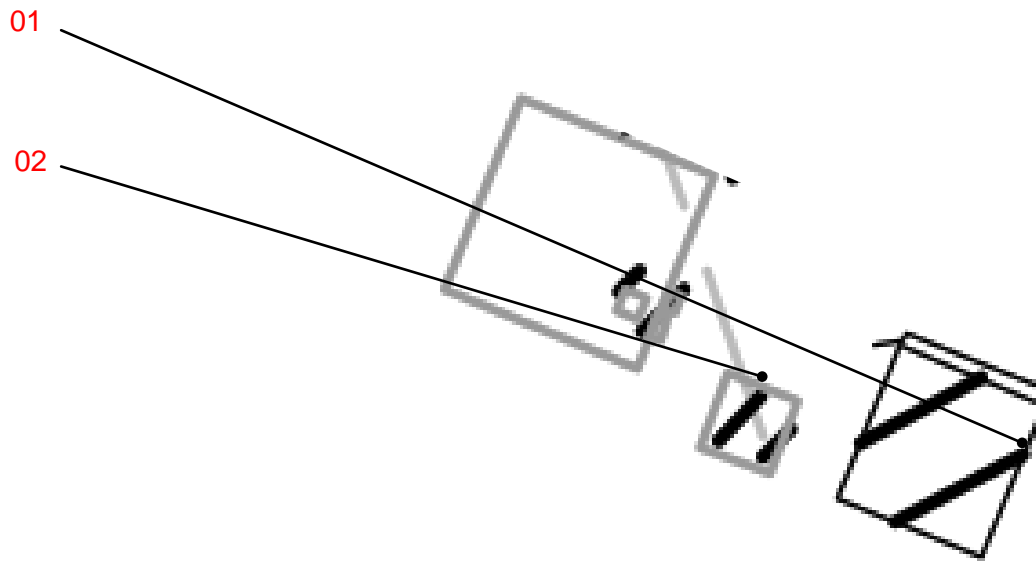
Las Gallinas Valley Sanitary District  
 Demolition Plan Page D-1 (Equipment Pads)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos Bulk Sample Location: -01 -

NOT TO SCALE





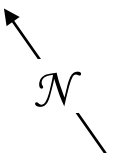
**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
 Demolition Plan Page D-1 and C-42 (Junction Box)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

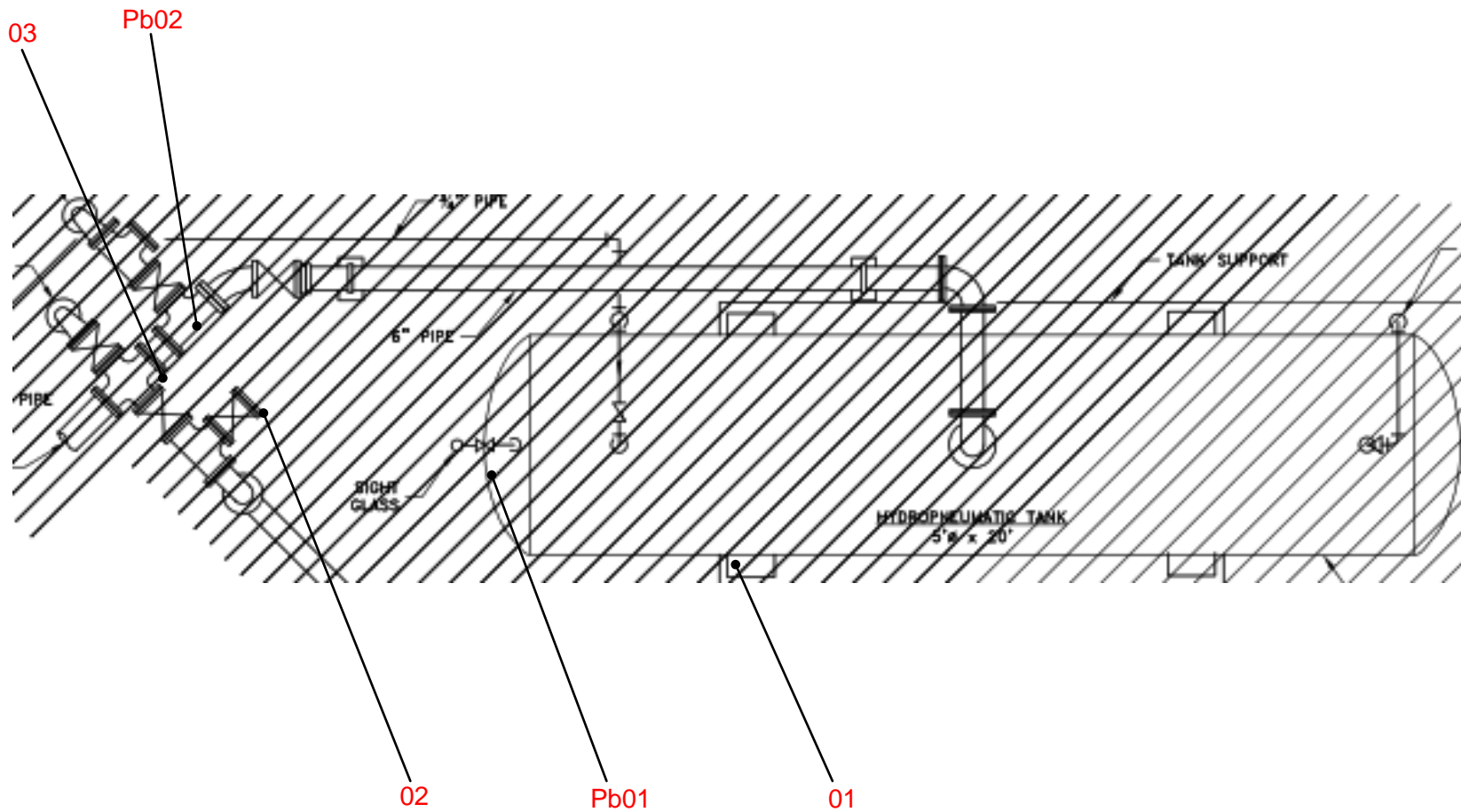
**LEGEND**

Asbestos Bulk Sample Location: -01 -

NOT TO SCALE







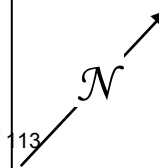
**SAMPLE LOCATION DRAWING**

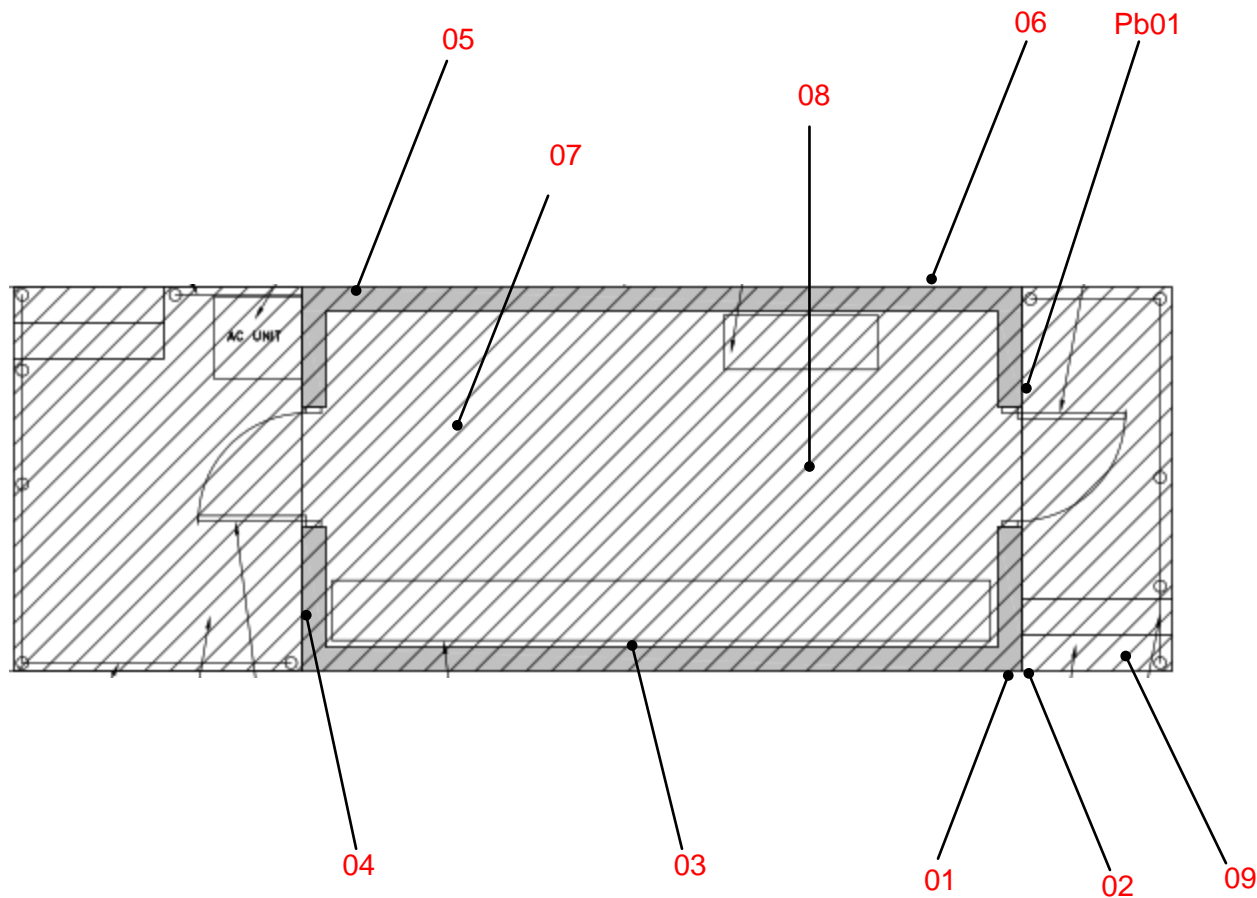
Las Gallinas Valley Sanitary District  
 Demolition Plan Page D-11 (Hydropneumatic Tank)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE



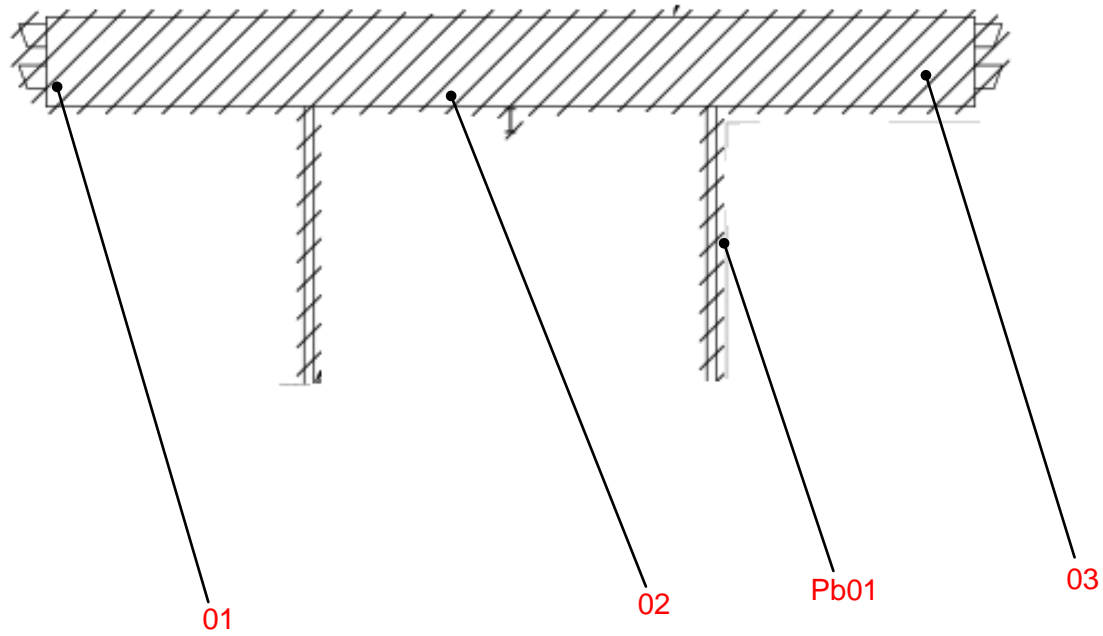


**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
 Demolition Plan Page D-12 (MCC #9 Building)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -  
 NOT TO SCALE



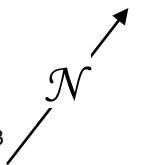
**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
 Demolition Plan Page D-13 (Canopy)  
 FACS # PJ38352  
 July 20, 2018

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE



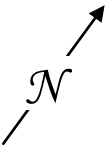


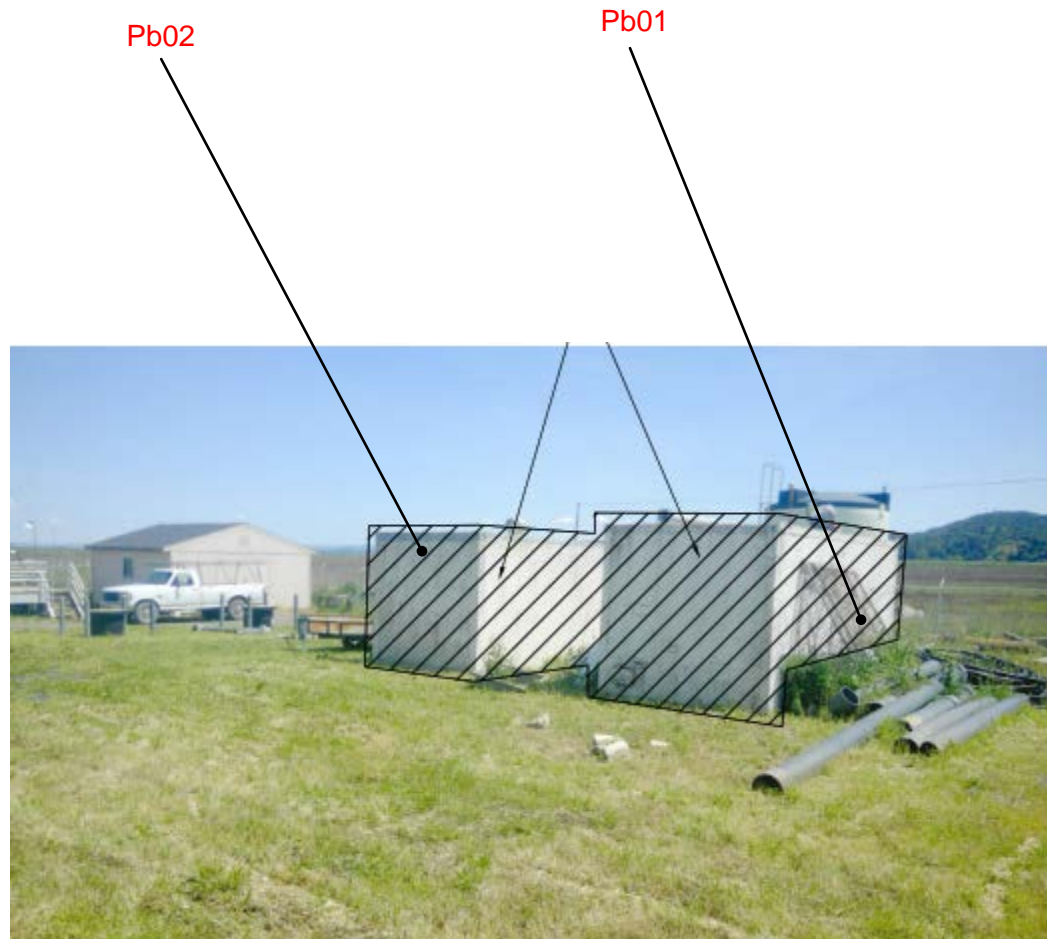
**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
 Demolition Plan Page D-14 (Dechlorination Pump and Storage  
 Area  
 FACS # PJ38352  
 ADDENDUM 1  
 July 20, 2018

**LEGEND**

Asbestos Bulk Sample Location: -01 -  
 NOT TO SCALE





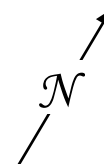
**SAMPLE LOCATION DRAWING**

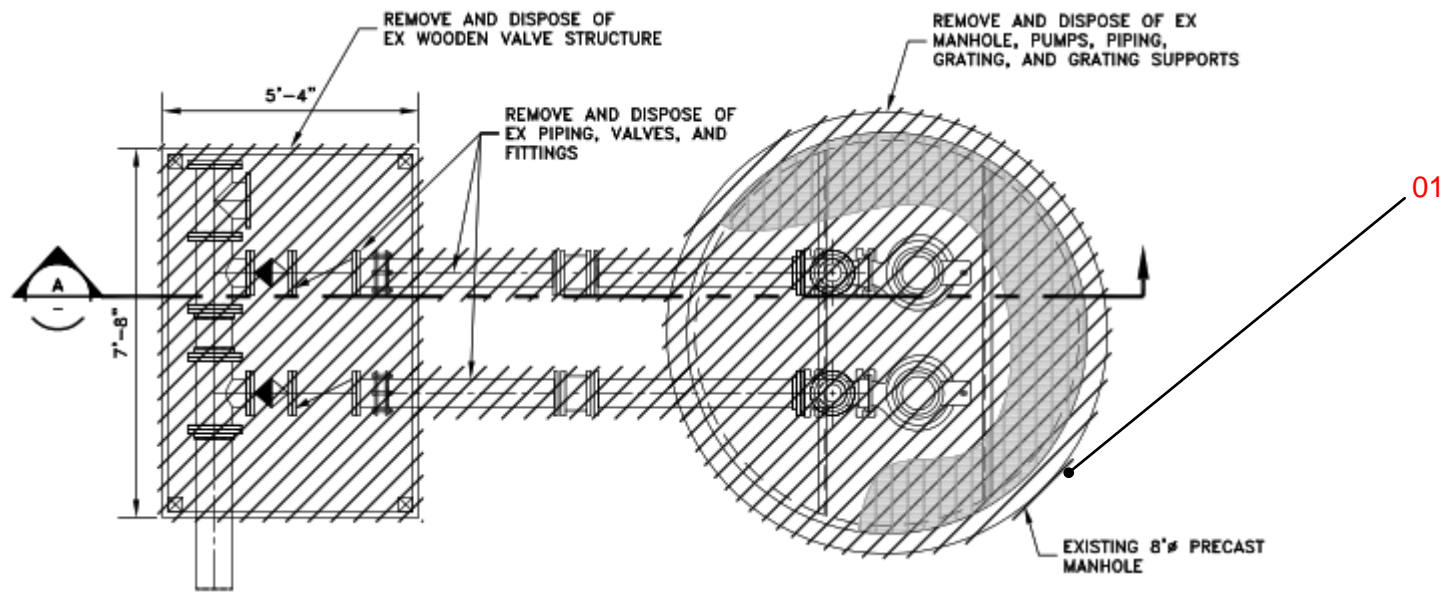
Las Gallinas Valley Sanitary District  
Demolition Plan Page D-14 (Storage Containers)  
FACS # PJ38352  
July 20, 2018 ADDENDUM 1

**LEGEND**

Lead Bulk Sample Location: -01 -

NOT TO SCALE





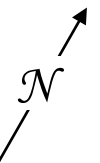
**SAMPLE LOCATION DRAWING**

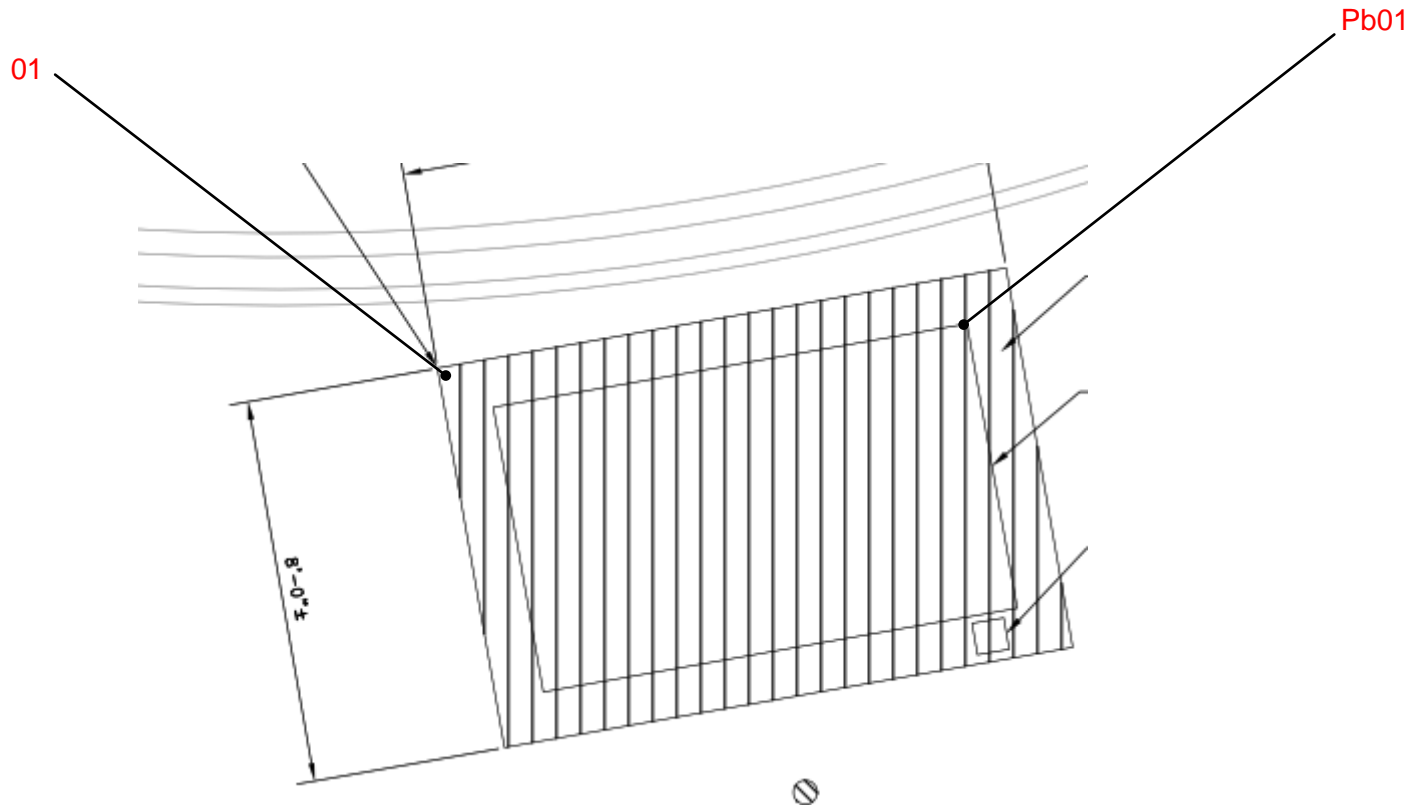
Las Gallinas Valley Sanitary District  
 Demplition Plan Page D-15 (Stormwater Pump Station)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos Bulk Sample Location: -01 -

NOT TO SCALE





**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
 Demolition Plan Page D5 (Fuel Tank)  
 FACS # PJ38352  
 July 20, 2018

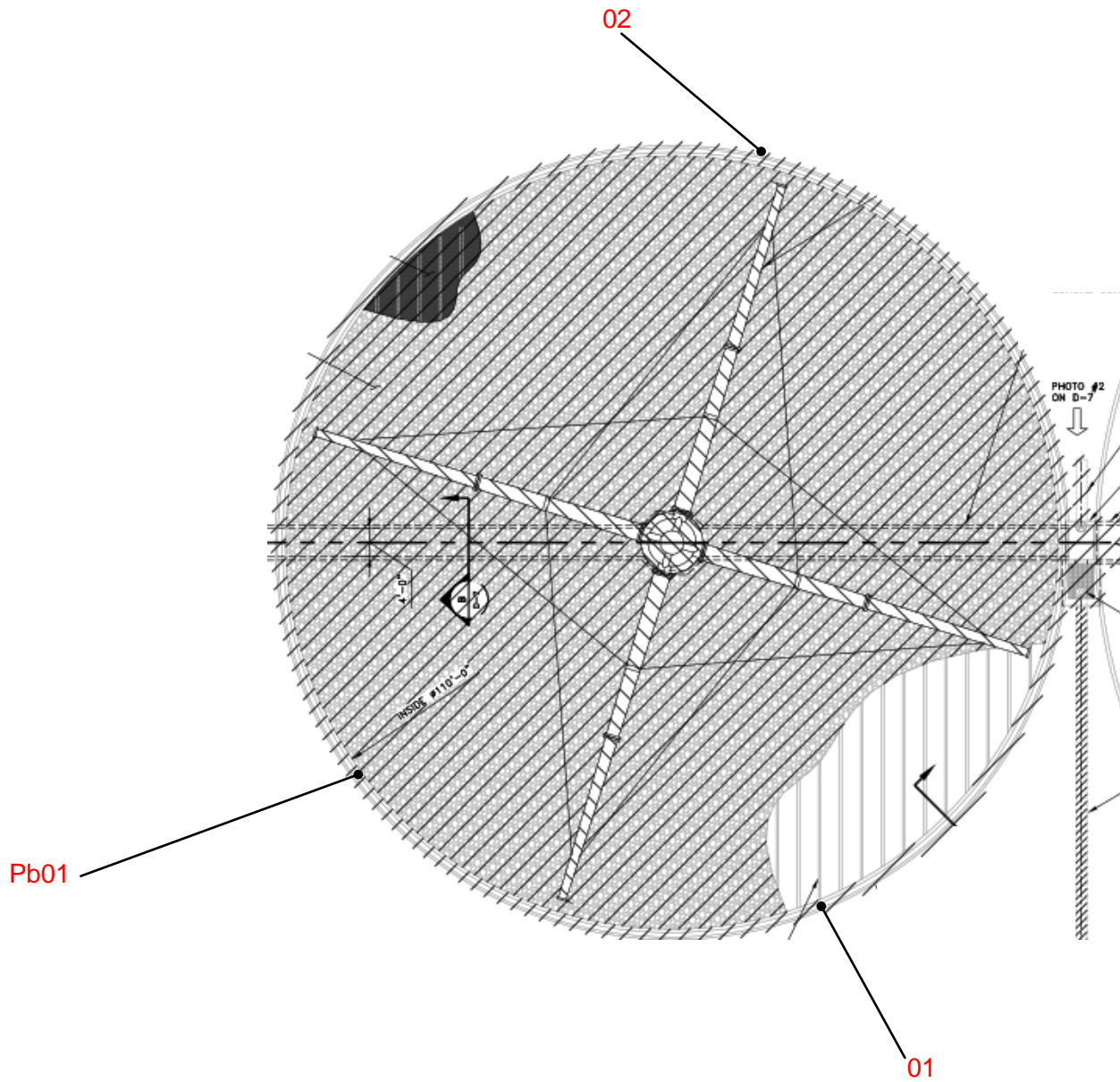
**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE







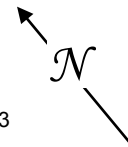
**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
 Demolition Plan Page D-6 (Primary Biofilter)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

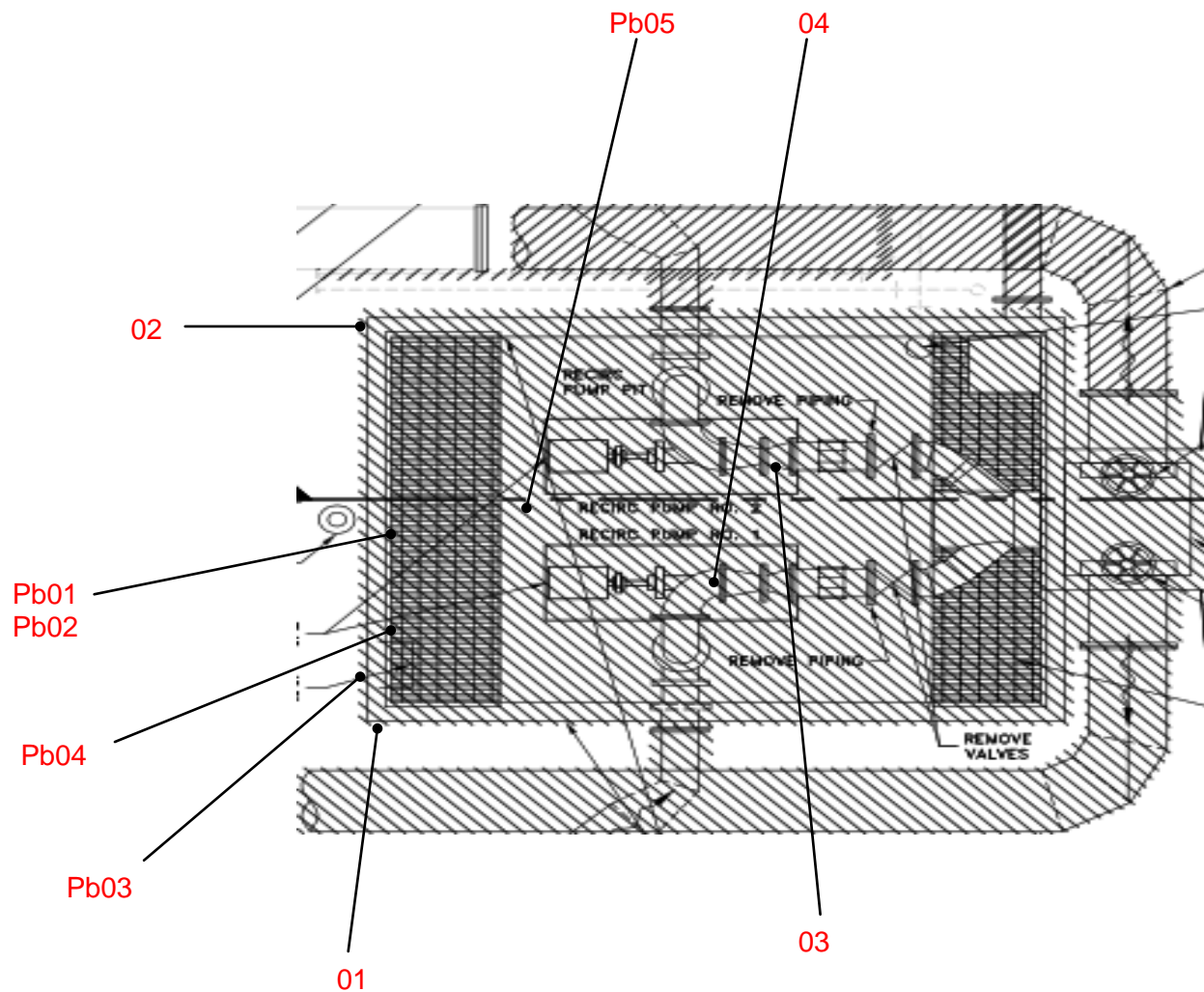
**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE







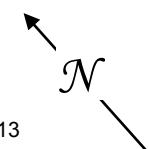
**SAMPLE LOCATION DRAWING**

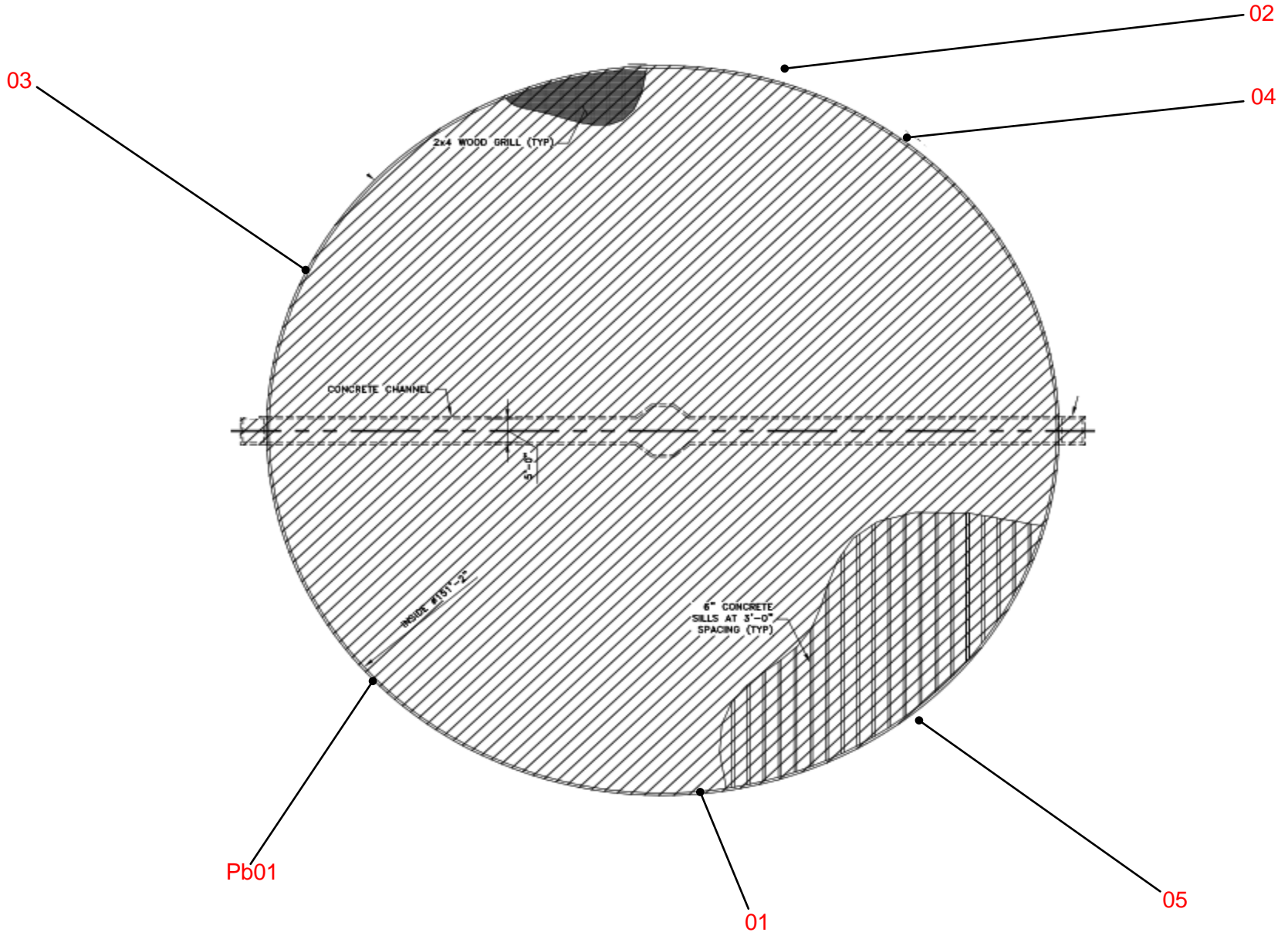
Las Gallinas Valley Sanitary District  
 Demolition Plan Page D-8 (Boifilter Recirc Pump Pit)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE



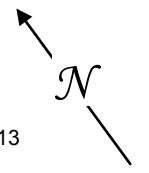


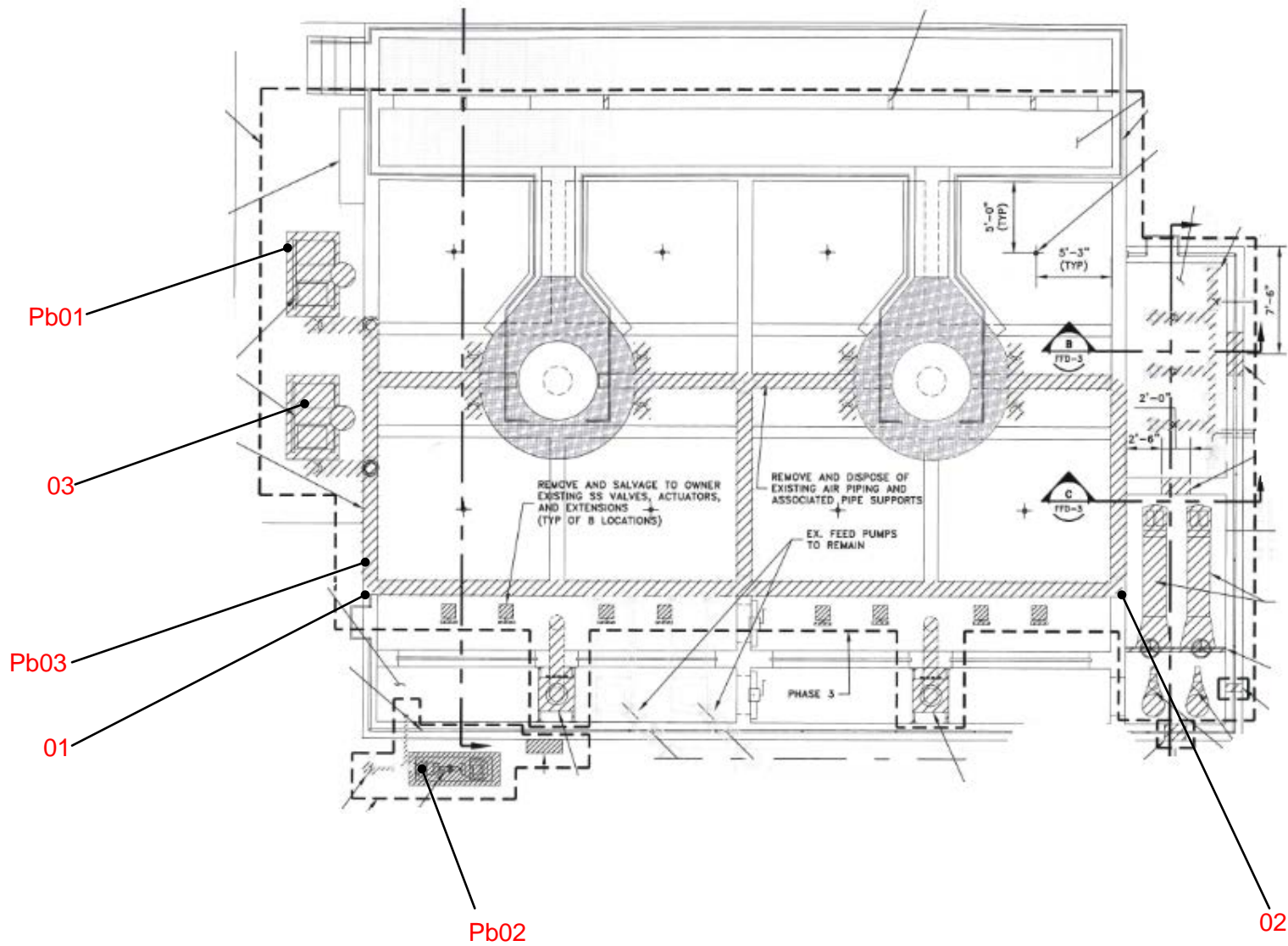
**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
 Demolition Plan Page D-9 (Secondary Biofilter)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -  
 NOT TO SCALE





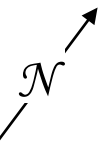
**SAMPLE LOCATION DRAWING**

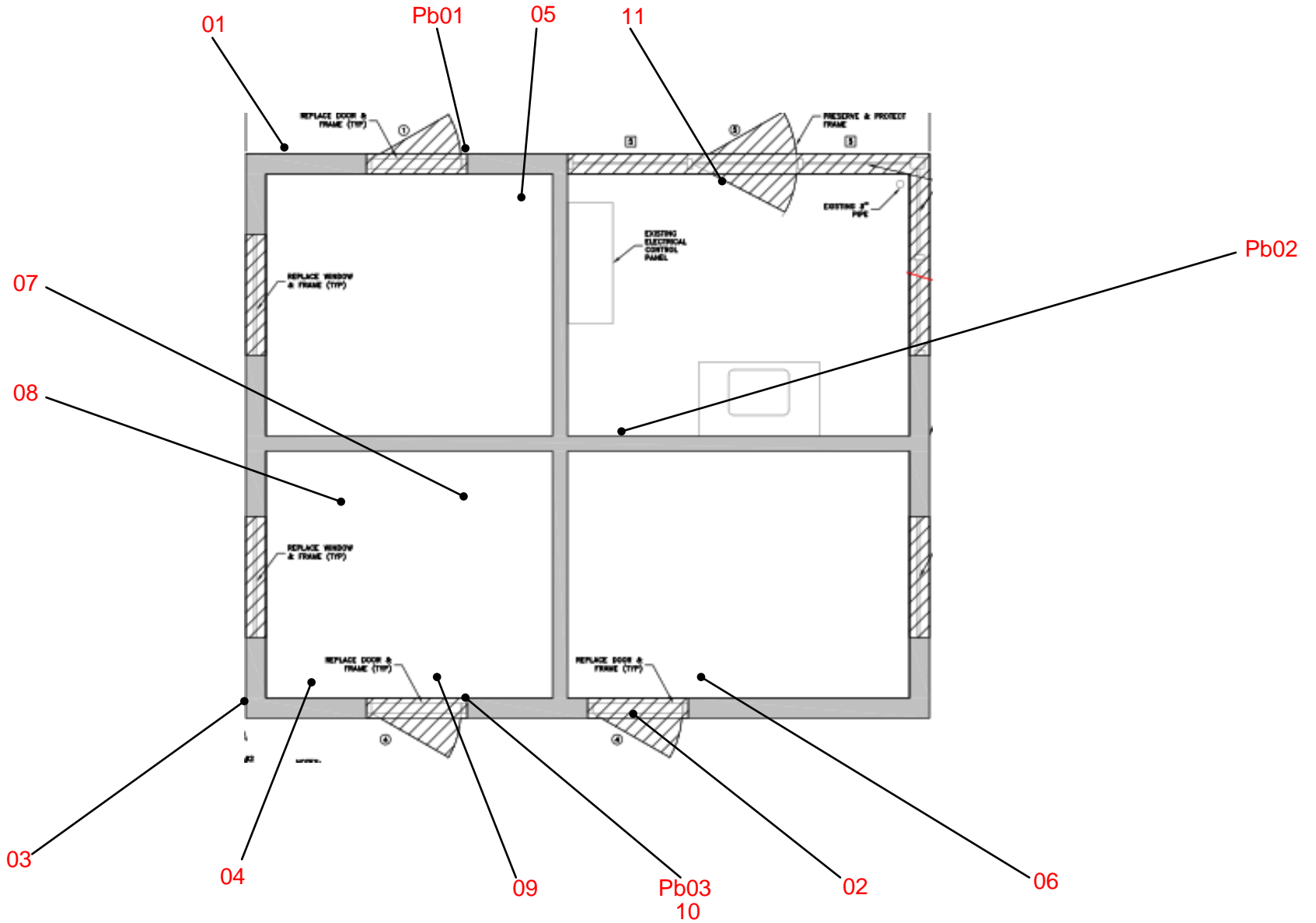
Las Gallinas Valley Sanitary District  
 Demolition Plan Page FFD-1 (Filter Feed Pump Station)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE





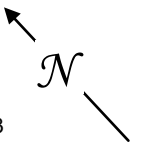
**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
 Demolition Plan Page MSB-1 (MCC #3 Building)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

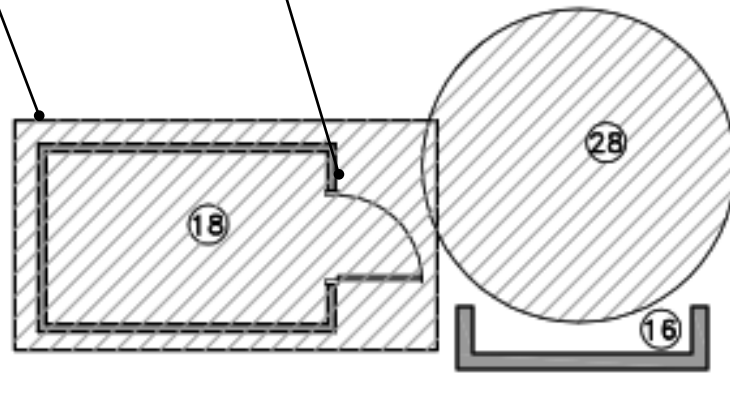
Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE



18-101-01

18-101-02



**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
Demolition Plan Page MMD-1 (Chlorination House & Poly Tank 28)  
FACS # PJ38352  
July 20, 2018  
ADDENDUM 1

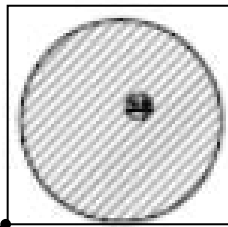
**LEGEND**

Asbestos Sample Location: -01 -

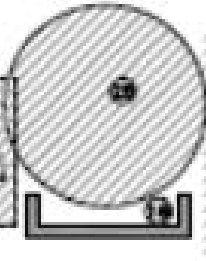
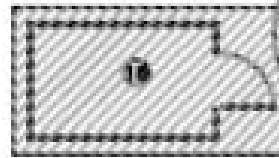
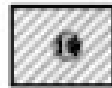
NOT TO SCALE



28-101-01



All of these  
slabs, vau  
except for  
noted on I  
distributio



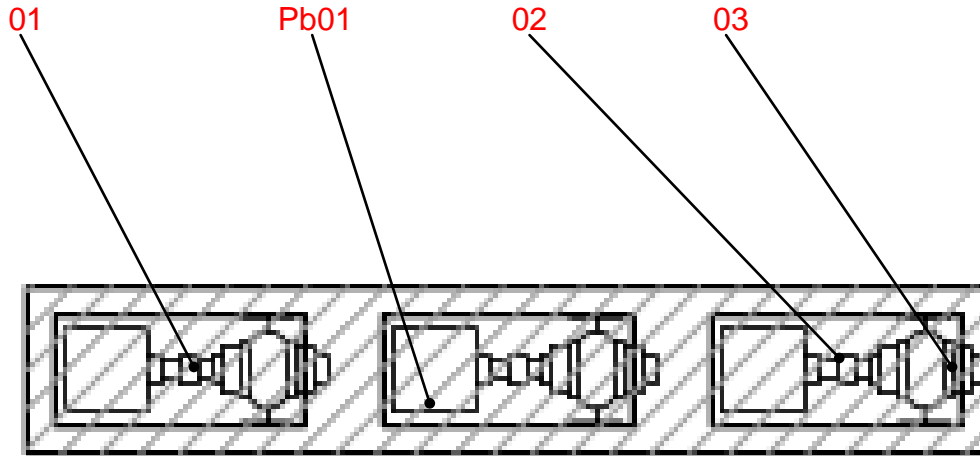
**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
MMD-1 Poly Tank  
FACS # PJ38352  
July 20, 2018

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE



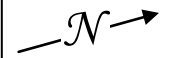
**SAMPLE LOCATION DRAWING**

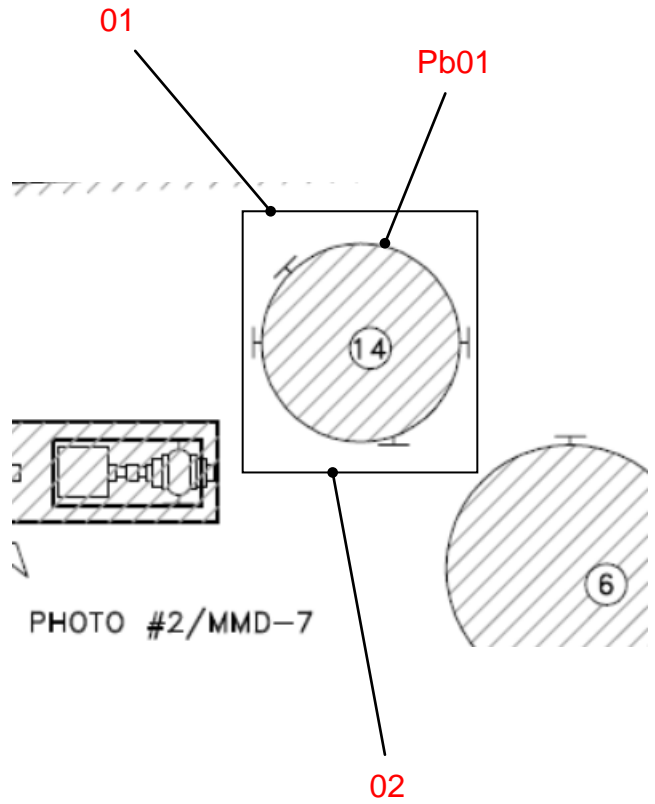
Las Gallinas Valley Sanitary District  
 Demolition Plan Page MMD-1 (Product Pump 15)  
 FACS # PJ38352  
 July 20, 2018

**LEGEND**

Asbestos Sample Location: -01 -

NOT TO SCALE





**SAMPLE LOCATION DRAWING**

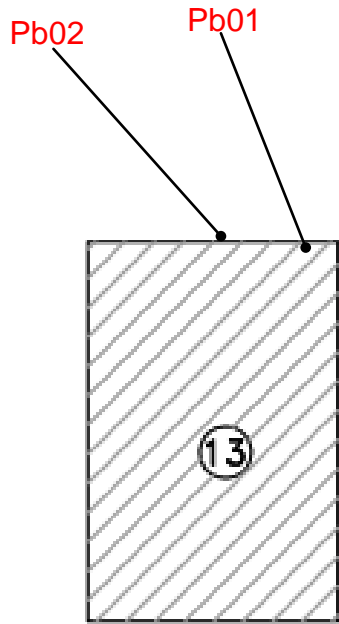
Las Gallinas Valley Sanitary District  
 Demolition Plan Page - MMD-1 (Product Weir Tank – 14)  
 FACS # PJ38352  
 July 20, 2018

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -  
 NOT TO SCALE





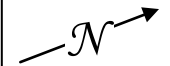


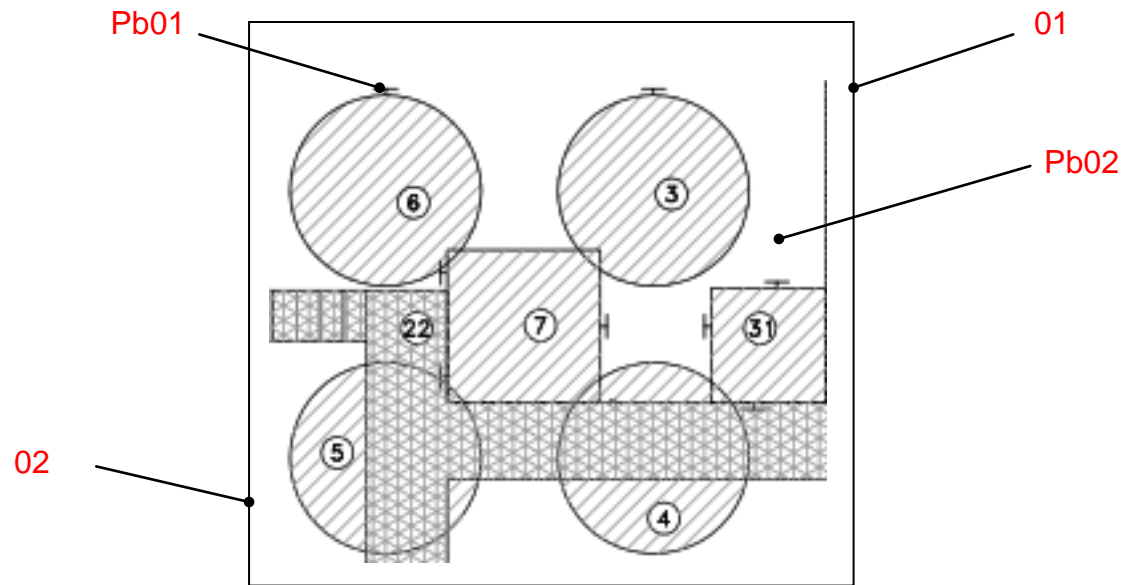
**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
Demolition Plan Page MMD-1 (Hydropneumatic Tank Shed - 13)  
FACS # PJ38352  
July 20, 2018

**LEGEND**

Lead Bulk Sample Location: -01 -  
NOT TO SCALE





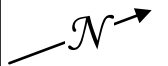
**SAMPLE LOCATION DRAWING**

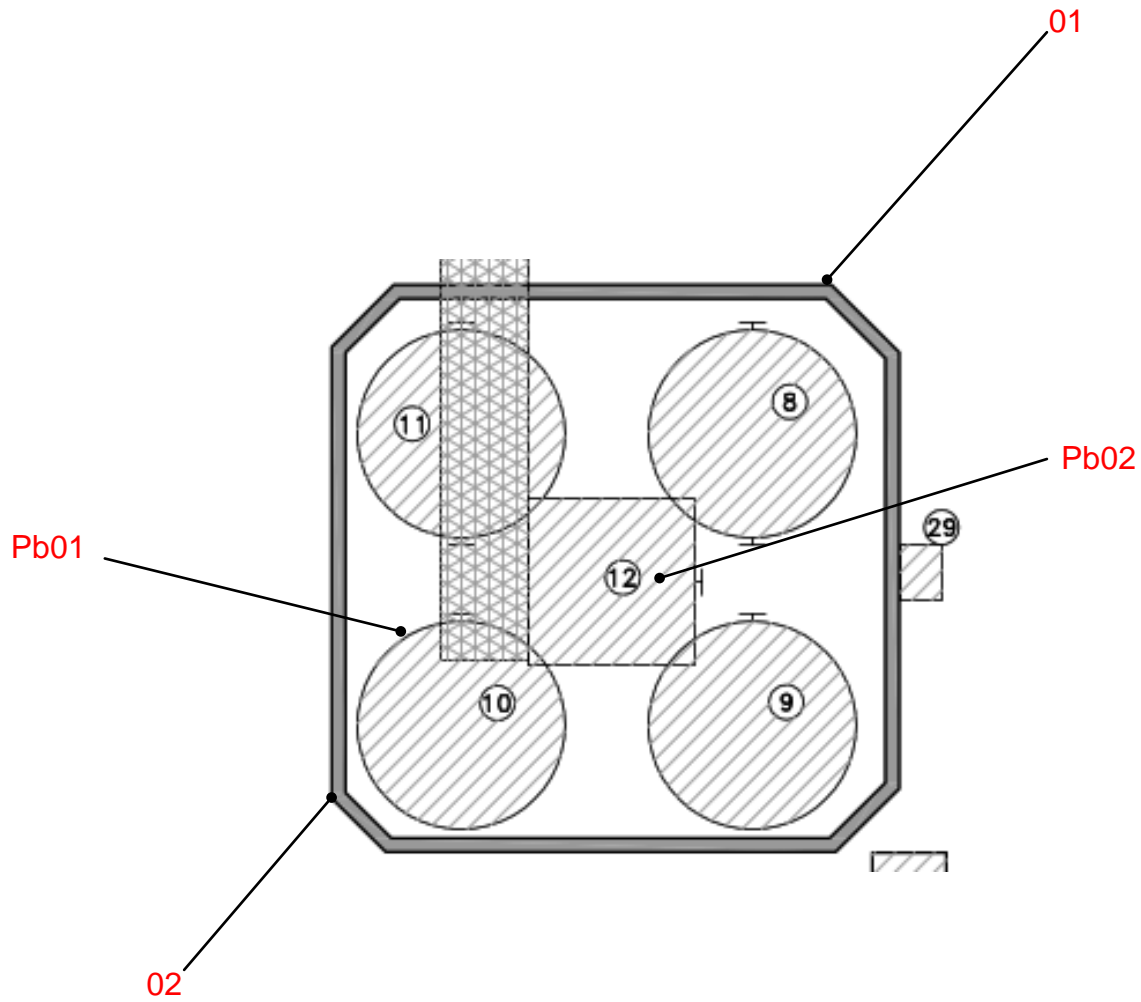
Las Gallinas Valley Sanitary District  
 Demolition Plan Page MMD-1 (Tanks 3-6 area)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE





**SAMPLE LOCATION DRAWING**

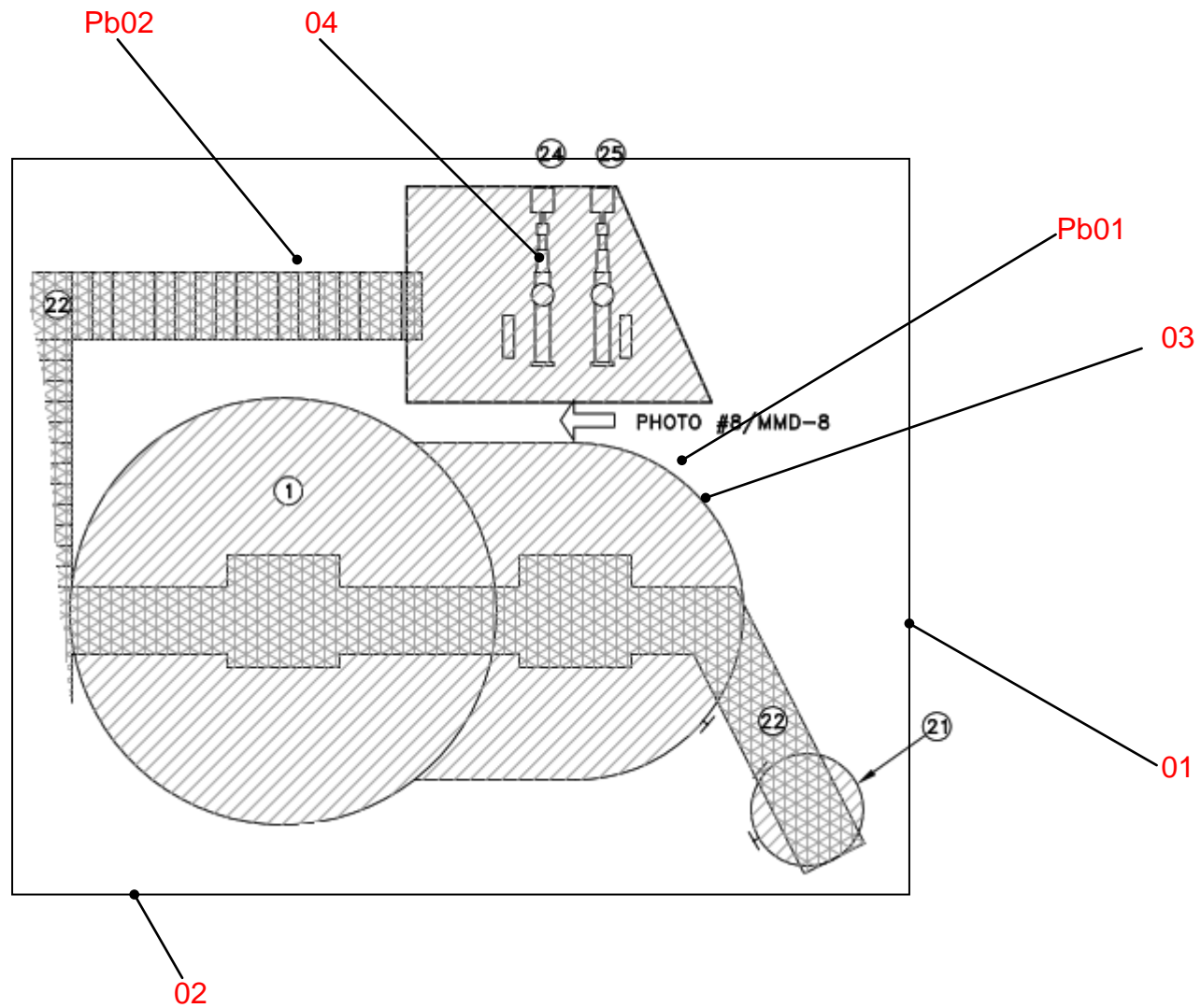
Las Gallinas Valley Sanitary District  
 Demolition Plan Page MMD-1 (Tanks 8-11 Area)  
 FACS # PJ38352  
 July 20, 2018  
 ADDENDUM 1

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE





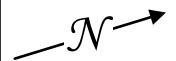
**SAMPLE LOCATION DRAWING**

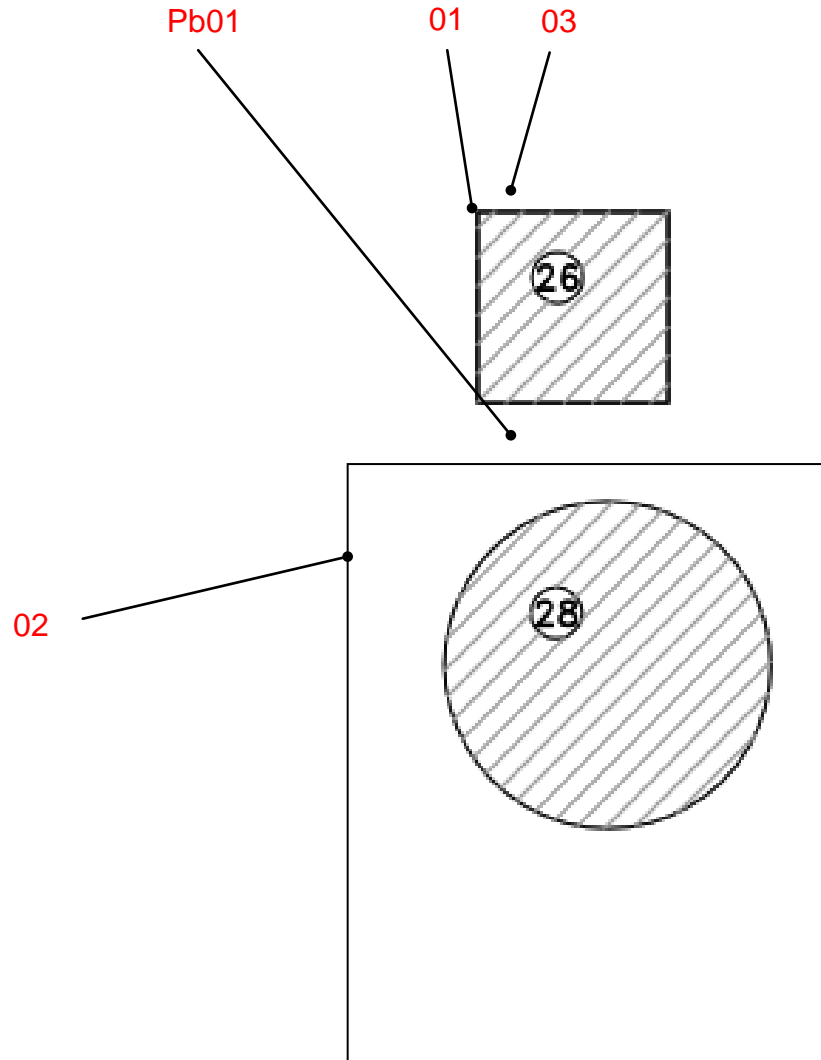
Las Gallinas Valley Sanitary District  
 Demolition Plan Page MMD-1 (Tank 1 Area)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE





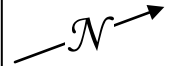
**SAMPLE LOCATION DRAWING**

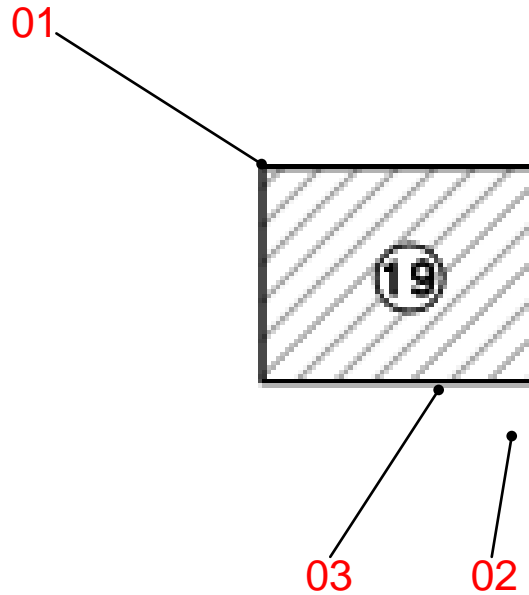
Las Gallinas Valley Sanitary District  
 Demolition Plan Page MMD-1 (Tank Area 26/28)  
 FACS # PJ38352  
 July 20, 2018

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE





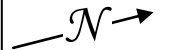
**SAMPLE LOCATION DRAWING**

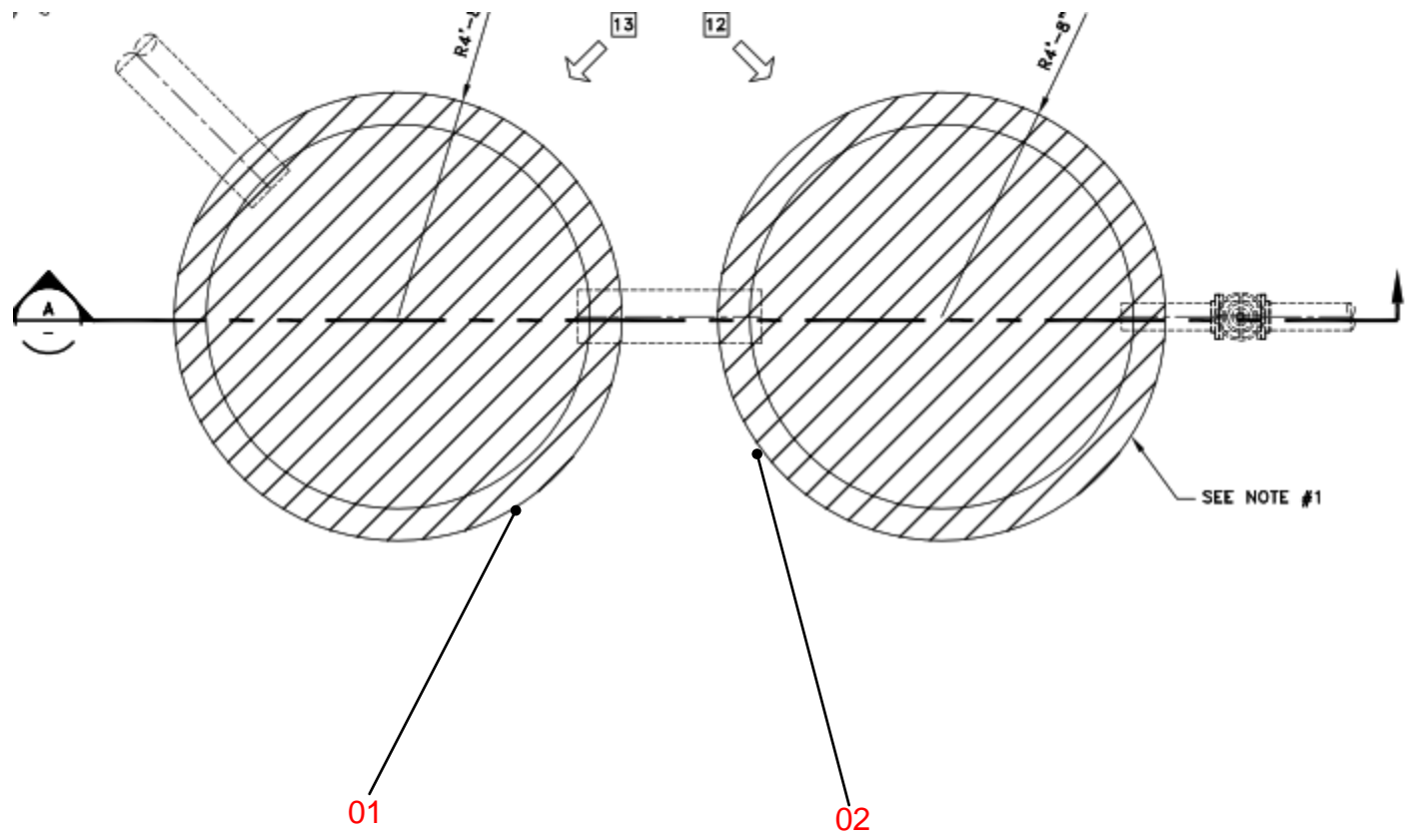
Las Gallinas Valley Sanitary District  
Demolition Plan Page MMD-1 (Zinc Pump House – 19)  
FACS # PJ38352  
July 20, 2018

**LEGEND**

Asbestos Sample Location: -01 -

NOT TO SCALE



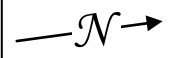


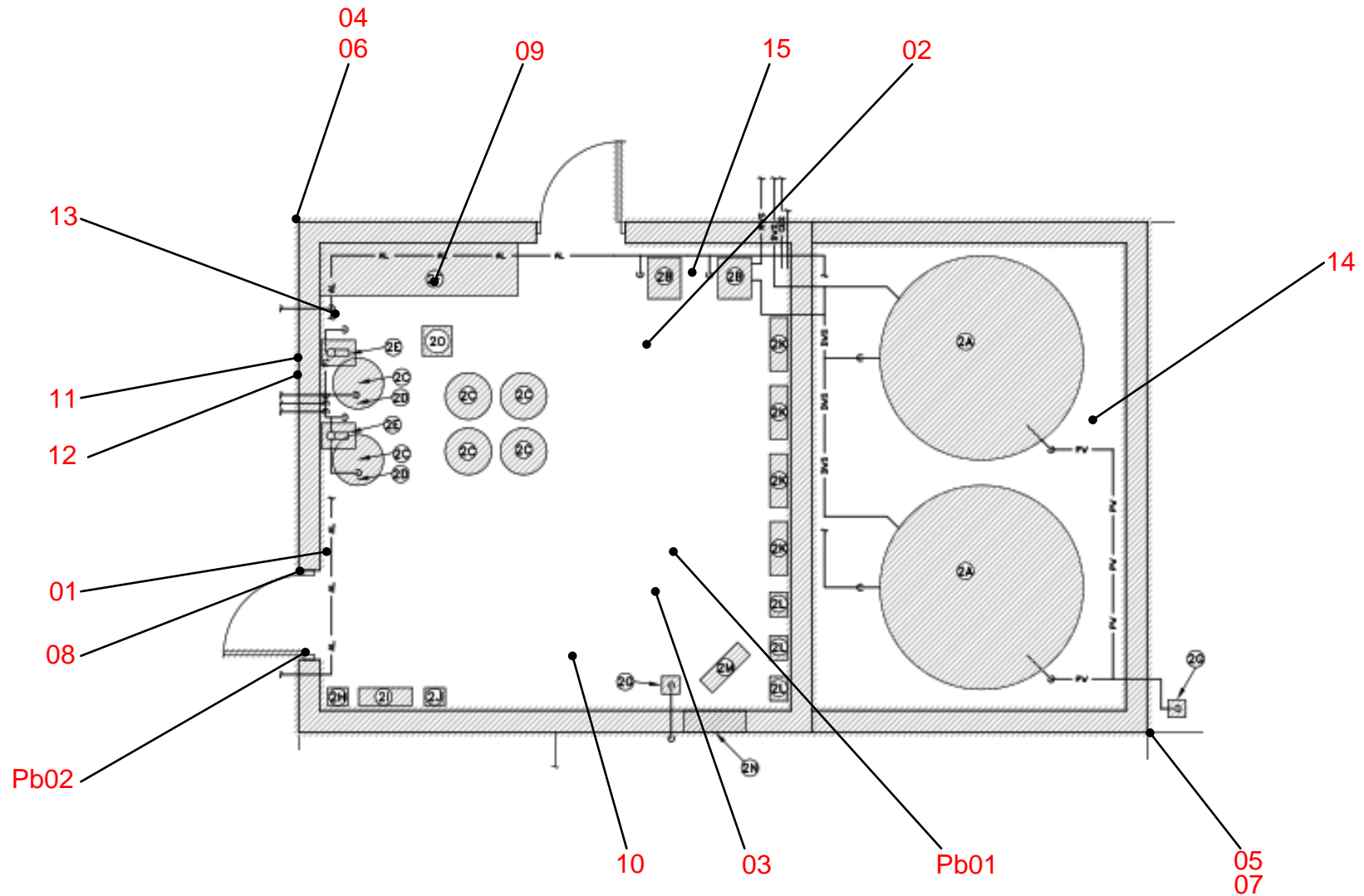
**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
 Demolition Plan Page MMD-2 (Backwash Sump)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos Bulk Sample Location: -01 -  
 NOT TO SCALE





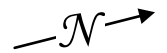
**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
 Demolition Plan Page MMD-3 (Chemical Building)  
 FACS # PJ38352  
 July 20, 2018

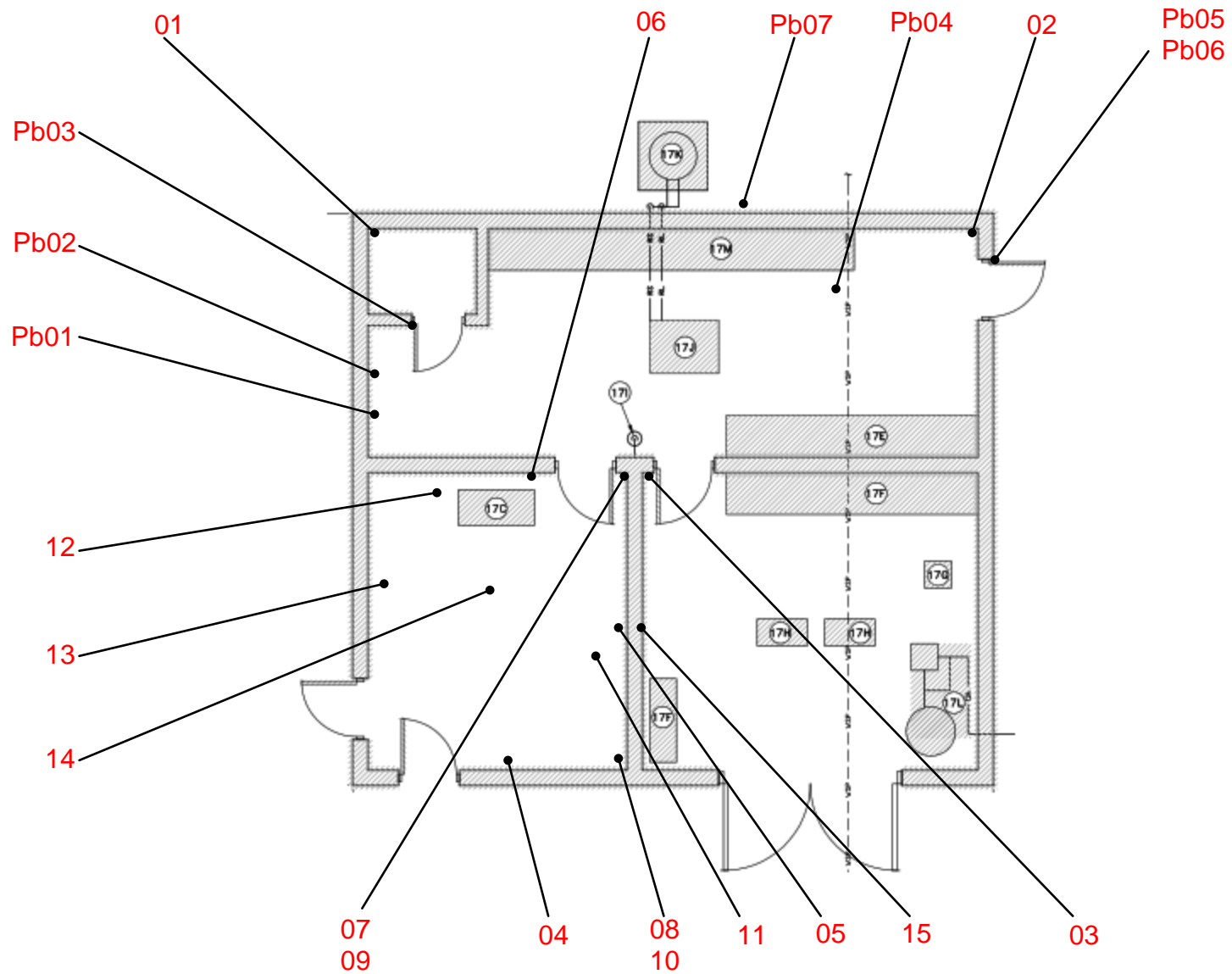
**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE







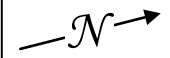
**SAMPLE LOCATION DRAWING**

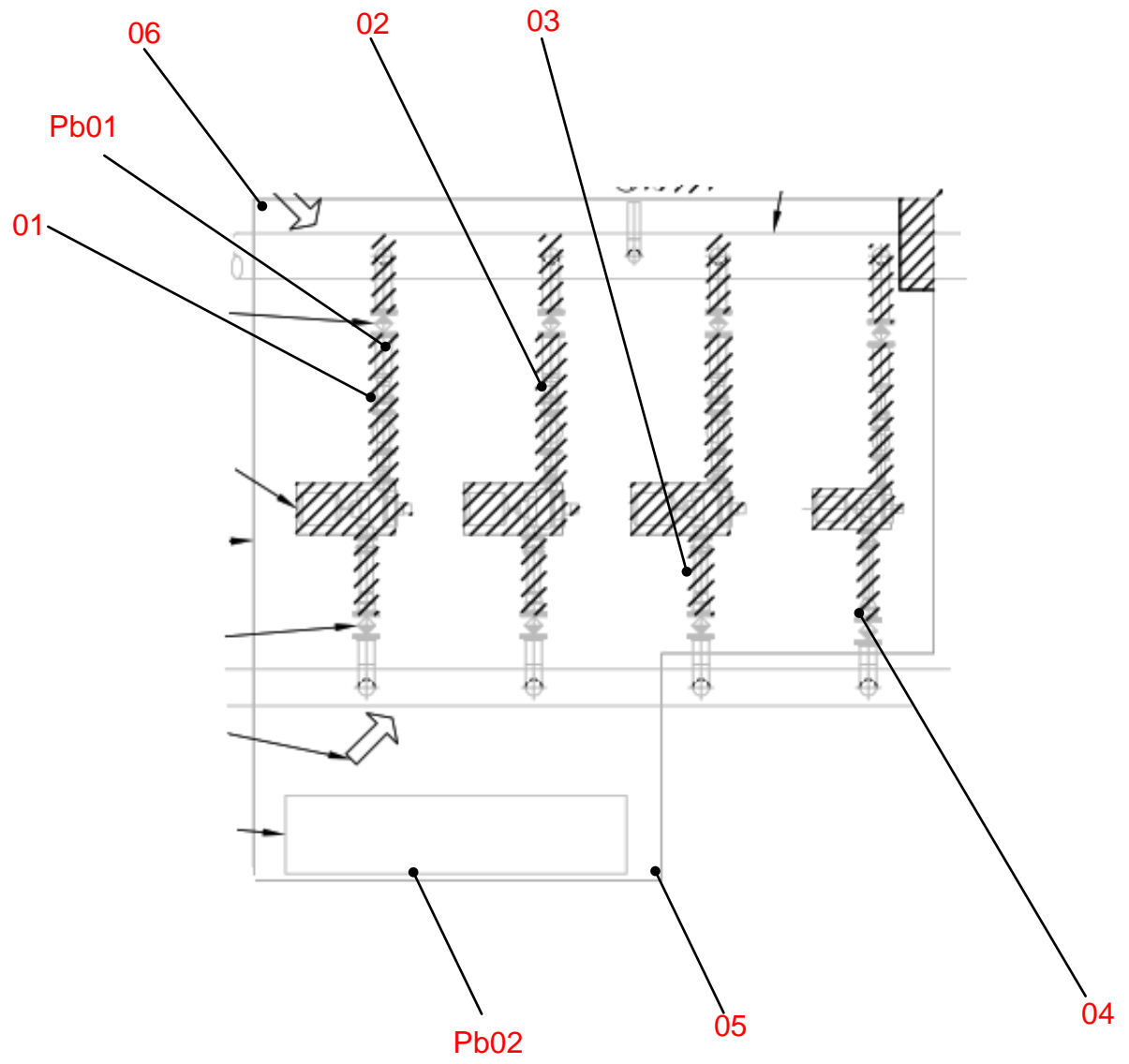
Las Gallinas Valley Sanitary District  
 Demolition Plan Page MMD-3 (Control Building)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE





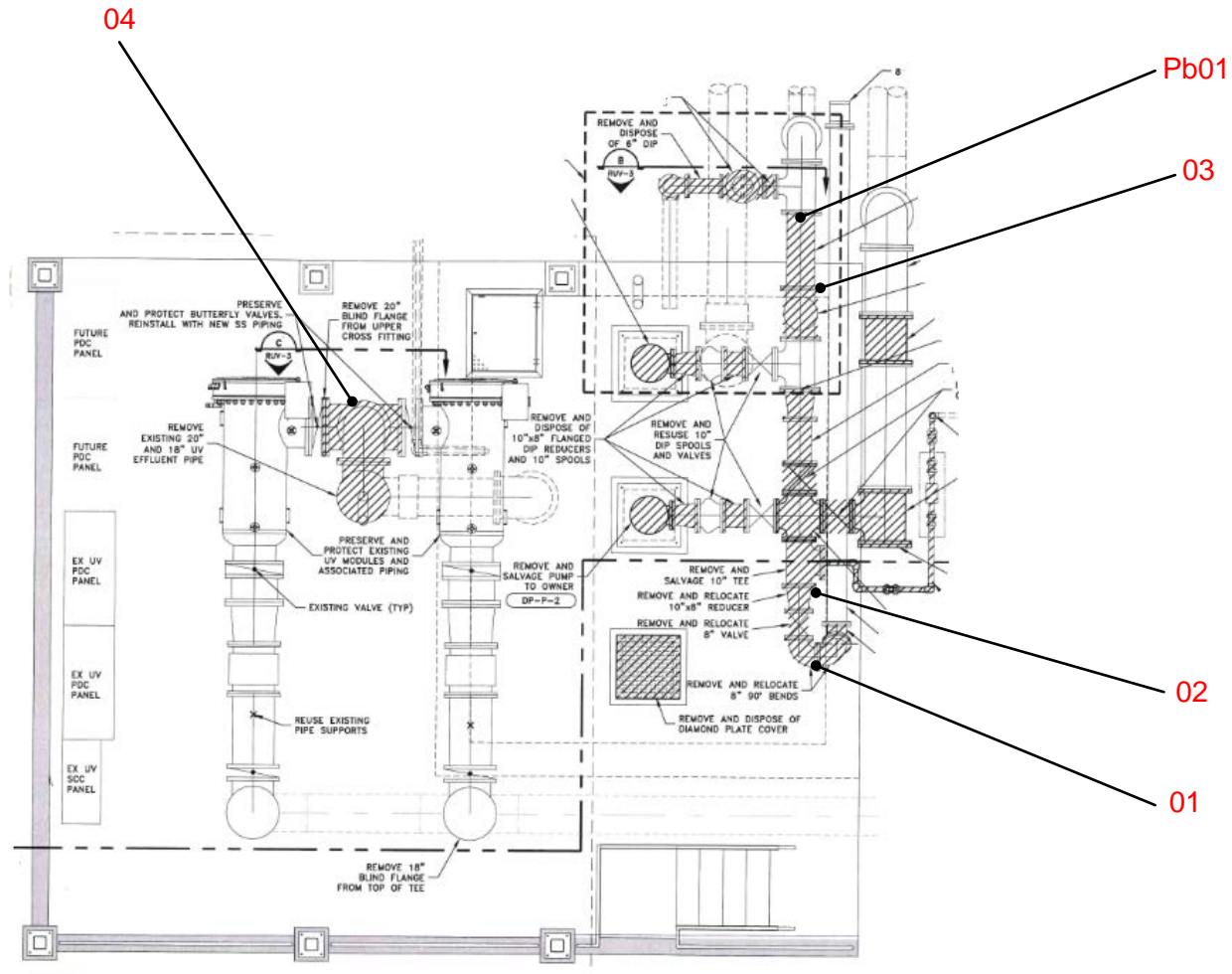
**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
 Demolition Plan Page MMD-6 (Pump Station)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -  
 NOT TO SCALE





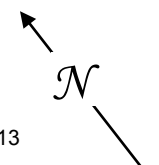
**SAMPLE LOCATION DRAWING**

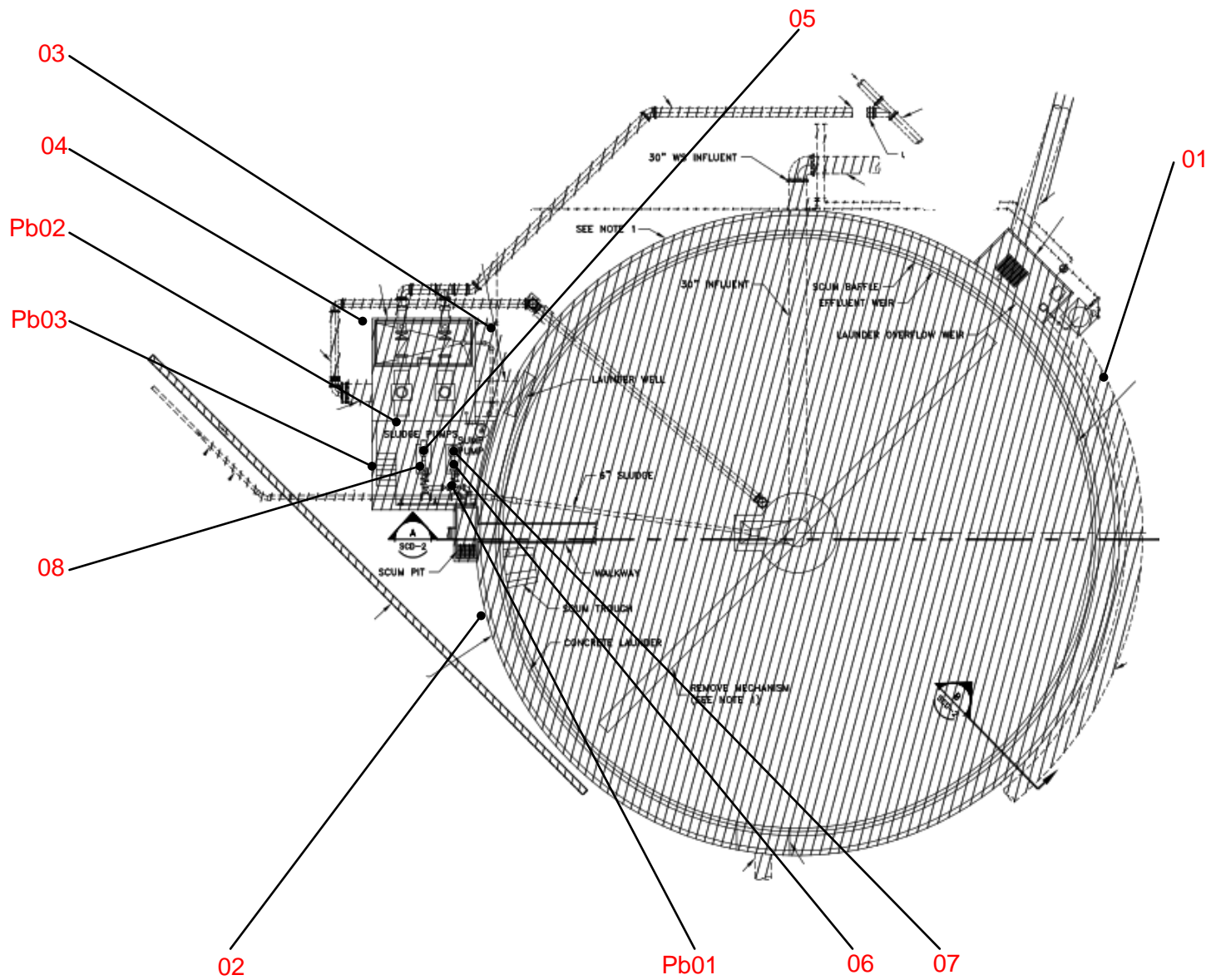
Las Gallinas Valley Sanitary District  
 Demolition Plan Page RUV-1 (RWTF UV Disinfection)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE





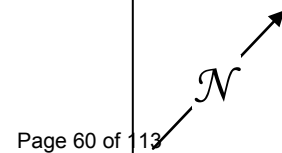
**SAMPLE LOCATION DRAWING**

Las Gallinas Valley Sanitary District  
 Demolition Plan Page SCD-1 (Existing Clarifier)  
 FACS # PJ38352  
 July 20, 2018 ADDENDUM 1

**LEGEND**

Asbestos and Lead Bulk Sample Location: -01 -

NOT TO SCALE



## Appendix B

# Asbestos Results Table, Laboratory Reports and Chain of Custody

# Attachment III

## Sample Results

Abbreviation Definitions Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Note: sf= square feet, N/A= not applicable, ND= non-detect for asbestos, CMU= concrete masonry unit, RACM= friable asbestos materials, regulated asbestos-containing materials, Category I Nonfriable = nonfriable packings, gaskets, resilient floor coverings (not including backing), and asphaltic roofing; Category II Nonfriable = Nonfriable materials other than Category I						

Asbestos Survey Summary – Chlorination House and Poly Tank 28 Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262222</b>						
18-101-01	Concrete	Slab	101	ND	N/A	--
18-102-02	White Caulking	North Side	102	ND	N/A	--

Asbestos Survey Summary – Stormwater Pump Station Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262223</b>						
Stormwater-101-01	Concrete	Top of wall	101	ND	N/A	--

Asbestos Survey Summary – Contact Weir Box Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262224</b>						
101-01	Concrete	East side	101	ND	N/A	--

+Asbestos Survey Summary – Backwash Sump Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262225</b>						
BWS-101-01,02	Concrete	Top of wall	101	ND	N/A	--

Asbestos Survey Summary – Product Weir Tank 14 Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262226</b>						
PWT-101-01,02	Concrete	Slab, West and East sides	101	ND	N/A	--

Asbestos Survey Summary – Junction Box Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262227</b>						
101-01	Concrete	Junction box walls	101	ND	N/A	--
102-02	Concrete	Electrical slab	102	ND	N/A	--

Asbestos Survey Summary – MMWD, Product Pump 15 Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262228</b>						
PumpStation-01 Through PumpStation-04	Black gaskets	Pump2 4A-4D	101	ND	N/A	--
PumpStation-05, 06	Concrete	Slab-SW and NE corners	102	ND	N/A	--

Asbestos Survey Summary – Dechlorination Pump and Storage Area Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262229</b>						
101-01	Concrete	Storage room slab	101	ND	N/A	--
102-02	White penetration mastic	Storage room (north side)	102	ND	N/A	--
103-03	White caulking	Exterior storage room	103	ND	N/A	--
104-04	Fiber reinforced panels with black mastic	Interior east wall	104	ND	N/A	--
105-05	Concrete fill	Fill stone	105	ND	N/A	--
106-06	Concrete	Tanks	106	ND	N/A	--

Asbestos Survey Summary – RWTF UV Disinfection Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262231</b>						
101-01	Red gasket	Piping, south side	101	ND	N/A	--
102-02	Black gasket rubberized	Piping, east and north sides	102	ND	N/A	--



Asbestos Survey Summary – Fuel Tank Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262247</b>						
101-01	Concrete	Fuel tank pad	101	ND	N/A	--

Asbestos Survey Summary – Existing Clarifier Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262248</b>						
101-01,02	Concrete wall	East and west walls	101	ND	N/A	--
102-03, 04	Concrete pit wall	East and west pit walls	102	ND		
<b>103-05, 06</b>	<b>Grey/black gasket</b>	<b>Piping</b>	<b>103</b>	<b>30% Chrysotile (Dark grey semi-fibrous material), ND</b>	<b>Cat 1</b>	<b>25 gaskets</b>
104-07	Off-white gasket	Piping	104	ND	N/A	--
105-08	Red gasket	Piping	105	ND	N/A	--

Asbestos Survey Summary – Canopy Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262252</b>						
Canopy-101-01,03	Felt paper	Roof	101	ND	N/A	--

Asbestos Survey Summary – Tanks Area 26 & 28 Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262253</b>						
101-01,02	Concrete	Slab	101	ND	N/A	--
102-03	Silver foil tape with grey mastic	Slab	102	ND	N/A	--

Asbestos Survey Summary – Secondary Biofilter Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262256</b>						
Sec.bio-101-01,02	Concrete	Walls	101	ND	N/A	--
Sec.bio-102-03 Through Sec.bio-102-05	Black vapor barrier	Sides at grade	102	ND	N/A	--

Asbestos Survey Summary – Biofilter Recirc Pump Pit Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262257</b>						
101-01,02	Concrete	Pit vault	101	ND	N/A	--
102-03	Green gasket	Piping	102	ND	N/A	--
103-04	Black gasket	Piping	103	ND	N/A	--

**Asbestos Survey Summary – Hydropneumatic Tank**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262258</b>						
101-01,04	Concrete pad	Pad	101	ND	N/A	--
<b>102-02</b>	<b>Gray/black gasket</b>	<b>Piping</b>	<b>102</b>	<b>30% Chrysotile (Black semi-fibrous material), ND (paint)</b>	<b>Cat 1</b>	<b>15 gaskets</b>
103-03	Black gasket	Piping	103	ND	N/A	--

**Asbestos Survey Summary – Tank Area 1**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262259</b>						
101-01, 02	Concrete	Tank slab	101	ND	N/A	--
102-03	Black gasket	Tank 1 hatch	102	ND	N/A	--
103-04	Black gasket	Pump 24-25	103	ND	N/A	--

**Asbestos Survey Summary – Tanks 3-6**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262260</b>						
101-01, 02	Concrete	Tank slab	101	ND	N/A	--
<b>N/A</b>	<b>Gaskets</b>	<b>Piping</b>		<b>Presumed</b>	<b>RACM</b>	<b>*10 gaskets</b>

**Note: \*Gaskets were inaccessible due to a larger flange**

Asbestos Survey Summary – Tanks 8-11 Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262261</b>						
101-01, 02	Concrete	Tank slab	101	ND	N/A	--
<b>N/A</b>	<b>Gaskets</b>	<b>Piping</b>		<b>Presumed</b>	<b>RACM</b>	<b>*10 gaskets</b>
<b>Note: *Pit inaccessible due to confined space</b>						

Asbestos Survey Summary – Chemical Building Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262262</b>						
ChemB-01 Through ChemB-03	Wallboard and joint compound	Ceiling	101	ND	N/A	--
ChemB-04, 05	CMU block and grey mortar	Exterior	102	ND	N/A	--
ChemB-06, 07	Concrete slab	Exterior	103	ND	N/A	--
<b>ChemB-08</b>	<b>Grey caulking</b>	<b>Exterior</b>	<b>104</b>	<b>2% Chrysotile (Grey semi-fibrous material)</b>	<b>Cat 1</b>	<b>10 sf</b>
ChemB-09	Grey seam sealant	Roof at exhaust duct	105	ND	N/A	--
ChemB-10	Grey penetration mastic	Roof	106	ND	N/A	--
ChemB-11	White roof flashing mastic	Roof	107	ND	N/A	--
<b>ChemB-12</b>	<b>Tan caulking</b>	<b>Roof – below flashing between CMU and roof deck</b>	<b>108</b>	<b>2% Chrysotile (Tan semi-fibrous material), ND (Grey cementitious material)</b>	<b>Cat 1</b>	<b>20 sf</b>
ChemB-13 Through ChemB-15	Single ply membrane roofing	Roof	109	ND	N/A	--

**Asbestos Survey Summary – Filter Feed Pump Station  
Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

<b>Sample Number</b>	<b>Material Description</b>	<b>Location(s) of Material</b>	<b>Material Number</b>	<b>Asbestos Content (percent)</b>	<b>Asbestos Regulatory Classification</b>	<b>Approximate Quantity</b>
<b>Lab Report # B262263</b>						
101-01, 02	Concrete walls	Exterior	101	ND	N/A	--
<b>102-03</b>	<b>Gray/black gasket</b>	<b>Piping blower silencers</b>	<b>102</b>	<b>30% Chrysotile (Black semi-fibrous material), ND (paint)</b>	<b>Cat 1</b>	<b>40 gaskets</b>
103-04	Black gasket	Piping backwash pumps	103	ND	N/A	--

**Asbestos Survey Summary – MMWD Control Building**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262264</b>						
MMWD-CB-01 Through MMWD-CB-03	Wallboard and joint compound	Restroom, lab room, electrical room	101	ND	N/A	--
MMWD-CB-04 Through MMWD-CB-06	Orange peel/ wall texture	Control room	102	ND	N/A	--
MMWD-CB-07, 08	Yellow baseboard mastic	Control room	103	ND	N/A	--
MMWD-CB-09, 10	Green carpet adhesive	Control room	104	ND	N/A	--
MMWD-CB-11 Through MMWD-CB-13	Single ply membrane roofing	Roof	105	ND	N/A	--
MMWD-CB-14	Grey roof penetration mastic	Roof	106	ND	N/A	--
MMWD-CB-15	Grey caulking	Exterior	107	ND	N/A	--
MMWD-CB-16	Concrete	Exterior	108	ND	N/A	--

**Asbestos Survey Summary – MMWD, Poly Tank 28**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262265</b>						
28-101-01	Concrete	Tank slab	101	ND	N/A	--

**Asbestos Survey Summary – MMWD, Tank Areas 26 & 28**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262266</b>						
28/16-101-01	CMU block with grey mortar	South side	101	ND	N/A	--
28/16-102-02	Concrete	Slab	102	ND	N/A	--
28/16-103-03	Concrete	Base for pump	103	ND	N/A	--
28/16-104-04	Concrete	Sump pit in slab	104	ND	N/A	--

**Asbestos Survey Summary – MMWD, Product Pump 15**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262267</b>						
#15-101-01, 02	Black gasket (7/8" thick)	Piping	101	ND	N/A	--
#15-102-03	Black gasket (1/2" thick)	Piping	102	ND	N/A	--

**Asbestos Survey Summary – MCC #9 Building**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262268</b>						
MCC9-101-01	Concrete and skim coat	Exterior	101	ND	N/A	--
MCC9-102-02 Through MCC9-102-06	Skim coat gray/painted	Exterior walls	102	ND	N/A	--
MCC9-102-07, 08	Rolled composition roofing material	Roof	103	ND	N/A	--
MCC9-103-09	Concrete landing	Stairs/pad	104	ND	N/A	--

Asbestos Survey Summary – MCC #3 Building Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262294</b>						
101-01 Through 101-03	Stucco	Exterior	101	ND	N/A	--
102-04 Through 102-06	Tar on plywood under cedar shingles	Roof	102	ND	N/A	--
<b>103-07 Through 103-09</b>	<b>9-inch green floor tiles with swirls and black mastic</b>	<b>Interior control room</b>	<b>103</b>	<b>3% - T 7% - M</b>	<b>Cat 1</b>	<b>160 sf</b>
104-10	CMU with grey mortar	Interior line crew room	104	ND	N/A	--
105-11	Yellow carpet adhesive	Floor under brown carpet	105	ND	N/A	--
<b>N/A</b>	<b>Transite panels</b>	<b>Under windows at control room</b>	<b>N/A</b>	<b>Presumed</b>	<b>RACM</b>	<b>25 sf</b>

Asbestos Survey Summary – Primary Biofilter Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262295</b>						
Prime Bio 101-01, 02	Concrete	Slab	101	ND	N/A	--



**Asbestos Survey Summary – Zinc Pump House 19**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
<b>Lab Report # B262293</b>						
#19-01	Concrete	Slab	101	ND	N/A	--
#19-02	Concrete	Eye wash station slab	102	ND	N/A	--
#19-03	Grey caulking	Base of structure	103	ND	N/A	--

**Asbestos Survey Summary – Outfall Box**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (percent)	Asbestos Regulatory Classification	Approximate Quantity
N/A	Gaskets	Piping	N/A	Presumed	RACM	*10 gaskets
<b>Note: *Pit inaccessible due to confined space</b>						

## Appendix C

# Lead Analysis Results, Laboratory Report and Chain of Custody

# Attachment III

## Sample Results

### Abbreviation Definitions

Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA

CMU= concrete masonry unit

### Lead Survey Summary – Chemical Building

Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA

Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200546</b>						
ChemB-Pb01	Interior ceiling	Ceiling	Off-white	Wallboard	Good	<0.006
<b>ChemB-Pb02</b>	<b>South Door</b>	<b>Door frame &amp; door</b>	<b>Beige</b>	<b>Metal</b>	<b>Good</b>	<b>0.030</b>

### Lead Survey Summary – Storage Containers

Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA

Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200547</b>						
SC Pb 01	South storage container	Paint metal box	Off-white	Metal	Fair	6.9
SC Pb 02	North storage container	Paint metal box	Grey	Metal	Fair	0.17

### Lead Survey Summary – RWTF UV Disinfection

Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA

Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200549</b>						
RWTF UV-Pb 01	Piping (west side)	Piping	Purple	Metal	Good	0.007

Lead Survey Summary – Product Weir Tank 14 Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200552</b>						
<b>PWT-Pb01</b>	<b>Tank extension</b>	<b>Tank</b>	<b>Beige</b>	<b>Metal</b>	<b>Good</b>	<b>0.007</b>

Lead Survey Summary – Control Building Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200553</b>						
CB-Pb01	Interior – Lab - south wall	Wall	Off-white	Wallboard	Good	<0.006
<b>CB-Pb02</b>	<b>Interior – Lab - south wall</b>	<b>Window frame</b>	<b>Brown</b>	<b>Wood</b>	<b>Good</b>	<b>0.040</b>
<b>CB-Pb03</b>	<b>Interior – Restroom</b>	<b>Door frame and door</b>	<b>Brown</b>	<b>Metal</b>	<b>Good</b>	<b>0.063</b>
CB-Pb04	Interior – Lab	Floor	Grey	Concrete	Good	<0.006
CB-Pb05	Exterior – North side	Door trim	Blue	Wood	Good	<0.006
CB-Pb06	Exterior – North side	Door frame and door	Blue	Metal	Good	<0.007
CB-Pb07	Exterior – West side	Wall	Off-white	Wood	Good	<0.006

Lead Survey Summary – Filter Feed Pump Station Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200554</b>						
<b>FFPS Pb01</b>	<b>Piping</b>	<b>Paint</b>	<b>Grey</b>	<b>Metal</b>	<b>Good</b>	<b>0.007</b>
FFPS Pb02	Piping - motor	Paint	Blue	Metal	Good	<0.02

Lead Survey Summary – Outfall Box Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200555</b>						
Outfall Pb01	Exterior/crane	Exterior	Red	Metal	Poor	<0.006
Not applicable	Piping	Piping	Unknown	Metal	Unknown	*Presumed lead-containing
Note: *Pit inaccessible due to confined space						

Lead Survey Summary – Existing Clarifier Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200556</b>						
Clarifier Pb01	Clarifier pit	Pipe	Beige	Metal	Fair	0.11
Clarifier Pb02	Clarifier walls	Concrete walls	Beige	Concrete	Poor	0.10
Clarifier Pb03	Handrail - exterior	Handrail	Grey	Metal	Good	0.026

Lead Survey Summary – Fuel Tank Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200557</b>						
Fuel Tank Pb01	Fuel tank	Paint	Beige	Metal	Good	<0.006

Lead Survey Summary – Canopy Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200558</b>						
Canopy Pb 01	MCC3 Canopy	Supports	Beige	Metal	Fair	0.61

Lead Survey Summary – MCC #9 Building Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200562</b>						
MCC9 - Pb01	Exterior walls of MCC9	Paint	Beige	Stucco	Good	<0.007

Lead Survey Summary – Tanks 8-11 Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200563</b>						
<b>T8-11 Pb01</b>	<b>Tank</b>	<b>Paint</b>	<b>Beige</b>	<b>Steel</b>	<b>Good</b>	<b>0.091</b>
T8-11 Pb02	Piping	Paint	Beige	Steel	Good	<0.02

Lead Survey Summary – Tanks 3-6 Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200564</b>						
T3-6PB01	Tank	Paint	Beige	Steel	Good	<0.006
<b>T3-6PB02</b>	<b>Piping</b>	<b>Paint</b>	<b>Beige</b>	<b>Steel</b>	<b>Good</b>	<b>0.028</b>

Lead Survey Summary – Chlorination House and Poly Tank 28 Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200565</b>						
28/16 – Pb-01	Tank motor housing – Top	Motor housing	White	Metal	Poor	<0.006
28/16 – Pb-02	East side	Wall	Light brown	CMU	Good	<0.006

**Lead Survey Summary – Tank Area 26 & 28**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200566</b>						
A 26/28 – Pb0-1	Area – Walking pad	Paint	Yellow	Metal	Good	<0.02

**Lead Survey Summary – Pump Station**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200567</b>						
<b>Pump Station – Pb01</b>	<b>Electrical Box – East Side</b>	<b>Frame and Door</b>	<b>Beige</b>	<b>Metal</b>	<b>Good</b>	<b>0.009</b>
Pump Station – Pb02	Pump 4D	Pipe and valves	Beige	Metal	Good	<0.006

**Lead Survey Summary – MCC #3 Building**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
<b>Lab Report # M200568</b>						
<b>MCC3 – Pb-01</b>	<b>Exterior Door North Side</b>	<b>Door frame and door</b>	<b>Light brown</b>	<b>Metal</b>	<b>Poor</b>	<b>0.19</b>
<b>MCC3 – Pb02</b>	<b>Interior control room</b>	<b>Wall</b>	<b>Light brown</b>	<b>CMU</b>	<b>Good</b>	<b>0.48</b>
<b>MCC3- Pb03</b>	<b>Interior storage room</b>	<b>Wall</b>	<b>Off-white</b>	<b>CMU</b>	<b>Good</b>	<b>0.038</b>

Lead Survey Summary – Primary Biofilter Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
Lab Report # M200569						
Prime Bio Pb01	Primary biofilter	Walls	Light brown	Concrete	Good	0.008
Not applicable	Sprayer arm	Sprayer arm	Green	Metal	N/A	*Presumed lead-containing
Not applicable	Sprayer arm	Sprayer arm	Beige	Metal	N/A	*Presumed lead-containing
Note: *Pit inaccessible due to confined space						

Lead Survey Summary – Hydropneumatic Tank Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
Lab Report # M200570						
HydrotankPb01	Tank	Tank	Beige	Metal	Good	0.034
HydrotankPb02	Pipe	Piping	Grey	Metal	Good	0.038

Lead Survey Summary – Tank Shed 13 Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
Lab Report # M200571						
13-Pb01	Exterior – West side	Wall	Beige	Wood	Good	<0.006
13-Pb02	Exterior – West side	Trim	Blue	Wood	Good	<0.007

Lead Survey Summary – Product Pump 15 Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
Lab Report # M200572						
15-Pb01	Valve	Piping system	Beige	Metal	Good	<0.006



Lead Survey Summary – Tank Area 1 Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
Lab Report # M200573						
TAI - Pb01	Tank #1/21 – Pipe 22	Paint	Beige	Metal	Good	0.01
TAI – Pb02	Stairs and catwalk, west side 22	Paint	Beige	Metal	Good	0.05

Lead Survey Summary – Biofilter Recirc Pump Pit Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
Lab Report # M200606						
Recirc Pit – Pb01	Recirc pit – Interior	Interior walls paint	Green	Concrete	Good	0.019
Recirc Pit – Pb02	Recirc pit – Interior	Interior walls paint	Off-White	Concrete	Good	0.017
Recirc Pit – Pb03	Recirc Pit – Exterior	Exterior walls	Beige	Concrete	Good	0.23
Recirc Pit – Pb04	Handrail – Recir pit	Handrail	Grey	Metal	Good	0.10
Recirc Pit – Pb05	Valve – Recir pit	Valve	Red	Metal	Good	1.6

Lead Survey Summary – Secondary Biofilter Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA						
Sample Number	Location(s) of Material	Component	Color	Substrate	Condition	Result (weight %)
Lab Report # M200608						
Sec Bio Pb01	Exterior west side	Wall	Off-white	Concrete	Poor	2.9
Not applicable	Arm	Piping	Unknown	Metal	Unknown	*Presumed lead-containing

Note: \*Pit inaccessible due to confined space

**Lead Survey Summary – Dechlorination Building**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

<b>Sample Number</b>	<b>Location(s) of Material</b>	<b>Component</b>	<b>Color</b>	<b>Substrate</b>	<b>Condition</b>	<b>Result (weight %)</b>
<b>Not applicable</b>	<b>Piping</b>	<b>Piping</b>	<b>Unknown</b>	<b>Metal</b>	<b>Unknown</b>	<b>*Presumed lead-containing</b>

**Note: \*Pit inaccessible due to confined space**

**Lead Survey Summary – Contact Weir Box**  
**Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA**

<b>Sample Number</b>	<b>Location(s) of Material</b>	<b>Component</b>	<b>Color</b>	<b>Substrate</b>	<b>Condition</b>	<b>Result</b>
<b>Not applicable</b>	<b>Piping</b>	<b>Piping</b>	<b>Assume beige</b>	<b>Metal</b>	<b>Unknown</b>	<b>*Presumed lead-containing</b>

**Note: \*Pit inaccessible due to confined space**

## Appendix D

# Employee Certifications

**State of California Department of Public Health**

<u>Certificate</u>	<u>Type</u>	<u>Expiration</u>
Lead-Related Construction Certificate	Inspector/Assessor	10/23/2019



**Jonathan S. Curtis** ID #: **18779**

Mr. James M. Rich  
Forensic Analytical Consulting Services, Inc.  
7625 Sunrise Boulevard #104  
Citrus Heights, California 95610



#### Conditions of Certification

This individual meets the requirements of the State of California, Department of Public Health (CDPH), to perform lead-related construction. CDPH may suspend or revoke certification for:

1. any false statement in the application (for certification);
2. violations of relevant local, state or federal statutes or regulations;
3. misrepresentation, failure to disclose relevant facts, fraud, or issuance by mistake; or
4. failure to comply with any relevant regulation or order of the Department.

This certificate was issued by the Department of Public Health as authorized by 17 CCR 35001 et seq., and is non-transferable.

To verify authenticity call  
(800) 597-LEAD or  
510-620-5600

03159513

DEPARTMENT OF INDUSTRIAL RELATIONS  
Division of Occupational Safety and Health  
Asbestos Unit  
2424 Arden Way, Suite 495  
Sacramento, CA 95825-2417  
(916) 574-2993 Office (916) 483-0572 Fax  
<http://www.dir.ca.gov/dirdatabases.html> [actu@dir.ca.gov](mailto:actu@dir.ca.gov)



608302035C

128

132

**Forensic Analytical Consultants**  
**James M Rich**  
**7625 Sunrise Blvd., #104**  
**Citrus Heights CA 95610**

**November 06, 2017**

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailling information within 15 days of the change.

Sincerely,

Jeff Ferrell  
Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal - Card Attached (Revised 10/24/2012)

State of California  
Division of Occupational Safety and Health  
**Certified Asbestos Consultant**

---

**James M Rich**  
Name

---

**Certification No. 96-2035**

**Expiration 1/06/18**

---

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7100 et seq. of the Business and Professions Code.

DEPARTMENT OF INDUSTRIAL RELATIONS  
Division of Occupational Safety and Health  
Asbestos Unit  
2424 Arden Way, Suite 495  
Sacramento, CA 95825-2417  
(916) 574-2993 Office (916) 483-0572 Fax  
<http://www.dir.ca.gov/dir/databases.html> [actu@dir.ca.gov](mailto:actu@dir.ca.gov)



403163562C

264

**Forensic Analytical Consulting Services, Inc.**  
**Jonathan S Curtis**  
**7625 Sunrise Blvd., 104**  
**Citrus Heights CA 95610**

**March 21, 2018**

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailling information within 15 days of the change.

Sincerely,

  
Jeff Ferrell  
Senior Safety Engineer

Attachment: Certification Card

cc: File



Renewal – Card Attached (Revised 10/24/2012)

**Right People  
Right Perspective  
Right Now**

[www.forensicanalytical.com](http://www.forensicanalytical.com)



## **Attachment C**

### **Revised Section 024100 of Volume 3A (Demolition, Salvage, and Reconstruction)**

## SECTION 024100 - DEMOLITION, SALVAGE, AND RECONSTRUCTION

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. The Contractor shall demolish, salvage and reconstruct existing civil, landscaping, structural, architectural, mechanical, HVAC, electrical, and instrumentation facilities as indicated, in accordance with the Contract Documents.
- B. Certain existing structures and piping have been inspected and identified as containing hazardous materials including asbestos and lead paint. Demolition, rehabilitation, or other activity that may include the removal or disturbance of hazardous materials at these locations shall be properly handled and disposed of by a contractor trained and licensed for the removal and disposal of said materials as identified in the Pre-Demolition Asbestos and Lead Survey Report (provided as Appendix B of Volume 3).

#### 1.2 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
  - 1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

#### 1.3 COORDINATION AND PROJECT CONDITIONS

- A. The Contractor shall carefully coordinate the Work in areas where existing facilities are interconnected with new facilities and where existing facilities remain operational. The Work as indicated is not all inclusive, and the Contractor shall be responsible to perform the reconstruction indicated plus that which can be reasonably inferred from the Contract Documents as necessary to complete the Project. The Specifications and Drawings identify the major facilities that shall be demolished and reconstructed, but auxiliary utilities such as water, air, chemicals, drainage, lubrication, fluid power, electrical wiring, controls, and instrumentation are not necessarily shown. The Contractor shall comply with sequencing requirements in Section 011000 – Summary of Work
- B. The Contractor shall note that the Drawings used to indicate demolition and reconstruction are based on record drawings of the existing facilities. Prior to bidding, the Contractor shall conduct a comprehensive survey at the Site to verify the scope of Work, and the extent of auxiliary utilities. A partial set of record drawings is available for review from the Owner.
- C. Buildings and/or structures to be demolished will be vacated and their use discontinued before start of the demolition.
- D. Owner assumes no responsibility for buildings and structures to be demolished.
  - 1. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

E. Hazardous Materials:

1. A “Pre-demolition Asbestos and Lead Survey Report” was prepared by Forensic Analytical Consulting Services (FACS) and submitted to the District on August 3, 2018. This report summarizes the results of their site assessment and laboratory testing of samples taken from existing buildings, piping, and structures that are to be demolished, updated, or otherwise disturbed during this project. The report, included as “Appendix B” in the Volume 3 Appendix, lists all structures/components that were tested and summarizes areas where asbestos or lead containing materials were identified.
2. The Contractor is responsible for properly providing staff that is properly trained and certified for removing, containing, handling, and disposing of all hazardous materials that are to be removed or disturbed due to this project. Contractor shall comply with all local and state requirements and guidelines (including Cal-OSHA) for the handling, containment, removal, and disposal of hazardous materials including providing personal protective equipment (PPE), respirators, containment precautions, proper disposal containment/transport protocol, etc. while material is being removed/disturbed.
3. Contractor shall submit to Owner and Engineer their plan for handling, containing, and removing asbestos and lead bearing materials for review, comment, and approval prior to conducting any demolition activity on site. Upon request of the Owner or Engineer, Contractor shall provide proof of proper training (and any applicable certification) as required by local, state, and Cal-OSHA regulations.
4. A summary of areas/structures identified as containing hazardous materials in the report is provided in paragraph 3.10 of this section for reference. However, the report in Appendix B of Volume 3 provides complete details including specifics regarding testing results and structures/locations that were tested and is ruling document regarding locations of hazardous materials.
5. While every effort has been made to identify hazardous materials that will be exposed/impacted due to this project, other areas not identified in the above mentioned report may contain as yet unknown or identified hazardous materials. Accordingly, if any materials suspected of containing hazardous materials are encountered beyond what is identified in the report, the contractor shall **not disturb said materials and shall immediately notify the Engineer and Owner**. Unidentified hazardous materials will be removed by Owner under a separate contract or negotiated with Contractor via change order.

F. On-site storage or sale of removed items or materials is not permitted.

G. Arrange demolition schedule so as not to interfere with Owner's operations at the adjacent WRF.

H. While demolition and reconstruction are being performed, the Contractor shall provide adequate access for the continued operation and maintenance of equipment and treatment processes at the existing WWTP. The Contractor shall erect and maintain fences, warning signs, barricades, and other devices around the reconstruction as required for the protection of the Contractor's employees and the Owner's personnel. The Contractor shall remove such protection when reconstruction activities are complete, or as work progresses, or when directed by the Engineer.

#### 1.4 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.
- C. Pre-demolition Conference: Conduct conference at Project site.

#### 1.5 CONTRACTOR SUBMITTALS

- A. Demolition and reconstruction activities and procedures, including operational sequence, shall be submitted to the Engineer for approval. The procedures shall provide for safe conduct of the Work, careful removal and disposition of materials and equipment, protection of existing facilities which are to remain undisturbed, coordination with existing facilities to remain in service, and timely disconnection and reconnection of utility services. The procedures shall include a detailed description and time schedule of the methods and equipment to be used for each operation and the sequence of operation. A storage plan for salvaged items shall be included.

#### 1.6 DEMOLITION AND ABANDONMENT

- A. Existing pavement, concrete, retaining walls, curb and gutter, sidewalks, buildings, yard structures, equipment, piping, valves, ductwork, duct banks, electrical gear, instrumentation, utilities, and related appurtenances such as anchors, supports, and hardware indicated or required to be demolished as part of the Work shall be removed and disposed of unless otherwise indicated. Removal of buried structures, utilities, and appurtenances includes the related excavation and backfill as required. Removed items shall be disposed of offsite by the Contractor.

#### 1.7 SALVAGE

- A. Items of existing equipment, piping, valves, electrical gear, instrumentation, utilities, and appurtenances indicated in the drawings to be salvaged shall be removed without any degradation in condition from that prior to removal. Salvaged items shall be stockpiled and protected on the Site at a location directed by the Engineer. The Contractor shall be responsible to properly safeguard the salvaged items against damage and loss during removal and handling.

#### 1.8 RELOCATION

- A. Items of existing equipment, piping, valves, electrical gear, instrumentation, utilities, and appurtenances required to be relocated and/or salvaged shall be removed without any degradation in condition from that prior to removal. The Contractor shall be responsible to properly safeguard the relocated items against damage and loss during removal, handling, storage, and installation in the new location.

#### 1.9 REHABILITATION

- A. Existing WWTP site shall be restored and landscaped as noted in the drawings.

## 1.10 DISPOSAL

- A. The Contractor shall be responsible for the legal, offsite disposal of debris resulting from reconstruction in compliance with local, state, and federal codes and requirements.

## PART 2 - PRODUCTS (NOT USED)

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting demolition operations.
- B. Inventory and record the condition of items to be removed and salvaged.

### 3.2 GENERAL

- A. The Contractor shall coordinate demolition and reconstruction Work with the Owner and Engineer. Unless otherwise indicated, the Contractor shall be responsible for the sequence of activities. Work shall be performed in accordance with applicable safety rules and regulations.
- B. The Contractor shall verify that any utilities connected to structures, equipment, and facilities to be removed, relocated, salvaged, replaced, or abandoned are rendered inoperable, replaced with new utilities, or adequately bypassed with temporary utilities before proceeding with demolition and reconstruction. The Owner shall arrange the shutoff of indicated utilities when requested by the Contractor.
- C. The Contractor shall take precautions to avoid damage to adjacent facilities and to limit the Work activities to the extent indicated. If reconstruction beyond the scope indicated is required, the Contractor shall obtain approval from the Engineer prior to commencing.

### 3.3 PROTECTION OF EXISTING FACILITIES

- A. Before beginning any reconstruction, the Contractor shall carefully survey the existing facilities and examine the Specifications and Drawings to determine the extent of reconstruction and coordination with the Work. Existing facilities not subject to demolition shall be protected and maintained in accordance with Section 015300 – Protection of Existing Facilities. Damaged existing facilities shall be repaired to the previous condition or replaced.
- B. Persons shall be afforded safe passages around areas of demolition.
- C. Erect a plainly visible fence around drip line of individual trees or around the perimeter drip line of groups of trees to remain.
- D. Provide temporary barricades and other protection required to prevent injury to people and adjacent buildings and facilities to remain.
- E. Provide protection to ensure safe passage of people around demolition areas.

- F. Structural elements shall not be overloaded. The Contractor shall be responsible for shoring, bracing, or adding new supports as may be required for adequate structural support as a result of Work performed under this Section. The Contractor shall remove temporary protection when the Work is complete or when so authorized by the Engineer.
- G. The Contractor shall carefully consider bearing loads and capacities before placement of equipment and material on Site. In the event of any questions as to whether an area to be loaded has adequate bearing capacity, the Contractor shall consult with the Engineer prior to the placement of such equipment or material.
- H. The Contractor shall not destroy any permanent survey points without the consent and review of the District. Any permanent monuments or points destroyed shall be replaced by a licensed land surveyor who is licensed in the State of California. Replacement shall be at the Contractor's expense.
- I. All valve boxes, catch basins, manholes, and vaults that are to remain in service shall be adjusted to new grade to coordinate with final grade or pavement.

### 3.4 DEMOLITION, SALVAGE, AND RELOCATION

- A. The Contract Documents indicate existing facilities to be demolished, salvaged, and/or relocated. Auxiliary utilities including such services as water, air, chemicals, drainage, lubrication, fluid power, electrical wiring, controls, and instrumentation are not necessarily indicated. The Contractor shall verify the scope of the Work to remove the equipment indicated; coordinate its shutdown, removal, replacement, or relocation; and submit an outage plan in accordance with Section 011000 – Summary of Work. The removal of existing facilities for demolition, salvage, and relocation shall include the following requirements:
  1. Demolish indicated buildings/structures and site improvements completely. Use methods required to complete the Work within limitations of governing regulations.
  2. Equipment supports, including concrete pads, baseplates, mounting bolts, and support hangers, shall be removed. Damage to the existing structure shall be repaired as indicated.
  3. Exposed piping including vents, drains, and valves shall be removed. Where exposed piping penetrates existing floors and walls, the piping, including wall thimbles, shall be removed to a minimum depth of 2-inches. Resultant openings in the structure shall be repaired as indicated.
  4. Electrical control panels, junction boxes, motor control centers, and local switches and pushbuttons shall be removed.
  5. Exposed electrical conduits and associated wiring shall be removed. Resultant openings in structures shall be repaired as indicated.
  6. Connections to embedded electrical conduits shall be removed a minimum of 2-inches inside the finished surface of the existing structure. Wiring shall be removed and the resulting openings shall be repaired as indicated.
  7. Associated instrumentation devices shall be removed.
  8. Auxiliary utility support systems shall be removed.
  9. The area shall be thoroughly cleaned such that little or no evidence of the previous equipment installation will remain.
  10. Asphalt and concrete pavement, curbs, and gutters shall be removed as necessary to perform reconstruction. The limits of removal shall be sawcut. When the required improvements have been constructed, new asphalt and concrete pavement, curbs, and gutters shall be placed to match the original unless otherwise indicated.

11. Footings, foundation walls, below-grade construction and concrete slabs on grade shall be demolished and removed completely.
  12. Below-grade areas and voids resulting from demolition of structures shall be completely filled. Fill and compaction shall be in accordance with Section 312000 – Earth Moving. After fill and compaction, surfaces shall be graded to meet adjacent contours and to provide flow to surface drainage structures, or as indicated.
  13. When existing pipe is removed, the Contractor shall plug the resulting open ends whether or not so indicated. Where removed piping is exposed, the remaining piping shall be blind-flanged or fitted with a removable cap or plug.
  14. When existing piping is removed from existing structures, the Contractor shall fill resulting openings in the structures and repair any damage such that the finished rehabilitated structure shall appear as a new homogeneous unit with little or no indication of where the new and old materials join. The openings in water-bearing structures shall be filled with non-shrink grout to be watertight and reinforced as required or indicated. In locations where the surface of the grout will be exposed to view, the grout shall be recessed approximately 1/2-inch and the recessed area filled with cement mortar grout.
  15. Electrical reconstruction shall be conducted by the Contractor in a safe and proper manner to avoid injury from electrical shock to the Owner's and Contractor's personnel. Electrical equipment to be shut off for a period of time shall be tagged, locked out, and sealed with a crimped wire and lead seal and made inoperable. At no time shall electrical wiring or connections, which are energized or could become energized be accessible to Contractor, Owner, or other personnel without suitable protection or warning signs.
- B. The Contractor shall perform, in the presence of Owner, an initial and final inspection of existing equipment that will be relocated to ensure the equipment condition is maintained as documented during the initial inspection. The Contractor shall make repairs and modifications necessary to restore the equipment to its original condition at no additional cost to the Owner.

### 3.5 ABANDONMENT

- A. Existing facilities to be abandoned shall be prepared as indicated. Where existing buried piping is to be abandoned, the Contractor shall completely remove the abandoned pipe to the points indicated on the plans. For abandoned segments that connect into active segments to remain, piping shall be removed to the connection point, and stubbed and capped at the connection point.
- B. Where removal is deemed unfeasible, the contractor may abandon in place after receiving permission from Owner. In this case, abandoned pipe shall be removed for a distance of 5-feet from any connecting structures. Openings at the existing structures shall be repaired. The remaining pipe shall be capped at both ends prior to backfill. Buried piping, 12-inches diameter or greater shall be completely sand-filled prior to closure of the piping ends.
- C. Where abandoned underground structures are encountered, the contractor shall remove the abandoned structures to sufficient depth to allow for new underground lines to cross or for new structures/foundations. Extent of removal shall be coordinated with Owner.

### 3.6 REHABILITATION

- A. Certain areas of existing structures, piping, conduits, and the like will be affected by Work necessary to complete modifications under this Contract. The Contractor shall be responsible to rehabilitate those areas affected by its construction activities.

- B. Where new piping is installed in existing structures, the Contractor shall accurately position core-drilled openings in the concrete as indicated or otherwise required. Openings shall be of sufficient size to permit a final alignment of pipelines and fittings without deflection of any part and to allow adequate space for satisfactory packing where pipe passes through the wall to provide watertightness around openings so formed. The boxes or cores shall be provided with continuous keyways to hold the filling material in place, and they shall have a slight flare to facilitate grouting and the escape of entrained air during grouting. Before placing the non-shrink grout, concrete surfaces shall be sandblasted, thoroughly cleaned of sand and any other foreign matter, and coated with epoxy bonding compound.
- C. Pipes, castings, or conduits shall be grouted in place by pouring in grout under a head of at least 4-inches. The grout shall be poured or rammed or vibrated into place to fill completely the space between the pipes, castings, or conduits, and the sides of the openings so as to obtain the same watertightness as through the wall itself. The grouted casings shall then be water cured.
- D. When new piping is to be connected to existing piping, the existing piping shall be cut square and ends properly prepared for the connection. Any damage to the lining and coating of the existing piping shall be repaired. Dielectric insulating joints shall be installed at interconnections between new and existing piping.
- E. Abandoned connections to piping and conduits shall be terminated with blind flanges, caps, and plugs suited for the material, type, and service of the pipe or conduit.
- F. Where existing handrailing is removed, post embedments and anchors shall be removed and post holes shall be filled with non-shrink grout flush to the floor surface. At the point of continuation of existing handrailing, a new post with rail connections matching the existing handrailing system shall be installed. New posts in existing concrete floors shall be installed in core-drilled socket holes and the annular space between the post and hole filled with non-shrink grout.
- G. Where reconstruction activities damage the painting and coating of adjacent or nearby facilities, the damaged areas shall be surface prepared and coated in accordance with Section 09 90 00 – Painting and Coating to match the original painting and coating with a compatible system.

### 3.7 DISPOSAL

- A. Demolition and removal of debris shall minimize interference with roads, streets, walks, and other adjacent occupied or used facilities, which shall not be closed or obstructed without permission from the Owner. Alternate routes shall be provided around closed or obstructed traffic ways.
- B. Site debris, rubbish, and other materials resulting from reconstruction operations shall be legally removed and disposed of. Structures and equipment to be demolished shall be cleaned prior to demolition and the wash water properly disposed of. No trace of these structures shall remain prior to placing of backfill in the areas from which structures were removed.
- C. Refuse, debris, and waste materials resulting from demolition and clearing operations shall not be burned.



### 3.8 OCCUPANCY AND POLLUTION CONTROL

- A. Water sprinkling, temporary enclosures, chutes, and other suitable methods shall be used to limit dust and dirt rising and scattering in the area. The Contractor shall comply with government regulations pertaining to environmental protection.
- B. Water shall not be used if it creates hazardous or objectionable conditions such as ice, flooding, or pollution.

### 3.9 CLEANING

- A. During and upon completion of Work, the Contractor shall promptly remove tools and equipment, surplus materials, rubbish, debris, and dust and shall leave areas affected by Work in a clean, approved condition.
- B. Adjacent structures shall be cleaned of dust, dirt, and debris caused by reconstruction, as directed by the Engineer or governing authorities, and adjacent areas shall be returned to condition existing prior to start of Work.

### 3.10 STRUCTURES IDENTIFIED AS CONTAINING HAZARDOUS MATERIALS

- A. The following is a summary of the full findings provided in the hazardous assessment report. Refer to the full report in Appendix B of the Volume 3 appendix for more information. This list is provided for reference and convenience only – the Contractor is responsible for properly handling hazardous material-bearing structures as listed and identified in the report.
- B. The following structures/sites were identified as asbestos-containing materials. Per the report the list is not exhaustive and complete as it only summarizes areas that were actually tested. Suspect materials that are similar in appearance/type to those testing positive for asbestos must be presumed to be asbestos-containing unless they are tested and proven not to contain asbestos.
  - 1. Existing secondary clarifier – specifically gray/black gaskets; reference sheets SCD-1 thru SCD-4 of Volume 4A.
  - 2. Hydropneumatic tank – specifically gray/black gaskets; reference sheet D-11 of Volume 4A.
  - 3. Chemical Building (MMWD Building) – gray and tan caulking and gray/black gaskets; reference sheet MMD-1 thru MMD-9.
  - 4. MMWD Filter Tanks – gaskets presumed to contain asbestos as they are similar to other gaskets that were tested; reference sheets MMD-1 thru MMD-9.
  - 5. MCC #3 Building – Cementitious panels (i.e. Transite® panels) and floor tiles; reference sheets MBS-1 thru MBS-3.
  - 6. Other gaskets and caulking of similar age and appearance will also like contain similar levels of asbestos and should be handled as such.
- C. Lead-containing coatings were identified in most surfaces tested for the report and, **per the report, the testing results are not exhaustive and complete as they only summarize areas that were directly sampled and tested.** Materials/coatings containing lead include interior walls/ceilings, doors/frames, storage containers, most painted piping (especially older, beige colored piping), process and water storage tanks, concrete structure protective coatings (walls, slabs, and floors), steel structural members and supports, pumps/motor housings. Below is a summary of areas that

tested positive for lead-containing paints – refer to the report for complete results and sample locations.

1. CCC weir box (reference sheet C-27)
2. Dechlorination Building and adjacent pond diversion box and meter pit (reference sheet C-31)
3. Outfall Box crane and piping (reference sheet C-32)
4. MCC #3 Building (door frame/trim, door, walls - reference sheet MBS-1)
5. Fuel storage tank (reference sheet D-5)
6. Primary biofilter (sprayer arm/mechanism, concrete walls - reference sheet D-6)
7. Biofilter recirculation pump pit (pumps, piping, valves, concrete, handrail) reference sheet D-8)
8. Secondary biofilter (concrete walls, sprayer arms/mechanism reference sheet D-9)
9. Hydropneumatic tank and associated piping (reference sheet D-11)
10. MCC #9 Building (exterior walls, reference sheet D-12)
11. Awning structure near MCC #3 (awning support columns and beams reference sheet D-13)
12. Storage Containers (reference sheet D-14)
13. Deep bed filter (aka Filter Feed Pump Station) and associated blower and NPW pump (reference sheet FFD-1)
14. RWTF UV piping (reference sheet RUV-1)
15. Existing Secondary Clarifier (reference sheet SCD-1)
16. MMWD Facilities (reference sheets MMD-1 thru MMD-9) including (but not limited to):
  - a) MMWD Control Building (interior/exterior walls in lab, restroom, storage areas, floors, door trim, door, and frame).
  - b) MMWD Chemical Building (interior ceiling, door frame, trim, and doors)
  - c) MMWD clearwell (aka product weir tank)
  - d) MMWD Filter tanks
  - e) MMWD Chlorination house and poly tank (including concrete pads)
  - f) MMWD Distribution pump area (piping/valves, pump/housing, and electrical frame and door).
  - g) MMWD hydropneumatic tank shed
  - h) MMWD product pumps (piping/valves, pump/housing)
  - i) MMWD thickener/clarifier (tank, piping, stairs and catwalk)

- D. Suspect materials that are similar in appearance/type to those testing positive for lead must be presumed to be lead-containing unless they are tested and proven not to contain lead. Refer to Appendix A of the report for sample locations and Appendix C of the report for a complete list of results and areas that tested positive for lead.

END OF SECTION 024100

[THIS PAGE INTENTIONALLY LEFT BLANK]

## **Attachment D**

### **Revised Section 151100 of Volume 3A (Owner Selected Equipment)**

## SECTION 151100 – OWNER SELECTED EQUIPMENT

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. The Owner has pre-selected various pieces of equipment to be purchased and installed by the Contractor under this contract.
- B. The list of Owner selected equipment, along with the terms and conditions of purchase, and all relevant equipment details and vendor contact information are included in this section.
- C. The Contractor is responsible for purchase of Owner selected equipment. The Contractor shall be responsible for all taxes and any additional fees associated with the purchase of Owner selected equipment. Unless noted otherwise, Owner has already released payment for equipment submittals (to facilitate design). Submittals have been received and approved, but no equipment has been released for production at this time. Contractor shall coordinate equipment release with Engineer, Owner, and the Supplier and shall be responsible for coordinating the production and delivery schedules.
- D. The Contractor shall issue Purchase Orders to release equipment for production on all Owner Selected equipment within seven (7) calendar days of issuance of the Notice to Proceed unless otherwise coordinated with Owner and Engineer. The contract price listed for each item in the Bid Schedule represents the approved and agreed upon price for the equipment package, including submittals.
- E. The Contractor is required to maintain a record for each piece of equipment.
- F. The equipment representative and primary contact for each manufacturer is included below. An overview of the scope for each piece of equipment is included in the attachment to this section. For a complete scope of supply, equipment assembly requirements, as well as warranties, payment terms and other necessary information the Contractor shall contact the equipment vendors.
- G. While every effort has been made to coordinate the design drawings with each supplier's submittal and equipment package, Contractor shall ensure that final installation accommodates the final dimensions and requirements as required by the manufacturer. Contractor shall furnish a complete and fully functional system as indicated in the design drawings.

#### 1.2 RECEIVING, STORAGE AND HANDLING

- A. The Contractor shall be responsible for receiving, storage and handling of Owner selected equipment. The Contractor shall unload and uncrate equipment and visually inspect for defects and/or damage. Contractor shall report immediately to the Owner and Engineer any such conditions found. The Contractor shall follow all requirements as outlined in Section 016100 of these specifications.
- B. Owner has already issued payment for submittal packages for each piece of Owner Selected Equipment. Accordingly, the costs listed in the Bid Schedule in Volume 2 represent the remaining

contract amount to be assigned to the Contractor. Submittals have been approved but no equipment has been released for production at this time. Contractor shall coordinate with Engineer and Owner to release each equipment package for fabrication per the terms in the assigned contract.

- C. Contractor shall store and protect all Owner Selected equipment and associated items per the supplier's recommendations and confirm proper storage and protection before delivery.

1.3 OWNER SELECTED EQUIPMENT

A. HYBRID FFAS BY H<sub>2</sub>O Innovation USA (BID ITEM #3)

1. Contact: Naomi Jones  
Phone: (760) 519-7701 (work)  
Email: Naomi.Jones@h2oinnovation.com
2. Contact: Jim Zaiser (Goble Sampson Associates, H<sub>2</sub>O Rep.)  
Phone: (916) 933-5500  
Email: jimzaiser@jbiwater.com

3. Summary of Contract Price:

Hybrid FFAS Package	Bid Item #16.a
Base Equipment Package	\$ 1,773,471.00
Submittals	\$ 201,755.00
Spare Parts	\$ 42,329.00
Sales Tax (9%)	<i>Included</i>
<b>Base Package Subtotal</b>	<b>\$ 2,017,555.00</b>
<b>Post RFP Changes</b>	
Removal of Controls	\$ (95,200.00)
Addition of "A" Frames	\$ 153,239.00
US Manufacturing	\$ 70,000.00
Upgraded Gear Motors	\$ 44,134.00
<b>Adjusted Total</b>	<b>\$ 2,189,728.00</b>
Submittals Already Paid	\$ 201,755.00
<b>Net Amount Remaining</b>	<b>\$ 1,987,973.00</b>
<b>Price Escalation Calculation</b>	
December 2017 Index	211.30
July 2018 Index (Preliminary)	227.20
% Change	7.52485%
Original Total Price	\$ 2,189,728.00
New Total Price	\$ 2,354,501.66
Price Change	\$ 164,773.66
Submittals Already Paid	\$ 201,755.00
<b>New Net Amount Remaining</b>	<b>\$ 2,152,746.66</b>

4. Price Escalation: Any adjustments to the contract price referenced in Item #3 will be based on the **Products Producer Price Index (PPI)**. The adjustment will be based on the net change of this index from July 2018 to the date when the PO is issued by the Contractor. **PO's must be issued no later than end of January 2019.**
5. Scope of Supply: **AS SHOWN IN APPENDIX A OF VOLUME 3A from the H2O Innovation USA proposal**: Contact equipment manufacturer for clarifications.

**B. EDUCTOR TUBE MIXERS BY JDV EQUIPMENT CORPORATION (BID ITEM #6)**

1. Contact: Joe Barringer  
Phone: (973)-366-6556 x112  
Email: joe@jdvequipment.com
2. Contact: Dave Ritter (Goble Sampson Associates)  
Phone: (801)550-1613  
Email: dritter@goblesampson.com

3. Summary of Contract Price:

Eductor Mixers	Bid Item #16.b
Base Equipment Package	\$ 70,650.00
Submittals	\$ 2,200.00
Spare Parts	\$ -
Sales Tax (9%)	\$ 6,556.50
<b>Base Package Subtotal</b>	<b>\$ 79,406.50</b>
Submittals Already Paid	\$ 2,200.00
<b>Net Amount Remaining</b>	<b>\$ 77,206.50</b>

4. Price Escalation: No price escalation is anticipated for this equipment. **PO's must be issued no later than end of January 2019.**
5. Scope of Supply: **AS SHOWN IN APPENDIX A OF VOLUME 3A from the JDV Equipment Corporation proposal**: Contact equipment manufacturer for clarifications.

**C. SECONDARY CLARIFIER MECHANISMS BY OVIVO USA, LLC. (BID ITEM #7)**

1. Contact: Robert R Palmer  
Phone: (801) 931-3000  
Email: bob.palmer@ovivowater.com
2. Contact: Mike Brown (Coombs-Hopkins Company)  
Phone: (801) 652-2632  
Email: mike@chcwater.com
3. Summary of Contract Price:

<b>(2) Secondary Clarifier Mechanisms</b>		<b>Bid Item #16.c</b>
Base Equipment Package	\$	300,214.00
Submittals	\$	32,000.00
Spare Parts	\$	-
Sales Tax (9%)		<i>Included</i>
<b>Base Package Subtotal</b>	<b>\$</b>	<b>332,214.00</b>
<b>Post RFP Changes</b>		
Addition of Picket Rail	\$	15,065.00
316 SS Walkways/Platforms	\$	55,185.00
<b>Adjusted Total</b>	<b>\$</b>	<b>402,464.00</b>
Submittals Already Paid	\$	32,000.00
<b>Net Amount Remaining</b>	<b>\$</b>	<b>370,464.00</b>

4. Price Escalation: Any adjustments to the contract price referenced in Item #3 will be based on the **ATI Metals surcharge index for stainless steel** and the current **North America Composite Carbon Steel Price index** for carbon steel materials. The adjustment will be based on the net change of this index from July 23, 2018 to the date when the PO is issued by the Contractor. **PO's must be issued no later than end of January 2019.**
5. Scope of Supply: **AS SHOWN IN APPENDIX A OF VOLUME 3A from the OVIVO USA, LLC proposal:** Contact equipment manufacturer for clarifications. Includes cost for two (2) clarifier mechanism equipment packages.

D. **UV DISINFECTION SYSTEM BY SUEZ TREATMENT SOLUTION, INC. (BID ALTERNATE ITEM #8)**

1. Contact: George Vrachimis  
Phone: (201) 676-2227  
Email: George.vrachimis@suez-na.com
2. Contact: Peter Ruszel (Burlingame Engineers, Inc)  
Phone: (925) 943-5200  
Email: peter@burlingameengineers.com
3. Summary of Contract Price:



UV System Package	Bid Item #A.3
Base Equipment Package	\$ 490,640.00
Submittals	\$ 42,200.00
Spare Parts	\$ 7,800.00
Sales Tax (9%)	<i>Included</i>
<b>Base Package Subtotal</b>	<b>\$ 540,640.00</b>
Submittals Already Paid	\$ 42,200.00
<b>Net Amount Remaining</b>	<b>\$ 498,440.00</b>
Price Escalation Calculation	
April 2018 Index	190.90
June 2018 Index	194.80
% Change	2.04295%
Original Total Price	\$ 540,640.00
New Total Price	\$ 551,685.03
Price Change	\$ 11,045.03
Submittals Already Paid	\$ 42,200.00
<b>New Net Amount Remaining</b>	<b>\$ 509,485.03</b>

4. Price Escalation: Any adjustments to the contract price referenced in Item #3 will be based on the price index from Commodity Cod 335311-SM as provided in the Bureau of Labor Statistics **Producer Price Index (PPI)**. The adjustment will be based on the net change of this index from June 2018 to the date when the PO is issued by the Contractor. **PO's must be issued no later than end of January 2019.**
5. Scope of Supply: **AS SHOWN IN APPENDIX A OF VOLUME 3A from the SUEZ proposal:** Contact equipment manufacturer for clarifications.

E. RWTF PRESSURE MEMBRANE FILTER EXPANSION PACKAGE BY GE/SUEZ, (BID ITEM #9)

1. Contact: Timothy Fisher-Kane  
Phone: (760) 305-0145  
Email: timothy.fisherkane@suez.com
2. Contact: Mike Brown (Coombs-Hopkins Company)  
Phone: (801) 652-2632  
Email: mike@chcwater.com
3. Summary of Contract Price:

<b>Membrane Filter Equipment Package</b>		<b>Bid Item #16.d</b>
Base Equipment Package		\$ 1,450,000.00
Submittals		\$ -
Spare Parts		\$ -
Sales Tax (9%)		\$ 130,500.00
<b>Base Package Subtotal</b>		<b>\$ 1,580,500.00</b>
Submittals Already Paid		\$ -
<b>Net Amount Remaining</b>		<b>\$ 1,580,500.00</b>
<b>Price Escalation Calculation</b>		
April 2018 CPI Index		250.456
July 2018 CPI Index		252.006
% Change		0.61887%
% Change + 1%		1.61887%
Original Total Price		\$ 1,580,500.00
New Total Price		\$ 1,606,086.26
Price Change		\$ 25,586.26
Submittals Already Paid		\$ -
<b>New Net Amount Remaining</b>		<b>\$ 1,606,086.26</b>

4. Price Escalation: Any adjustments to the contract price referenced in Item #3 will be based on the **Consumer Price Index (CPI)** plus an additional 1% (i.e. CPI + 1%). The adjustment will be based on the net change of this index from July 2018 to the date when the PO is issued by the Contractor. **PO's must be issued no later than end of January 2019.**
5. Scope of Supply: **AS SHOWN IN APPENDIX A OF VOLUME 3A from the GE proposal:** Contact equipment manufacturer for clarifications.

F. MECHANICAL THICKENER SYSTEMS BY HUBER(BID ITEM #A.5)

1. Contact: John Lewis  
Phone: (704) 995 5451  
Email: [john@hhusa.net](mailto:john@hhusa.net)
2. Contact: Dave Ritter (Goble Sampson Associates)  
Phone: (801)550-1613  
Email: [dritter@goblesampson.com](mailto:dritter@goblesampson.com)
3. Summary of Contract Price:

<b>Mechanical Thickening Equipment Package</b>	<b>Bid Item #16.e</b>
Base Equipment Package	\$ 225,084.32
Submittals	\$ 19,549.15
Spare Parts	\$ 1,263.31
Sales Tax (9%)	<i>Included</i>
<b>Base Package Subtotal</b>	<b>\$ 245,896.78</b>
<b>Post RFP Changes</b>	
Addition of (2) Knife Gate Valves	\$ 3,859.69
Polymer System Pump Upgrade	\$ 12,072.84
Second Thickening Unit	\$ 47,972.00
<b>Adjusted Total</b>	<b>\$ 309,801.31</b>
Submittals Already Paid	\$ -
<b>Net Amount Remaining</b>	<b>\$ 309,801.31</b>

4. No price escalation is anticipated for this equipment. **PO's must be issued no later than end of January 2019.**
5. Scope of Supply: **AS SHOWN IN APPENDIX A OF VOLUME 3A from the Huber proposal:** Contact equipment manufacturer for clarifications.

#### 1.4 ASSEMBLY OF OWNER SELECTED COMPONENT

- A. Assembly of some Owner selected components are required to make complete and functional installations. The contractor shall follow manufacturer's instructions.

#### 1.5 PRESTART-UP INSPECTION AND LUBRICATION

- A. Contractor shall check all Owner selected equipment and make adjustments to the equipment which will allow for proper/ functional operation of the equipment, then start-up the equipment. Pertinent items include but not necessarily limited to the following:
  1. Removal of shipping stops.
  2. Vibration isolators properly aligned and adjusted.
  3. Flexible connections are properly aligned.
  4. Safety controls, safety valves and high or low limits are in operation.
- B. Provide initial lubrication to all Owner selected equipment. Follow manufacturer's requirements.

#### 1.6 START-UP

- A. The Contractor will inform the Owner when each piece of equipment is ready for start-up. The Contractor will then have an authorized representative of that piece of equipment come and perform the start-up.

- B. Any problems in start-up which are found to be as a result of improper installation shall be corrected by the Contractor at no cost to the Owner.
- C. The Contractor will coordinate and schedule the training of each piece of equipment by each manufacturer's representative at the Owner's convenience.

END OF SECTION 151100

## **Attachment E**

### **Sign-in Sheet from the August 21, 2018 Site Walkthrough**

# LGVSD Secondary Treatment Plant Upgrade & RW Expansion Project

## Mandatory Contractor Pre-Bid Meeting

August 21, 2018  
Sign In Sheet

ADDENDUM 1

Name	Company	Phone Number	Email Address
KEN LEEF	WESTGAIN WATER	(707) 540-9640	ken.leef@westgainwater.com
BRYAN EVANS	Myers & Sons.	916-283-9950	estimating@myers-sons.com
Paul Loustaunau	Redwood Ptg	(925) 432-4500	pawle@redwoodptg.com
Michael Lynch	Scott Electric	415-206-7120	MIKE@SCOTTELECTRIC.COM
Meaghan Vanderpol	Flatiron west	707-742-0000	norcalbids@flatironcorp.com
David Wirth	Flatiron West	707 693 5111	d.wirth@flatironcorp.com
JASON KUHLEIN	SHERWIN WILLIAMS	925-726-7213	JASON.S.KUHLEIN@SHERWIN.COM
Ben Evans	C. Overea + Co	510-234-0926	bids@overea.com
Dennis Weishaar	BADGER-DAYLIGHTING	408-318-1202	Dweishaar@BADGERINC.COM
JAMES BOWSER	MMH CONSTRUCTION	916-870-0798	JIM.BOWSER@STARNBC.COM
Jim Kenney	MMWD	415-945-1501	jkenney@marinwater.org
Paul Sellier	MMWD	415-945-1557	psellier@marinwater.org
BRAD LEIDICKER	COOMBS-HOPKINS	925-876-0046	BRAD@OXCWATER.COM

Page 110 of 113

Name	Company	Phone Number	Email Address
MATHEN EVANS	SETON PACIFIC	415 919 9594	MATHEN_MATT@SETONYPAC.COM
Dennis Geffner	BC	925 210 - 2325	dgeffner@growncd.com
GEORGE STAUFFER	Rockwell Automation	657-220-0758	GRSTAUFF@RA.ROCKWELL.COM
JEFF RAIFIELD	"	925-270-6735	JMRAIFIELD@RA.ROCKWELL.COM
Bob Formicola	Bay City Kohler Generators	925-784-0992	Rformicola@BCEW.com
Jon Rodgers	TSI	530-710-3325	Jon@TSIcontrols.com
Andrew Palmberg	TSI	206-744-9207	andrewp@tsicontrols.com
Melissa Torres	J Bird Abatement	209-894-2080	jaybirdabatement@gmail.com
Glenn Vita	MWHC	626 945-9004	glenn.vita@stntec.com

ADDENDUM 1

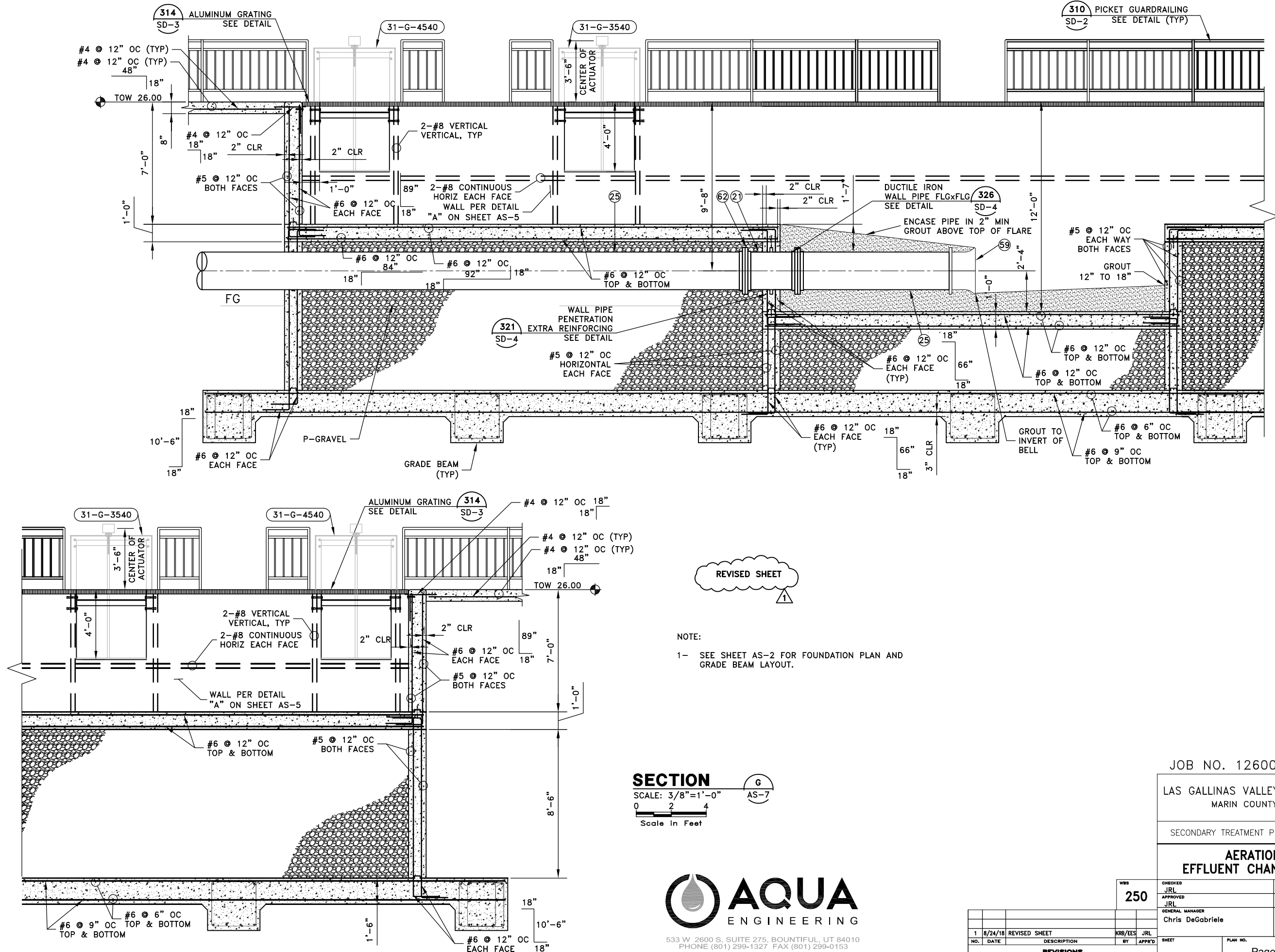
## **Attachment F**

### **Revised Design Drawings (From Volume 4A)**

#### **Sheet AS-8**



KRB\_08/24/2018 X:\Las Gallinas\LASG150119-Secondary Treatment Upgrades\Drafting\STM AS-B.dwg



PLOT: EXTEND  
SCALE: 1:1  
BORDER: 22,34

COLOR: No.  
RED 0.70MM  
YELLOW 0.20MM  
GREEN 0.25MM  
CYAN 0.40MM  
BLUE 0.50MM  
MAGENTA 0.20MM  
WHITE 0.35MM  
GRAY 0.15MM  
9 0.15MM  
10 1.00MM  
100 0.70MM  
210 0.60MM

ADDENDUM 1

LGVS 1 FILE:  
FD144793

**SECTION** G  
SCALE: 3/8"=1'-0"  
0 2 4  
Scale in Feet



FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES



JOB NO. 12600-07/16650-02

LAS GALLINAS VALLEY SANITARY DISTRICT  
MARIN COUNTY, CALIFORNIA

SECONDARY TREATMENT PLANT AND RW EXPANSION

**AERATION BASIN  
EFFLUENT CHANNEL SECTIONS**

250	CHECKED JRL	DRAWN CAL	SCALE AS SHOWN
	APPROVED JRL	DESIGNED EES	DATE 07/26/18
GENERAL MANAGER Chris DeGabriele		DISTRICT ENGINEER Michael P Cortez	
NO. DATE		BY	APPR'D
1 8/24/18 REVISED SHEET		KRB/EES	JRL
<b>REVISIONS</b>			