BUILDING DEMOLITION & SITE GRADING
2202 Soquel Avenue, Santa Cruz, CA

PROJECT #23TI-064

Volume #02 Plans - Specifications - Scope - Photographs - Other
CUPCCAA Supporting Docs

COUNTY OF SANTA CRUZ, CALIFORNIA
GENERAL SERVICES DEPARTMENT
December 15, 2023 ***Date Prepared***

PROPOSALS DUE:
Thursday, January 25, 2024 – 2:30 P.M.

PRE-BID CONFERENCE:
Thursday, January 11, 2024 - 11:00 A.M.

LOCATION:
Harbor Vet Building
2022 Soquel Avenue
Santa Cruz, CA 95062

For use in connection with Santa Cruz County standards and the 2019 California Building Code.

TABLE OF CONTENTS

This CUPCCAA Project is supported by specific documents enumerated in the "Table of Contents" below:

A. Engineered Drawings –
B. Technical Specifications – ***Not Applicable***
C. Supplemental Conditions
D. Existing Condition Photographs
E. Scope of Work
F. Preliminary / Milestone Project Schedule – **Not Applicable**
G. Other Documents

Project Scope of Work:

The County, as a core milestone in the development and delivery of a project, did conduct a site assessment and in conjunction met with the occupants of the facility and/or space to discuss the needs, wants, and expectations. From this site meeting discussion, the **"scope of work"** was drafted and refined to aid the Bidder in understanding parameters of the project and establishing the Bid to execute the expected work.

Project Supplemental Conditions:

These are project clarifications that help the Contractor to gain comfort with the site conditions and support the project intent. The Supplemental Conditions are weighted equally in significance to that of the County General Conditions Terms & Conditions and project Specifications.

Project Existing Condition Photographs:

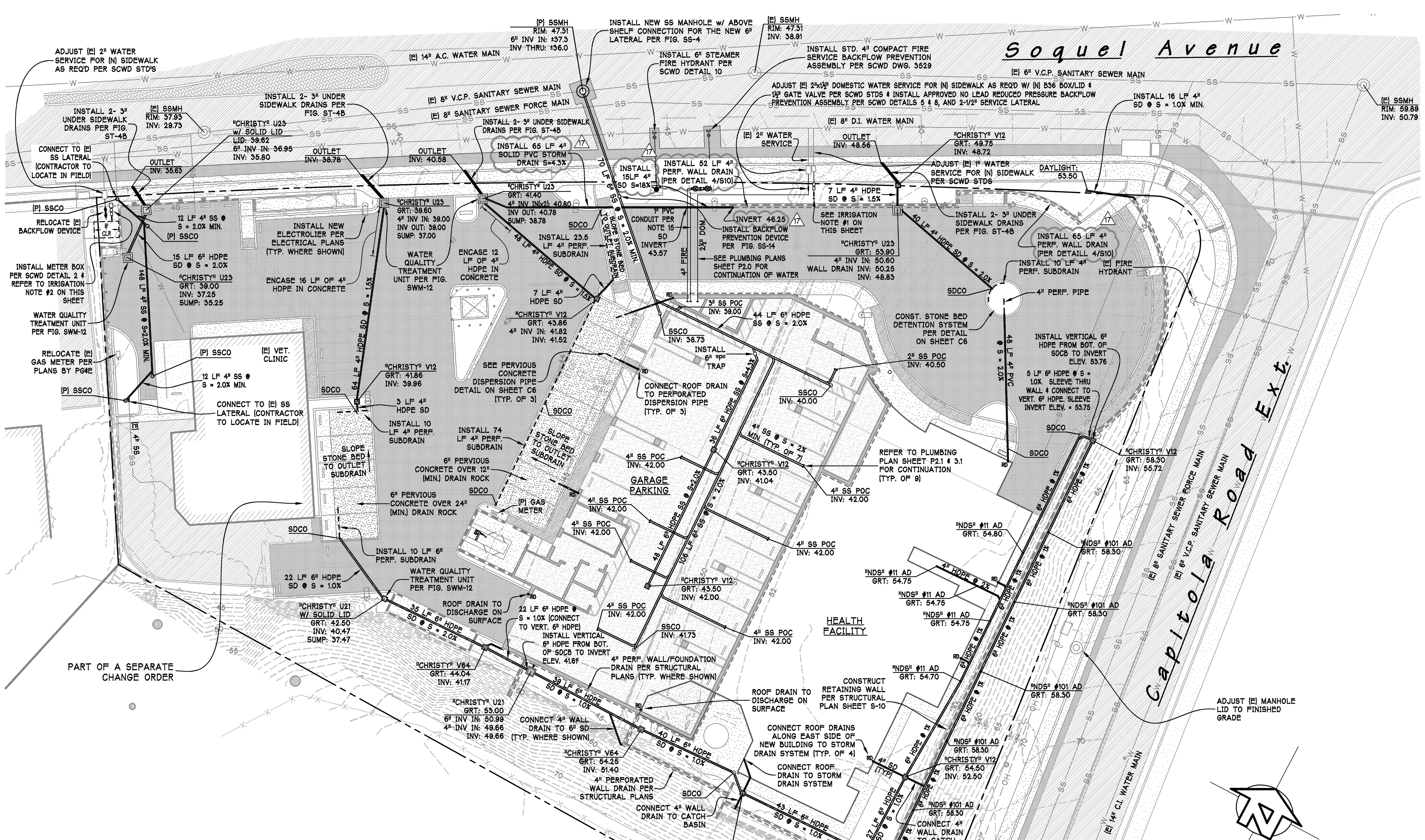
The County has provided existing condition photographs in advance of a site visit for the purpose of formulating questions to focus observations during the mandatory pre-bid site visit. This will better prepare the Contractor to identify, mitigate, and manage their risk as well that of the county.

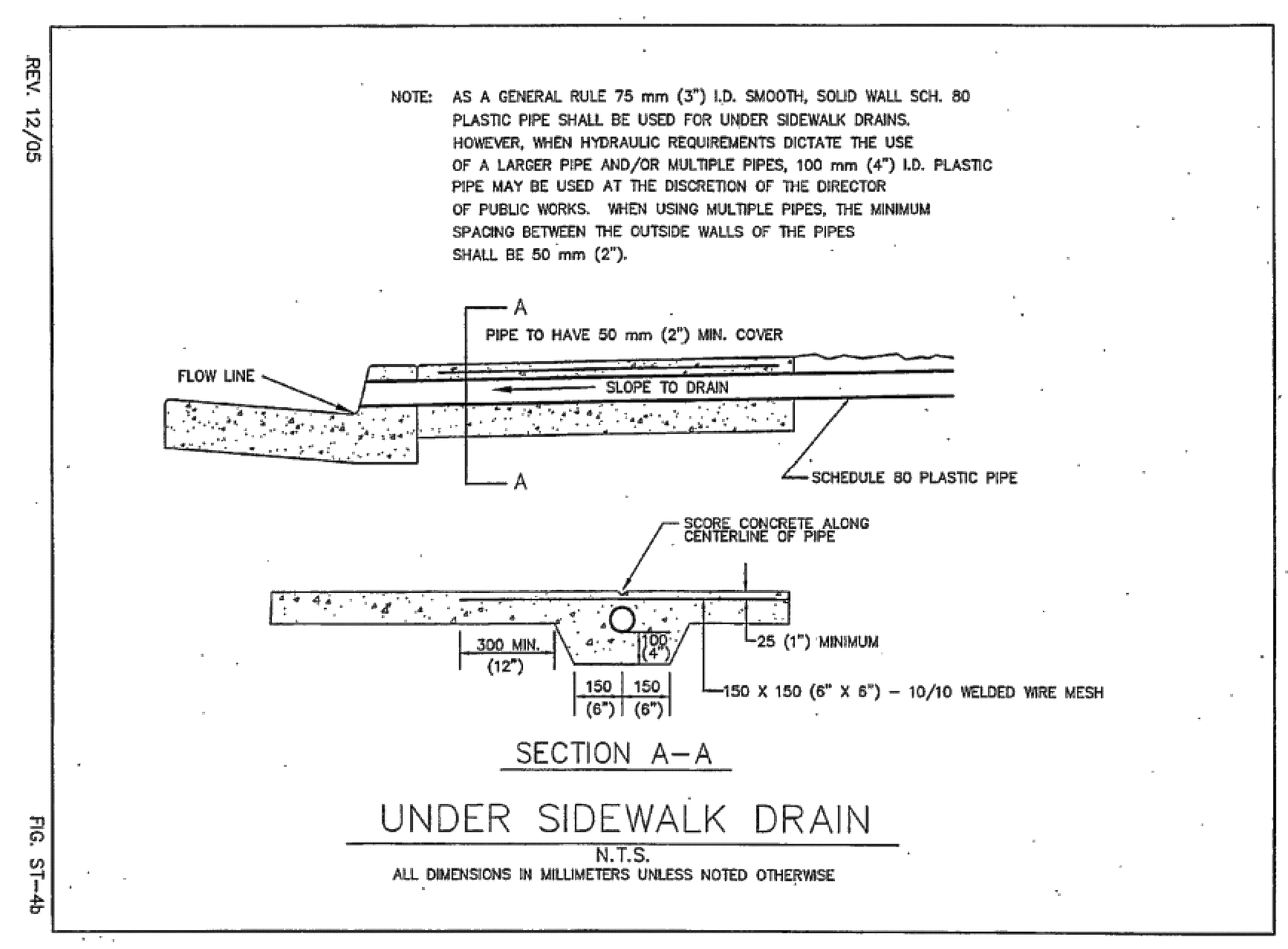
Preliminary / Milestone Project Schedule:

The County has prepared either a **"Preliminary or Milestone Project Schedule"**. This schedule shall be considered by the Bidder to establish expected duration to execute the work. At the **"Notice of Award"** (NOA) the Bidder will be asked to begin preparing the **"Baseline Project Schedule"** for formal submission and review by the County. This Schedule will be submitted and reviewed within the first ten (10) days of receiving the NOA.

ENGINEERED DRAWINGS

EXHIBIT “A”





Site Utility Plan

SCALE: 1" = 20'

Vet Clinic Sanitary Sewer Note

THE EXISTING VET. CLINIC SANITARY SEWER LATERAL SHALL REMAIN OPERATIONAL WHILE THE NEW SANITARY SEWER LATERAL IS TRENCHED & INSTALLED. THE EXISTING SERVICE SHALL ONLY BE INTERUPTED DURING CONNECTION OF THE NEW LATERAL TO THE EXISTING LATERAL.

Irrigation Notes

1. CONNECT 1-1/2" IRRIGATION SERVICE TO (E) SERVICE. INSTALL 1-1/2" REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY PER SCWD DETAIL 8. SEE LANDSCAPE PLANS FOR CONTINUATION OF IRR. SERVICE. REFER TO DETAIL 5 ON SHEET L2 FOR Y-STRAINER AND PRESSURE REDUCER ON BACKFLOW PREVENTION ASSEMBLY. REFER TO DETAIL 6 ON SHEET L2 FOR MASTER CONTROL VALVE DETAIL.
2. CONNECT 1½" IRRIGATION SERVICE TO RELOCATED SERVICE PER LANDSCAPE PLANS. INSTALL REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY PER SCWD DETAIL 8. SEE LANDSCAPE PLANS FOR CONTINUATION OF IRR. SERVICE. REFER TO DETAIL 5 ON SHEET L2 FOR Y-STRAINER AND PRESSURE REDUCER ON BACKFLOW PREVENTION ASSEMBLY. REFER TO DETAIL 6 ON SHEET L2 FOR MASTER CONTROL VALVE DETAIL.

City of Santa Cruz Water Department Notes

1. ALL WORK ON THE WATER SYSTEM MUST BE CONSTRUCTED IN CONFORMANCE WITH THE LATEST VERSION OF CITY OF SANTA CRUZ WATER DEPT (SCWD) STANDARD SPECIFICATIONS.
2. A MINIMUM OF 2 WORKING DAYS NOTICE SHALL BE GIVEN TO THE SCWD BEFORE CONSTRUCTION ON ANY PORTION OF THE WATER SYSTEM. OBTAIN ALL APPLICABLE WATER SYSTEM PERMITS AT THE SCWD. CALL 831-420-5210 FOR INFORMATION AND TO SCHEDULE WATER SERVICE, FIRE HYDRANT AND BACKFLOW ASSEMBLY INSPECTIONS.
3. MINIMUM SEPARATIONS FROM OTHER PARALLEL AND CROSSING UTILITIES MUST BE MAINTAINED PER CURRENT STANDARD TECHINICAL SPECIFICATIONS.
4. UTIILITY LOCATIONS ARE APPROXIMATE. VERIFICATION OF ACTUAL UTILITIES AND LOCATIONS IS THE RESPONSIBILITY OF THE CONTRACTOR. CALL UNDERGROUND SERVICE ALERT AT LEAST TWO WORKING DAYS BEFORE DIGGING AT 800-227-2600.
5. CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO WORKING DAYS NOTICE TO SCWD FOR INSPECTION OF SERVICES THAT ARE TO BE RETIRED, MODIFIED OR RELOCATED. CONTRACTOR SHALL EXPOSE CORPORATION STOPS FOR SCWD STAFF TO OPERATE. AN ACTIVE WATER METER MAY BE RELOCATED UP TO 8' HORIZONTALLY USING THE PIPE FREEZE METHOD OR BY TEMPORARILY CLOSING THE CORPORATION STOP. RETIRED METER BOXES ARE TO BE REMOVED BY CONTRACTOR AND ALL SIDEWALK & PAVING RESTORED. SERVICE LINES SHALL NOT BE CRIMPED AS A METHOD OF RETIREMENT OR SERVICE LINE MODIFICATION OR RELOCATION.
6. APPROVAL BY THE SCWD FOR THE FIRE SERVICE INSTALLATION SHALL BE FOR THE SERVICE LINE LOCATION AND THE CONNECTION TO THE CITY WATER SYSTEM. THE FIRE SERVICE SIZE AND DESIGN APPROVAL ARE THE RESPONSIBILITY OF THE LOCAL FIRE PROTECTION AGENCY.
7. TEMPORARY REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY INSTALLATION(S) PER SCWD STANDARDS ARE REQUIRED FOR ALL CONSTUCTION WATER USE.

Central Fire Protection District (CFPD)

1. THESE PLANS ARE IN COMPLIANCE WITH CALIFORNIA BUILDING AND FIRE CODES (2010) AS AMENDED BY THE CFPD.
2. THE PROPOSED STRUCTURE SHALL BE SPRINKLERED AS OUTLINED IN THE 2010 CALIFORNIA BUILDING CODE.
3. THE FIRE FLOW REQUIREMENT FOR THE SUBJECT PROPERTY IS 1,500 GALLONS PER MINUTE.
4. AVAILABLE FIRE FLOW FOR THE SUBJECT PROPERTY IS 1,186 GALLONS PER MINUTE (FLOW AT 20 PSI IS 5,563 GPM)
5. AN UNDERGROUND FIRE PROTECTION SYSTEM WORKING DRAWING MUST BE PREPARED BY THE DESIGNER/INSTALLER. WORKING DRAWINGS SHALL COMPLY WITH THE DISTRICT UNDERGROUND FIRE PROTECTION SYSTEM INSTALLATION POLICY HANDOUT.
6. BUILDING SHALL BE PROTECTED BY AN APPROVED AUTOMATIC SPRINKLER SYSTEM COMPLYING WITH THE EDITION OF NFPA 13 CURRENTLY ADOPTED IN CHAPTER 35 OF THE CALIFORNIA BUILDING CODE.
7. THE FDC SHALL BE LABELED WITH THE ADDRESS OF THE BUILDING THAT IT SERVES, WITH 2" PEAL AND STICK PLASTIC REFLECTIVE NUMBERS.

10. ROOF COVERINGS TO BE NO LESS THAN CLASS "B" RATED ROOF.
11. NEW/UPGRADED HYDRANTS, WATER STORAGE TANKS, AND/OR UPGRADED ROADWAYS SHALL BE INSTALLED PRIOR TO AND DURING TIME OF CONSTRUCTION.
12. DESIGNER/INSTALLER SHALL SUBMIT TWO (2) SETS OF PLANS, CALCULATIONS, AND CUT SHEETS FOR THE AUTOMATIC SPRINKLER SYSTEM TO THE CFPD AGENCY FOR APPROVAL. INSTALLATION SHALL FOLLOW THE CFPD GUIDE SHEET. CUT SHEETS SHALL INCLUDE, BUT NOT BE LIMITED TO PIPING, VALVES, GAUGES AND SPRINKLER HEADS.
13. THE JOB COPIES OF THE BUILDING AND FIRE SYSTEMS PLANS AND PERMITS MUST BE ON-SITE DURING INSPECTIONS.
14. THE SUBMITTER, DESIGNER AND INSTALLER CERTIFY THAT THESE PLANS AND DETAILS COMPLY WITH APPLICABLE SPECIFICATIONS, STANDARDS, CODES AND ORDINANCES, AGREE THAT THEY ARE SOLELY RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE SPECIFICATIONS, STANDARDS, CODES AND ORDINANCES, AND FURTHER AGREE TO CORRECT ANY DEFICIENCIES NOTED BY THE CENTRAL FIRE PROTECTION DISTRICT REVIEW, SUBSEQUENT REVIEW, INSPECTION OR OTHER SOURCE, AND, TO HOLD HARMLESS AND WITHOUT PREJUDICE, THE REVIEWER AND REVIEWING AGENCY.
15. INSTALL 1" (MIN.) PVC CONDUIT FROM THE RISER ROOM TO THE DOUBLE BACK CHECK ASSEMBLY AT THE STREET TO ALLOW FOR MONITORING OF THE TAMPER SWITCHES.

Sanitary Sewer Notes

1. ALL SANITARY SEWER WORK SHALL CONFORM TO PART 4. "SANITARY SEWER DESIGN," OF THE SANTA CRUZ COUNTY DESIGN CRITERIA.
2. PIPE MATERIAL SHALL BE PVC SDR 26 OR EQUAL.
3. TRENCH BACKFILL SHALL BE PER SCCO FIGURES SS-2A, AND SS-2B.
4. BACK FLOW PREVENTION DEVICES SHALL BE INSTALLED ON ALL LATERALS WHERE THE FINISHED FLOOR ELEVATION IS LESS THAN ONE FOOT ABOVE THE RIM ELEVATION OF THE NEAREST UPSTREAM MANHOLE OR CLEAN OUT. THE VALVES SHALL BE LOCATED IN SUCH A WAY AS TO PREVENT ANY DAMAGE TO ADJACENT PROPERTY AS A RESULT OF SEWAGE RELEASED THROUGH THE DEVICE, AS NOTED ON FIGURE SS-14.
5. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.
6. ALL LATERAL CLEANOUTS SHALL BE OUTSIDE OF THE PUBLIC RIGHT OF WAY.
7. INSULATED COPPER WIRE (NO. 10) SHALL BE PLACED ALONG TOP OF ALL GRAVITY AND FORCE MAINS. THE WIRE SHALL RUN BETWEEN MANHOLES, CLEANOUTS, OR OTHER APPROPRIATE FACILITIES, BROUGHT TO THE SURFACE AND BOLTED OR OTHERWISE SECURELY AFFIXED TO THE MANHOLE OR CLEANOUT COVER OR OTHER APPROPRIATE METAL STRUCTURE.
8. SANITARY SEWER MANHOLES, SUBJECT TO SURFACE OR STORM WATER, SHALL HAVE WATER-TIGHT LIDS. REFER TO SCCO FIGURES SS23 & SS24 FOR SANITARY SEWER MANHOLE FRAME & COVER DETAILS.
9. THE EXISTING SEWER LATERALS MUST BE PROPERLY ABANDONED AT THE PROPERTY LINE (INCLUDING INSPECTION BY SANTA CRUZ COUNTY SANITATION DISTRICT) PRIOR TO ISSUANCE OF DEMOLITION PERMIT OR RELOCATION OR DISCONNECTION OF STRUCTURE. AN ABANDONMENT PERMIT FOR DISCONNECTION MUST BE OBTAINED FROM THE DISTRICT.
10. ALL SANITARY SEWERS WITHIN THE ROADWAY OR UNDER CURB, GUTTER OR SIDEWALK SHALL BE IN PLACE, VIDEOTAPED, AND APPROVED FOR ACCEPTANCE PRIOR TO PLACING THE PERMANENT PAVING ON SAID ROADWAY OR PLACING ANY CURB, GUTTER OR SIDEWALK THEREON.
11. FOLLOWING THE SUCCESSFUL COMPLETION OF CLEANING AND TESTING, ALL SANITARY SEWER MAINS WHICH ARE TO BE COUNTY_MAINTAINED, OR PRIVATE LINES AT THE DISCRETION OF THE PUBLIC WORKS INSPECTOR, SHALL FIRST BE FLUSHED, THEN VIDEO-RECORDED AT THE DEVELOPER'S EXPENSE ON DVD IN A MICROSOFT WINDOWS MEDIA PLAYER COMPATIBLE FORMAT. SAID VIDEO-RECORDING AND ACCOMPANYING REPORT SHALL BE SUBMITTED TO THE SANITATION DISTRICT FOR REVIEW AND APPROVAL PRIOR TO THE ACCEPTANCE OF THE PROJECT AND ANY ASSOCIATED SIGN_OFFS FOR BUILDING OCCUPANCY. THE CONTRACTOR SHALL REFER TO PART 4, "SANITARY SEWER DESIGN" OF THE DESIGN CRITERIA FOR SPECIFICATIONS ON PIPE LAYING, PIPELINE TESTING AND ALLOWABLE DESIGN TOLERANCES.

Storm Drainage Notes

1. ALL CATCH BASINS AND DRAIN BOXES SHALL HAVE MARKINGS STATING: "NO DUMPING - DRAINS TO BAY", OR OTHER EQUIVALENT MESSAGE.
2. ALL "NDS" #101 AREA DRAINS SHALL HAVE 6" "NDS" ATRIUM GRATE

PG&E Note

1. RELOCATE (E) PG&E METER PER PLANS PREPARED BY PG&E

BY		REVISION	DATE
RC	17	RETAINING WALL DRAINAGE	9/30/13
RC	16	EXTENDED RETAINING WALL	3/27/13
RC	15	RFI #85	12/3/12
RC	14	RFI #47	8/29/12
RC	13	PG&E REVISIONS	8/10/12

PROFESSIONAL ENGINEER · DAVID A. HEINRICHSEN · NO. C49167 · CIVIL · REGISTERED · STATE OF CALIFORNIA

APPROVED
DAVID HEINRICHSEN (RCE NO. 49167) — DATE 03/27/13

IFLAND ENGINEERS
CIVIL ENGINEERING ■ LAND PLANNING ■ STRUCTURAL DESIGN
5200 SOQUEL AVE, SUITE 101
SANTA CRUZ, CA 95062
TEL (831) 426-5313
FAX (831) 426-1763
www.iflandengineers.com

Site Utility Plan
Behavioral Health Unit
2250 Soquel Avenue, Santa Cruz, CA

APN: 026-011-06

DATE	DESIGN	DRAWN
6/5/12	JON/RYAN	RYAN

SHEET C4

JOB NO. 11006

GEOTECHNICAL INVESTIGATION
FEASIBILITY PHASE

FOR
2202 SOQUEL AVENUE
SANTA CRUZ, SANTA CRUZ COUNTY, CALIFORNIA

PREPARED FOR
COUNTY OF SANTA CRUZ GENERAL SERVICES DEPARTMENT
PROJECT NO. 21-173-SC

PREPARED BY

BUTANO GEOTECHNICAL ENGINEERING, INC.
AUGUST 2021

BUTANO GEOTECHNICAL ENGINEERING, INC.
231 GREEN VALLEY ROAD, SUITE E, FREEDOM, CALIFORNIA 95019
PHONE: 831.724.2612
WWW.BUTANOGEOTECH.COM

August 4, 2021
Project No. 21-173-SC

County of Santa Cruz General Services Department
701 Ocean Street, Room 330
Santa Cruz, CA 95060

ATTENTION: Thomas Fakner

SUBJECT: **GEOTECHNICAL INVESTIGATION - FEASIBILITY PHASE**
Proposed Commercial Construction
2202 Soquel Avenue
Santa Cruz, Santa Cruz County, California

Dear Mr. Fakner:

In accordance with your authorization, we have completed a geotechnical investigation for the subject project. This report summarizes the findings and discussions from our field exploration, laboratory testing, and engineering analysis. It is a pleasure being associated with you on this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office.

Sincerely,

BUTANO GEOTECHNICAL ENGINEERING, INC.

Greg Bloom, PE, GE
Principal Engineer
R.C.E. 58819

Appendices: 1. Appendix B Field Exploration Program
2. Appendix C Laboratory Testing Program

Distribution: (4) Addressee

1.0 INTRODUCTION

This report presents the results of our feasibility level geotechnical investigation for the proposed commercial construction at 2202 Soquel Avenue in unincorporated Santa Cruz, Santa Cruz, California.

The purpose of our investigation is to provide geotechnical data from our field and laboratory investigation and discuss the geologic and geotechnical restraints at the site.

This work included site reconnaissance, subsurface exploration, soil sampling, laboratory testing, engineering analyses, and preparation of this report. The scope of services for this investigation is outlined in our agreement dated February 26, 2021, and purchase order dated April 15, 2021.

The recommendations contained in this report are subject to the limitations presented in Section 8.0 of this report. The Association of Engineering Firms Practicing the Geosciences has produced a pamphlet for your information titled *Important Information About Your Geotechnical Report*. This pamphlet has been included with the copies of your report.

2.0 PROJECT DESCRIPTION

Based on our discussions with the client, it is our understanding that the project consists of demolishing the existing structure and constructing a new two-story structure with underground parking.

3.0 FIELD EXPLORATION AND LABORATORY TESTING PROGRAMS

Our field exploration program included drilling, logging, and interval sampling of a total of nine borings. Borings B1 through B8 were advanced on May 4, 2021 and July 20, 2021 with a truck mounted drill rig advanced using 6-inch diameter solid stem augers. Boring B9 was advanced on July 22, 2021 with a truck mounted drill rig using 8-inch diameter hollow stem augers. Details of the field exploration program, including the Boring Logs and the Key to the Logs, are presented in Appendix B, Figures B-3 through B-12b.

Representative samples obtained during the field investigation were taken to the laboratory for testing. Laboratory tests were used to determine physical and engineering properties of the in-situ soils. Details of the laboratory testing program are presented in Appendix C. Test results are presented on the Boring Logs and in Appendix C.

4.0 SITE DESCRIPTION

4.1 Location

The project site is located south of Highway 101 in unincorporated Santa Cruz, Santa Cruz County, California. The site location is shown on the Site Location Plan, Appendix B, Figure B-1.

4.2 Surface Conditions

The parcel is approximately 1.5 acres in size and has been developed. There is a relatively new structure on the eastern 2/3 of the parcel which houses the Psychiatric Health Facility. There is an existing one-story structure on the western side of the parcel, which is referred to as the Harbor Vet Building. The western portion of the parcel is the subject project area.

The southern portion of the parcel has been steeply cut into a sandstone hillside. The western edge of the parcel is separated from the adjacent parking lot by a retaining wall. The northern edge of the parcel is separated from Soquel Avenue by a retaining wall. The Harbor Vet Building is still standing, and the remaining areas consist of paved driveways and parking. The paved area slopes gently to the north.

4.3 Subsurface Conditions

The site is geologically mapped as being underlain by alluvium and purisima formation. The native earth material encountered during our investigation is consistent with the geologic mapping.

A total of nine borings were advanced for this phase of the project. In addition to the borings, our firm observed the cut-slope on the southern portion of the parcel.

The borings generally encountered three units. Non-engineered fill was encountered in all of the borings. The fill prism is generally thin (several feet thick) on the southern edge of the project and then increases to approximately 14 feet on the northwestern edge of the proposed building. Purisima formation sandstone directly underlies the non-engineered fill in the southern portion of the site (Boring 1 and Boring 5). The sandstone is very dense, weathered, and friable.

Alluvium was encountered below the non-engineered fill in Boring 2 to Boring 4 and Boring 6 to Boring 9. The thickness of the alluvium thickens as you go to the

northwest (alignment of Arana Gulch). The alluvium generally consists of soft to firm lean clay, sandy lean clay, clayey sand, and silty sand. The silty sand is loose. At the northwest corner of the proposed structure the depth to purisima formation bedrock is approximately 46 feet below existing grade.

Our firm measured groundwater in Boring 4 at12 feet, Boring 6 at18 feet, Boring 7 at18 feet, and Boring 8 at16 feet. Groundwater was encountered in Boring 9 but not accurately recorded. Groundwater was not encountered in Boring 1 through Boring 3 and B5.

Complete soil profiles are presented on the Boring Logs, Appendix B, Figures B-4 through B-12b. The boring locations are shown on the Boring Site Plan, Figure B-2.

5.0 GEOTECHNICAL HAZARDS

5.1 General

In our opinion the geotechnical hazards that could potentially affect the proposed project are:

- Intense seismic shaking
- Collateral seismic hazards
- Liquefaction and Lateral Spreading

5.1.1 Intense Seismic Shaking

The hazard of intense seismic shaking is present throughout central California. Intense seismic shaking may occur at the site during the design lifetime of the proposed structure from an earthquake along one of the regions many faults. Generally, the intensity of shaking will increase the closer the site is to the epicenter of an earthquake; however, seismic shaking is a complex phenomenon and may be modified by local topography and soil conditions. The transmission of earthquake vibrations from the ground into the structure may cause structural damage.

The County of Santa Cruz has adopted the seismic provisions set forth in the 2019 California Building Code to address seismic shaking. The seismic provisions in the 2019 CBC are minimum load requirements for the seismic design for the proposed structure. The provisions set forth in the 2019 CBC will not prevent structural and nonstructural damage from direct fault ground

surface rupture, coseismic ground cracking, liquefaction and lateral spreading, seismically induced differential compaction, seismically induced landsliding, or seismically induced inundation.

Table 1 has been constructed based on the 2019 CBC requirements as adopted from the ASCE 7-16 provisions for the seismic design of proposed structures built in liquefiable areas. The Site Class has been determined based on our field investigation and laboratory testing. The soil underlying the site is a Type S_F (potentially liquefiable) soil, but the structure has a short period. Due to the short period of the structure it is appropriate to analyze the site as being underlain by Type S_D with respect to ground shaking. Specific analysis and recommendations with respect to liquefaction are provided in section 5.1.3 and the recommendation section of this report.

Table 1. Seismic Design Parameters

S_S	S_1	Site Class	F_a	F_v	S_{DS}	S_{D1}	F_{PGA}	PGA_M	Risk Category	Seismic Design Category
1.722	0.663	D	1.0	Null*	1.148	Null	1.1	0.794	II	Null*

Design Coordinates - Latitude: 36.9831655 Longitude: -121.9943625

*Site specific analysis required for site class D and building structures having a period within the velocity domain of the design response spectrum (T_s <T<=T_L).

5.1.2 Collateral Seismic Hazards

In addition to intense seismic shaking, other seismic hazards that may have an adverse effect to the site and/or the structure are: fault ground surface rupture, coseismic ground cracking, seismically induced liquefaction and lateral spreading, seismically induced differential compaction, seismically induced landsliding, and seismically induced inundation (tsunami and seiche). In our opinion, the potential for collateral seismic hazards to affect the site and to damage the proposed structure is low except for liquefaction and lateral spreading. See section 5.1.3 for a detailed discussion on liquefaction and lateral spreading.

5.1.3 Liquefaction and Lateral Spreading

Liquefaction is a mechanism of ground failure resulting from increased pore pressures during undrained cyclical shearing of saturated cohesionless soils. The excess pore water pressure causes the effective stress and shear resistance to drop, producing a liquefied soil state. In general terms, when loose, saturated, coarse-grained soils (cohesionless soils) are subjected to earthquake shaking (cyclical shearing) the water pressure (pore pressure) increases. If the water cannot escape fast enough (undrained) stress is transferred from the soil skeleton to the pore water, reducing the grain to grain contact (effective stress); thus reducing the soil strength (shear resistance). If this reduction is great enough, the soil deforms and is said to liquefy. Ultimately, sands and non-plastic silts consolidate when subjected to repeated liquefaction.

The site was analyzed for liquefaction potential utilizing the data in the most recent publications of the NCEER Workshop and SP 117 implementations. The analysis was performed for existing grade elevations using a peak ground acceleration of 0.722 g and a magnitude 7.9 earthquake. A groundwater elevation of 14 feet below existing grade was used for the liquefaction analysis. This groundwater elevation was based on a review of the soil profile and estimations of winter conditions.

The associated hazards related to liquefaction are:

- Loss of bearing capacity.
- Lateral spreading.
- Ground settlement.
- Surface manifestations of underlying liquefaction.

A liquefaction analysis was conducted on the borings. The lowest estimated factor of safety against liquefaction using the NCEER method was 0.16. Due to the low factor of safety the site should be mitigated for the hazards of liquefaction.

Loss of Bearing Capacity

Liquefaction can cause loss of bearing capacity in stable strata located above the liquefied zone. The loss of bearing capacity has historically resulted in large translational and rotational failures. There are no recognized analytical methods to evaluate the loss of bearing capacity at

this time. The liquefiable zone is potentially thick, up to 10 to 15 feet thick in some locations, and relatively shallow (if a basement is constructed). We anticipate that the probability for loss of bearing capacity to occur at the site is moderate to high unless the soil is improved.

Lateral Spreading

Lateral spreading occurs when a liquefied soil mass fails toward an open slope face or fails on an inclined plane. The site is in an area that slopes gently to the northeast, which is the historical location of Arana Gulch. Therefore, the potential for lateral spreading to occur is considered moderate to high unless the soil is improved.

Ground Settlement

The liquefied soil profile may settle as the result of a seismic event. This occurs as the soil grains are shaken into a slightly denser arrangement. Because sites rarely have homogeneous soil profiles, this often results in differential settlement, also known as differential compaction. The probability of ground settlement to occur at the site due to a seismic event is high.

Volumetric reconsolidation strains of 3 percent were calculated based on cyclic stress ratio of 0.44 and fines adjusted blow counts of 7. The maximum settlement using a 15 feet thick liquefiable layer is 5 ½ inches. Differential settlements will be on the order of 5 ½ inches. The differential settlement matches the calculated settlement because some portions of the proposed structure are located directly on purisima formation sandstone and will not liquefy and other portions of the structure are located on alluvium.

Surface Manifestations of Underlying Liquefaction

Boils and ground fissures may occur through the top non-liquefiable soil from liquefaction of the underlying soil layers. Our evaluation of the potential for surface manifestations was conducted using a 2 feet thick non-liquefiable surface layer and a 15 feet thick liquefiable layer. Based on our calculations, the potential for surface manifestations is moderate to high.

6.0 DISCUSSIONS AND CONCLUSIONS

The proposed building envelope is underlain by varying soil/rock conditions. The southern portion of the site is underlain by minimal non-engineered fill and then purisima formation sandstone. The non-engineered fill prism thickens as one goes to the north (towards Soquel Avenue) and was recorded to be up to 14 feet deep. In the northern portion of the project there is alluvium below the non-engineered fill. The alluvium consists of soft to firm lean clay and loose silty sand. The silty sand has the potential to liquefy and laterally spread. This is a significant geologic hazard which requires mitigation.

The boring logs and cross-sections are presented in Appendix B. Based on our investigation, the bedrock slopes towards the northwest at a gradient of approximately 100 percent. Therefore, the northwestern edge of the structure is underlain by significantly more alluvium than the northeast corner. Our investigation was constrained by the existing building. We recommend that additional borings be advanced within the footprint of the existing Old Harbor Vet Building so our firm can map the depth of alluvium in more detail.

In our opinion, the most feasible mitigation strategy is to improve the alluvium underlying the proposed development. Typical soil improvement methods include compaction grouting and soil mixing. Once the soil is improved, to a specified parameter the hazard of liquefaction and lateral spreading will be considered low. Typically, a conventional shallow foundation can then be constructed.

Other considerations include over-excavation of the non-engineered fill and placement of engineered fill to design grade.

REFERENCES

ASTM International (2016).*Annual Book of ASTM Standards, Section Four, Construction*. Volume 4.08, Soil and Rock (I): D 430 - D 5611.

ASTM International (2016).*Annual Book of ASTM Standards, Section Four, Construction*. Volume 4.09, Soil and Rock (II): D 5714 - Latest.

Cochrane, G.R., Johnson, S.Y., Dartnell, P., Greene, H.G., Erdey, M.D., Dieter, B.E., Golden, N.E., Hartwell, S.R., Ritchie, A.C., Kvitek, R.G., Maier, K.L., Endris, C.A., Davenport, C.W., Watt, J.T., Sliter, R.W., Finlayson, D.P., and Krigsman, L.M., 2016, California State Waters Map Series—offshore of Aptos, California, U.S. Geological Survey, Open-File Report OF-2016-1025, 1:24,000

APPENDIX B

FIELD EXPLORATION PROGRAM

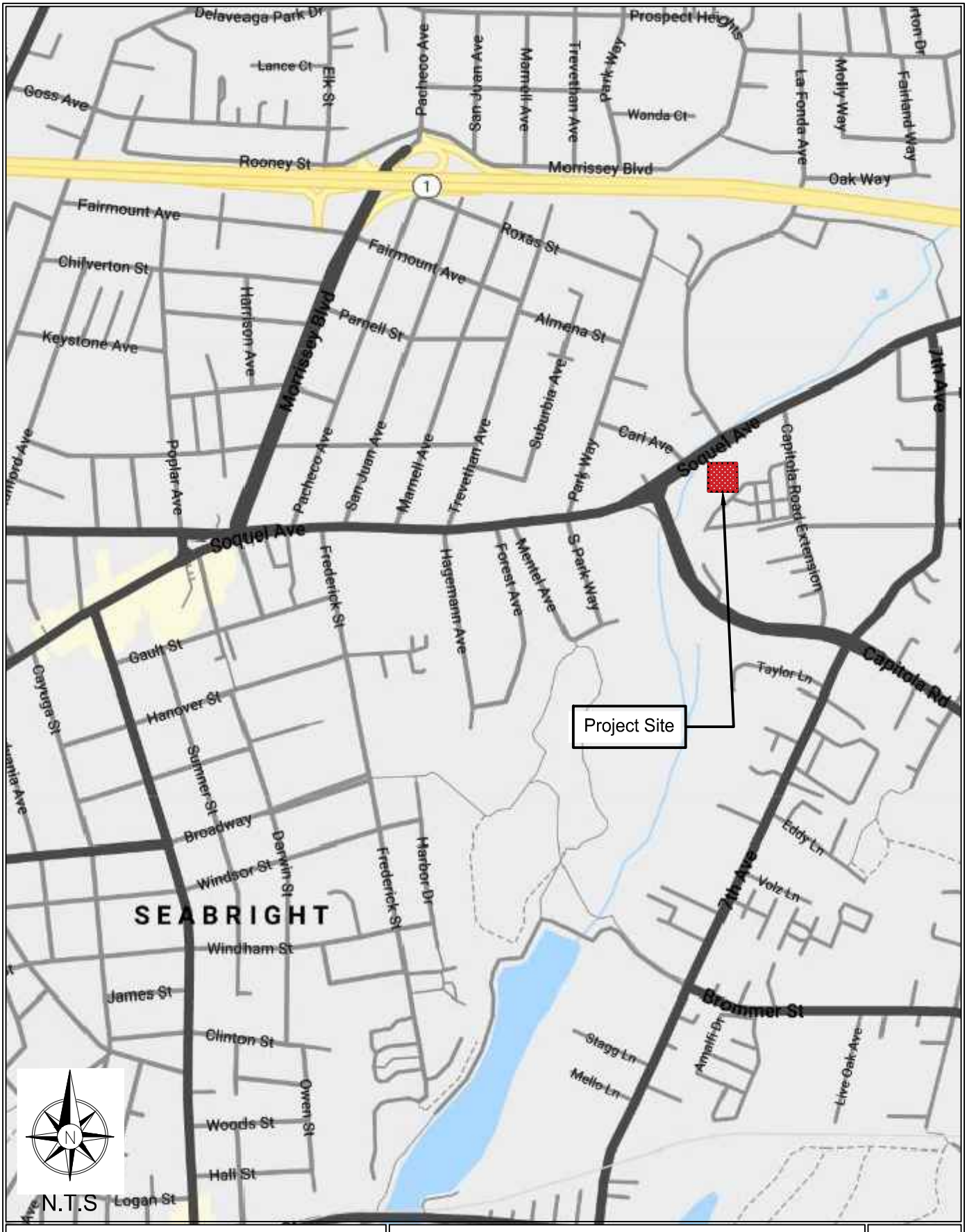
Field Exploration Procedures	Page B-1
Site Location Plan	Figure B-1
Boring Site Plan	Figure B-2
Key to the Logs	Figure B-3
Logs of the Borings	Figures B-4 through B-12b
Cross-Sections	Figures B-13 and B-14

FIELD EXPLORATION PROCEDURES

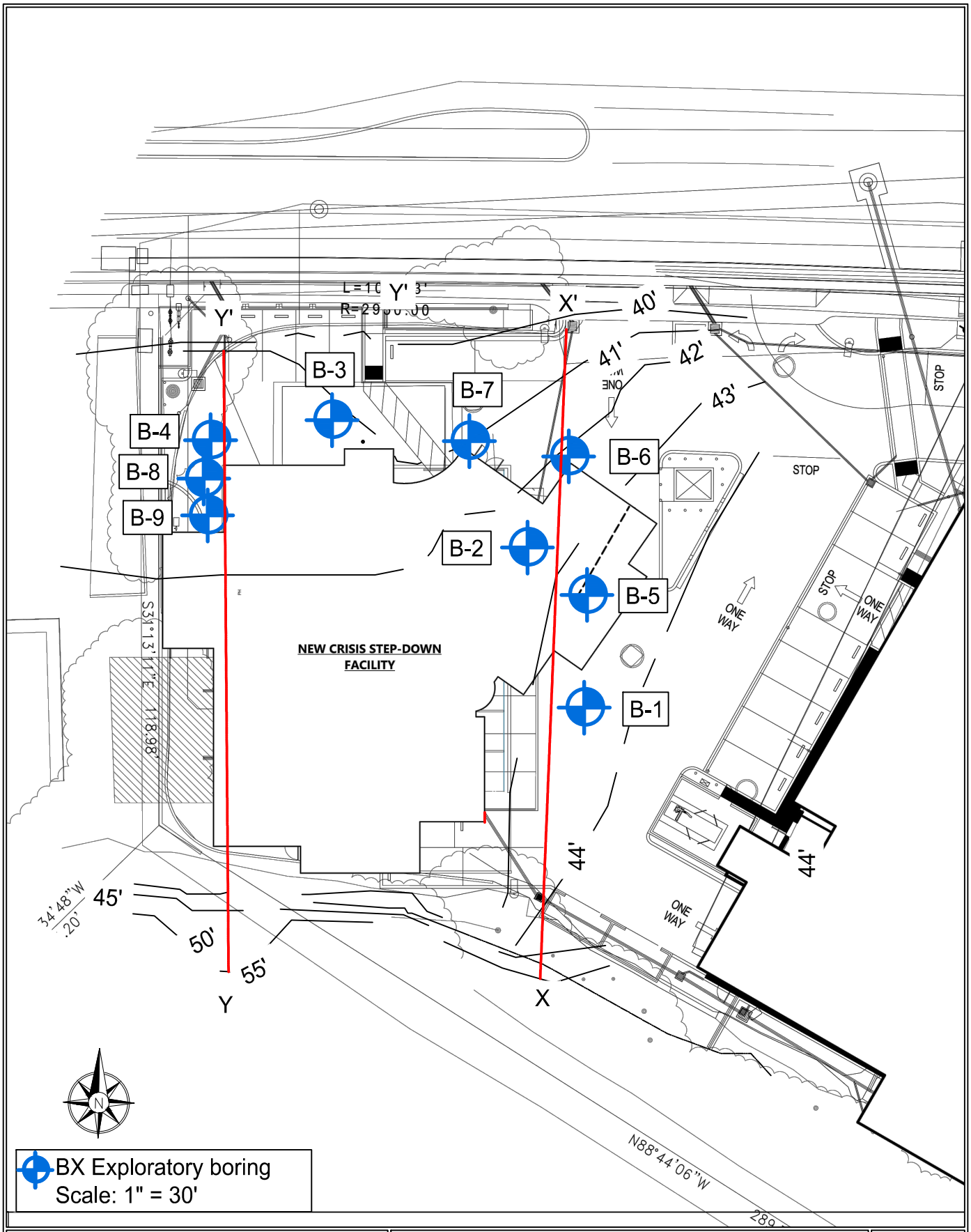
Subsurface conditions were explored by advancing nine borings below existing grade. The borings were advanced using six-inch diameter solid stem augers or 8-inch hollow stem augers on a truck mounted drill rig. The Key to The Logs and the Logs of the Boring are included in Appendix B, Figures B-3 through B-12b. The approximate locations of the borings are shown on the Boring Site Plan, Figure B-2. The borings were located in the field by tape measurements from known landmarks. Their locations as shown are therefore within the accuracy of such measurement.

The soils encountered in the borings were continuously logged in the field by a representative of Butano Geotechnical Engineering, Inc. Bulk and relatively undisturbed soil samples for identification and laboratory testing were obtained in the field. These soils were classified based on field observations and laboratory tests. The classifications are accordance with the Unified Soil Classification System (USCS: Figure B-3).

Two geologic cross-sections based on the topographic map of the site and our field investigation. They are shown on Figures B-13 and B-14



BUTANO	**SITE LOCATION PLAN**	FIGURE
GEOTECHNICAL ENGINEERING, INC.	2202 Soquel Avenue	B-1



BUTANO	**BORING SITE PLAN**	FIGURE
GEOTECHNICAL ENGINEERING, INC.	2202 Soquel Avenue	B-2

KEY TO LOGS

UNIFIED SOIL CLASSIFICATION SYSTEM

PRIMARY DIVISIONS			GROUP SYMBOL	SECONDARY DIVISIONS
COARSE GRAINED SOILS More than half of the material is larger than the No. 200 sieve	GRAVELS More than half of the coarse fraction is larger than the No. 4 sieve	CLEAN GRAVELS (Less than 5% fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
		GRAVEL WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines
			GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines
	SANDS More than half of the coarse fraction is smaller than the No. 4 sieve	CLEAN SANDS (Less than 5% fines)	SW	Well graded sands, gravelly sands, little or no fines
			SP	Poorly graded sands, gravelly sands, little or no fines
		SAND WITH FINES	SM	Silty sands, sand-silt mixtures, non-plastic fines
			SC	Clayey sands, sand-clay mixtures, plastic fines
FINE GRAINED SOILS More than half of the material is smaller than the No. 200 sieve	SILTS AND CLAYS Liquid limit less than 50		ML	Inorganic silts and very fine sands, silty or clayey fine sands or clayey silts with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS Liquid limit greater than 50		MH	Inorganic silts, micaceous or diatomacaceous fine sandy or silty soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils

GRAIN SIZE LIMITS

SILT AND CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

No. 200 No. 40 No. 10 No. 4 3/4 in. 3 in. 12 in.

US STANDARD SIEVE SIZE

RELATIVE DENSITY	
SAND AND GRAVEL	BLOWS/FT*
VERY LOOSE	0 - 4
LOOSE	4 - 10
MEDIUM DENSE	10 - 30
DENSE	30 - 50
VERY DENSE	OVER 50

CONSISTENCY	
SILT AND CLAY	BLOWS/FT*
VERY SOFT	0 - 2
SOFT	2 - 4
FIRM	4 - 8
STIFF	8 - 16
VERY STIFF	16 - 32
HARD	OVER 32

MOISTURE CONDITION	
CLAY	DRY
	MOIST
	SATURATED
SAND	DRY
	DAMP
	WET
	SATURATED

* Number of blows of 140 pound hammer falling 30 inches to drive a 2 inch O.D. (1 3/8 inch I.D.) split spoon (ASTM D-1586).

LOG OF EXPLORATORY BORING

Project No.: 21-173-SC
Project: 2202 Soquel
Date: May 4, 2021
Logged By: GB

Boring: B1
Location:
Elevation:
Method of Drilling: 6 inch diameter solid stem auger, truck mounted

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample
Perched Water Table | Static Water Table | Water Encountered During Drilling
Change in Soil Classification | Gradation or Minor Change in Classification

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
0	SM (FILL)			Grayish brown Silty SAND, medium dense, damp, trace gravel (FILL)	19	15		18.9					
5	BR			Grayish brown purisma formation sandstone, medium dense, weathered, friable	19	15		29.3					
10				very dense	50/6"	N/A		30.2					
15				Boring terminated at a depth of 10 1/2 feet. No groundwater encountered during drilling.									
20													
25													
30													
35													

LOG OF EXPLORATORY BORING

Project No.: 21-173-SC
Project: 2202 Soquel
Date: May 4, 2021
Logged By: GB

Boring: B2
Location:
Elevation:
Method of Drilling: 6 inch diameter solid stem auger, truck mounted

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample
Perched Water Table | Static Water Table | Water Encountered During Drilling
Change in Soil Classification | Gradation or Minor Change in Classification

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
	SM (FILL)			2 inches of AC, 14 inches of AB Grayish brown Silty SAND with gravel, medium dense, damp (FILL)	37	13		15.7					
					20	16		22.3					
5					28	24		22.3					
10				encountered cobble sized clast at 10 feet (FILL)	19	15		27.5					
15	SC			Dark brown Clayey SAND, loose, wet (Alluvium)	5	4		52.5					
20	BR			Gray purisima formation sandstone, very dense, weathered, fine grained	50/6"	N/A		29.3					
25					50/6"	N/A		29.7					
				Boring terminated at a depth of 26 feet. No groundwater encountered during drilling.									
30													
35													

LOG OF EXPLORATORY BORING

Project No.: 21-173-SC
Project: 2202 Soquel
Date: May 4, 2021
Logged By: GB

Boring: B3
Location:
Elevation:
Method of Drilling: 6 inch diameter solid stem auger, truck mounted

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample
Perched Water Table | Static Water Table | Water Encountered During Drilling
Change in Soil Classification | Gradation or Minor Change in Classification

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
	SM (FILL)			3 inches AC, 10 inches AB Gray Silty SAND with trace gravel, medium dense, damp	24	20							
5					50/1"	N/A							
				Auger refusal on rubble at a depth of 5 1/2 feet. No groundwater encountered during drilling.									
10													
15													
20													
25													
30													
35													

LOG OF EXPLORATORY BORING

Project No.: 21-173-SC
Project: 2202 Soquel
Date: May 4, 2021
Logged By: GB

Boring: B4 (1 of 2)
Location:
Elevation:
Method of Drilling: 6 inch diameter solid stem auger, truck mounted

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample
Perched Water Table | Static Water Table | Water Encountered During Drilling
Change in Soil Classification | Gradation or Minor Change in Classification

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
0	SM (FILL)			Gray Silty SAND, loose, damp (FILL)									
5													
10		■			8	6		18.5					
				▽									
15	SC			Gray Clayey SAND, loose, saturated (Alluvium)	6	4		37.9					
20	SC	■		Dark gray Clayey SAND with seams of silty sand,	6	4		35.6					
25	SM	■		Gray Silty SAND, medium dense	13	10		36.1					
30													
35	CL	■		Blueish gray Sandy Lean CLAY, stiff	35	8		31.6					

BUTANO GEOTECHNICAL ENGINEERING, INC.

FIGURE B-7a

LOG OF EXPLORATORY BORING

Project No.: 21-173-SC
Project: 2202 Soquel
Date: May 4, 2021
Logged By: GB

Boring: B4 (2 of 2)
Location:
Elevation:
Method of Drilling: 6 inch diameter solid stem auger, truck mounted

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample
Perched Water Table | Static Water Table | Water Encountered During Drilling
Change in Soil Classification | Gradation or Minor Change in Classification

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
40	CL			Straight drilled from 35 feet to 51 feet									
45													
50													
	BR			Gray purisima formation sandstone				39.3					
55				Boring terminated at a depth of 52 feet. Groundwater encountered at a depth of 12 feet during drilling.									
60													
65													
70													

BUTANO GEOTECHNICAL ENGINEERING, INC.

FIGURE B-7b

LOG OF EXPLORATORY BORING

Project No.: 21-173-SC
Project: 2202 Soquel
Date: July 20, 2021
Logged By: GB

Boring: B5
Location:
Elevation:
Method of Drilling: 6 inch diameter solid stem auger, truck mounted

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample
Perched Water Table | Static Water Table | Water Encountered During Drilling
Change in Soil Classification | Gradation or Minor Change in Classification

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
0	SM (FILL)			2 inches AC over 6 inches AB Grayish brown Silty SAND, medium dense, damp, trace gravel (FILL)	38	34		17.2					
5					9	7		11.1					
10	BR			Grayish brown purisma formation sandstone, medium dense, weathered, friable	50/5"	NA		30.9					
15					50/4"	NA		27.2					
20				Boring terminated at a depth of 16 feet. No groundwater encountered during drilling.									
25													
30													
35													

BUTANO GEOTECHNICAL ENGINEERING, INC.

FIGURE B-8

LOG OF EXPLORATORY BORING

Project No.: 21-173-SC
Project: 2202 Soquel
Date: July 20, 2021
Logged By: EJ

Boring: B6
Location:
Elevation:
Method of Drilling: 6 inch diameter solid stem auger, truck mounted

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample
Perched Water Table | Static Water Table | Water Encountered During Drilling
Change in Soil Classification | Gradation or Minor Change in Classification

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
	SM (FILL)			3 inches of AC, 5 inches of AB Grayish brown Silty SAND, medium dense, damp, trace gravel (FILL)	16	13		23.8					
5				medium dense	16	13		18.6					
10				Brown Silty SAND, very loose, wet (Alluvium)	4	3		27.0					
15	SC			Black Clayey SAND/ Sandy Lean CLAY, firm	7	5		24.2					
20	BR			Grayish brown purisma formation sandstone, medium dense, weathered, friable	50/3"			53.0					
25				Boring terminated at a depth of 21 1/2 feet. Groundwater measured at a depth of 18 feet at the conclusion of drilling.									
30													
35													

BUTANO GEOTECHNICAL ENGINEERING, INC.

FIGURE B-9

LOG OF EXPLORATORY BORING

Project No.: 21-173-SC
Project: 2202 Soquel
Date: July 20, 2021
Logged By: EJ

Boring: B7
Location:
Elevation:
Method of Drilling: 6 inch diameter solid stem auger, truck mounted

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample
Perched Water Table | Static Water Table | Water Encountered During Drilling
Change in Soil Classification | Gradation or Minor Change in Classification

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
	SM (FILL)			4 inches of AC over 6 inches of AB Grayish brown Silty SAND, loose, damp, trace gravel (FILL)	19	15		24.7					
5				loose, with gravel and cobble from 6 to 10 feet	12	9		10.1					
10					2	1		11.3					
15	SM			Brown Silty SAND, very loose, wet (Alluvium) ▽	6	5		19.8		31			
20													
25	BR			Grayish brown purisma formation sandstone, ~~medium dense, weathered, friable~~	50/1"			34.6					
30				Boring terminated at a depth of 26 feet. Groundwater measured at a depth of 18 feet at the conclusion of drilling.									
35													

BUTANO GEOTECHNICAL ENGINEERING, INC.

FIGURE B-10

LOG OF EXPLORATORY BORING

Project No.: 21-173-SC
Project: 2202 Soquel
Date: July 20, 2021
Logged By: EJ

Boring: B8 (1 of 2)
Location:
Elevation:
Method of Drilling: 6 inch diameter solid stem auger, truck mounted

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample
Perched Water Table | Static Water Table | Water Encountered During Drilling
Change in Soil Classification | Gradation or Minor Change in Classification

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
	SM (FILL)			3 inches of AC over 5 inches of AB Grayish brown Silty SAND, medium dense, damp, trace gravel (FILL)	25	21		24.2					
5					23	19		6.1					
10					19	15		21.1					
15	CL			Black Lean CLAY, firm, very moist (Alluvium) ▽	9	7		23.3					
20	SC			Clayey SAND, medium dense	13	10		75.4					
25													
30	SM			Black Silty SAND, medium dense, saturated	13	12		28.0		14			
35													

BUTANO GEOTECHNICAL ENGINEERING, INC.

FIGURE B-11a

LOG OF EXPLORATORY BORING

Project No.: 21-173-SC
Project: 2202 Soquel
Date: July 20, 2021
Logged By: EJ

Boring: B8 (2 of 2)
Location:
Elevation:
Method of Drilling: 6 inch diameter solid stem auger, truck mounted

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample
Perched Water Table | Static Water Table | Water Encountered During Drilling
Change in Soil Classification ———— | Gradation or Minor Change in Classification - - - - - - - -

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
40	CL	☒		Black Lean CLAY, firm, saturated	6	6		20.6					
45													
50	BR			Gray purisima formation sandstone				18.5					
55				Boring terminated at a depth of 50 feet. Groundwater encountered at a depth of 16 feet during drilling.									
60													
65													
70													

BUTANO GEOTECHNICAL ENGINEERING, INC.

FIGURE B-11b

LOG OF EXPLORATORY BORING

Project No.: 21-173-SC
Project: 2202 Soquel
Date: July 22, 2021
Logged By: JC

Boring: B9 (1 of 2)
Location:
Elevation:
Method of Drilling: 8 inch diameter solid stem auger, truck mounted

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample
Perched Water Table | Static Water Table | Water Encountered During Drilling
Change in Soil Classification ———— | Gradation or Minor Change in Classification - - - - - - - -

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
0	SM (FILL)			3 inches of AC over 5 inches of AB Grayish brown Silty SAND, mdium dense, damp, trace gravel (FILL) straight drilled from the surface to a depth of 50 feet.									
15	Qal			Alluvium encountered at a depth of approximately 15 feet									

BUTANO GEOTECHNICAL ENGINEERING, INC.

FIGURE B-12a

LOG OF EXPLORATORY BORING

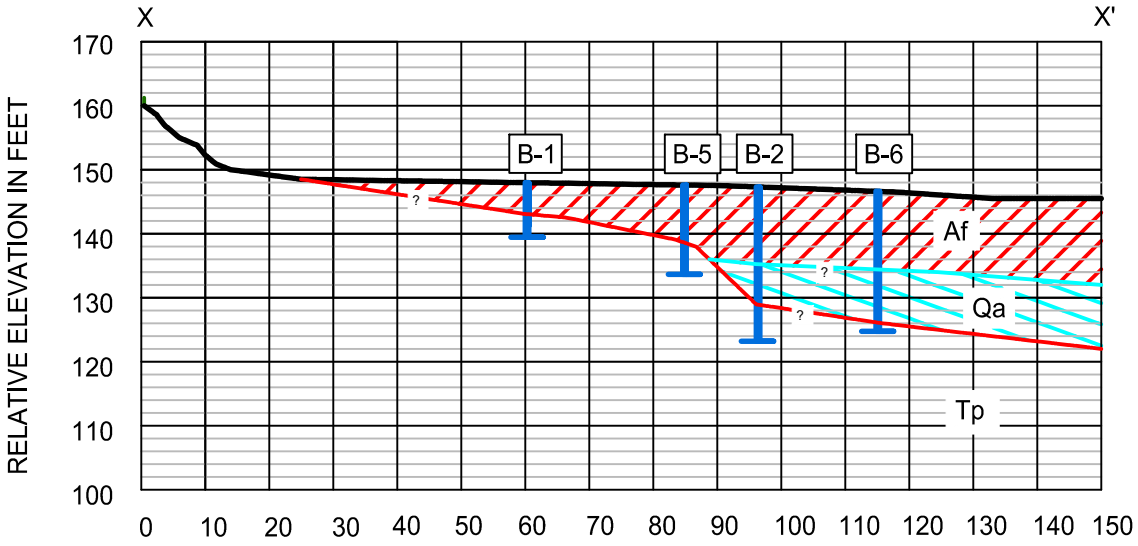
Project No.:	21-173-SC	Boring:	B9 (2 of 2)
Project:	2202 Soquel	Location:	
		Elevation:	
Date:	July 22, 2021	Method of Drilling:	8 inch diameter hollow stem auger,
Logged By:	JC		truck mounted

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample

Perched Water Table | Static Water Table | Water Encountered During Drilling

Change in Soil Classification ———— | Gradation or Minor Change in Classification - - - - - - - -

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
40													
45													
50	BR	☐		Gray purisima formation sandstone	50/4"			26.2					
		☐			50/1"			31.1					
55													
60				Boring terminated at a depth of 52 1/2 feet. Groundwater was sealed out during drilling and not recorded.									
65													
70													

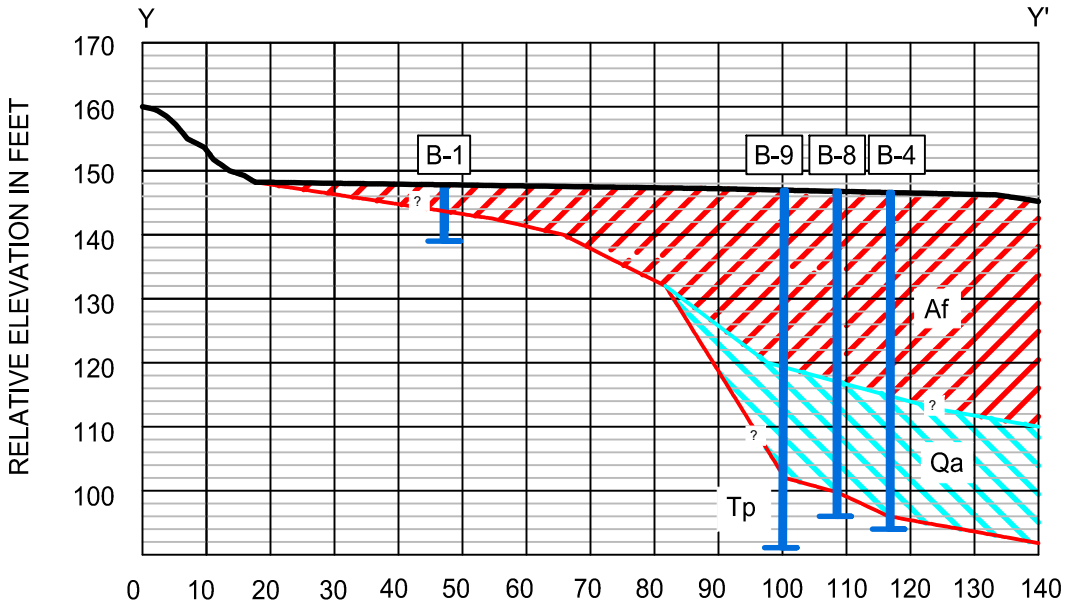


LEGEND

Af	- Non-engineered Fill
Qa	-Alluvium
Tp	-Purisima Formation
?	- Queried Where Approximate
B-X	- Exploratory Boring

Scale 1" = 20'
Horizontal = Vertical

BUTANO GEOTECHNICAL ENGINEERING, INC.	**CROSS SECTION 'X'** 2202 Soquel Avenue	FIGURE B-12



LEGEND

Af	- Non-engineered Fill
Qa	-Alluvium
Tp	-Purisima Formation
?	- Queried Where Approximate
B-X	- Exploratory Boring

Scale 1" = 30'
Horizontal = Vertical

NOTE
Boring B-1 is 80' offset from cross-section

BUTANO GEOTECHNICAL ENGINEERING, INC.	**CROSS SECTION 'Y'** 2202 Soquel Avenue	FIGURE B-13

APPENDIX C

LABORATORY TESTING PROGRAM

Laboratory Testing Procedures	Page C-1
Particle Size Analysis	Figures C-1 to C-4

LABORATORY TESTING PROCEDURES

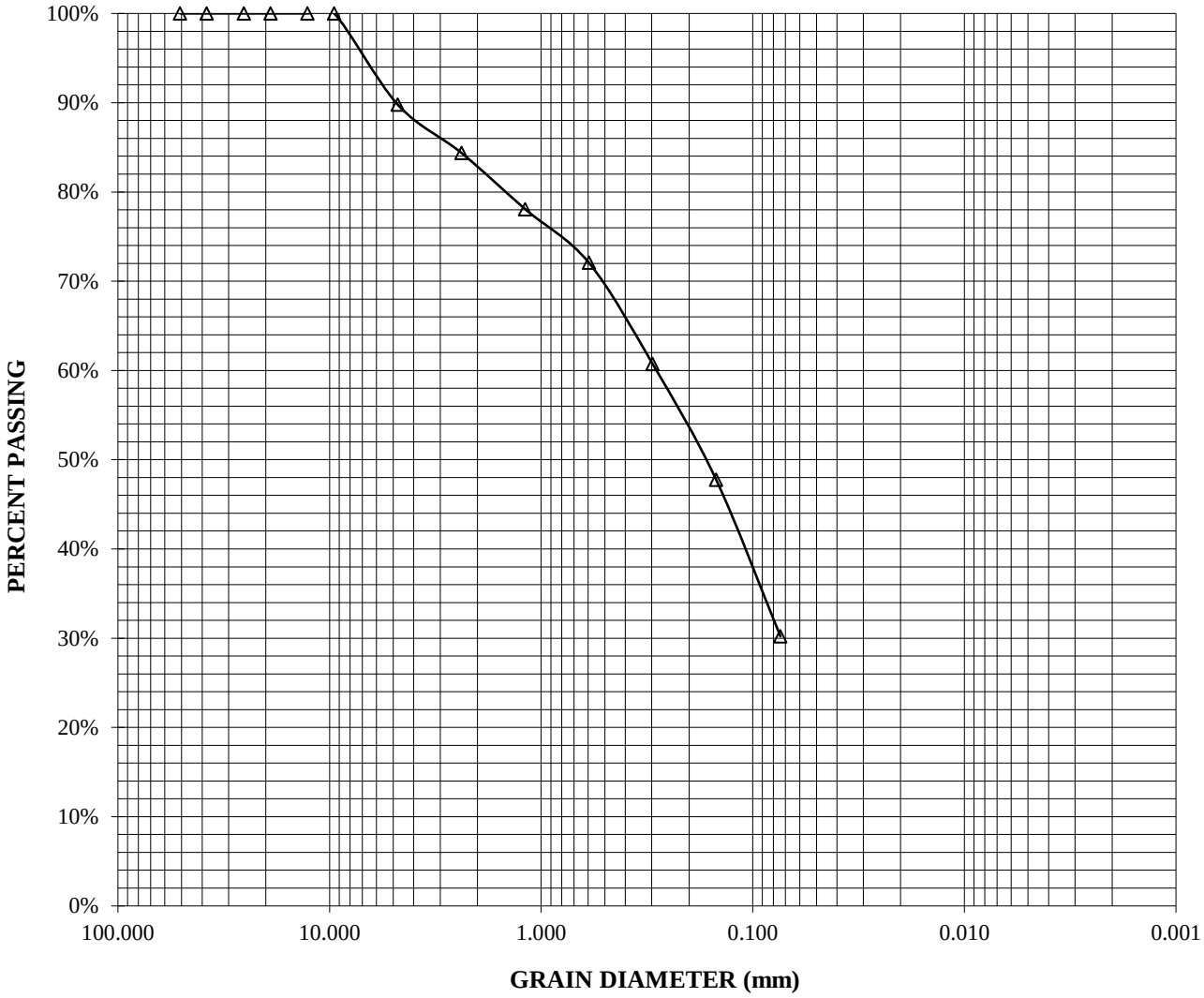
Classification

Soils were classified according to the Unified Soil Classification System in accordance with ASTM D 2487 and D 2488. Moisture content and density determinations were made for representative samples in accordance with ASTM D 2216. Results of moisture density determinations, together with classifications, are shown on the Boring Logs, Figures B-3 through B-12b.

Particle Size Analysis

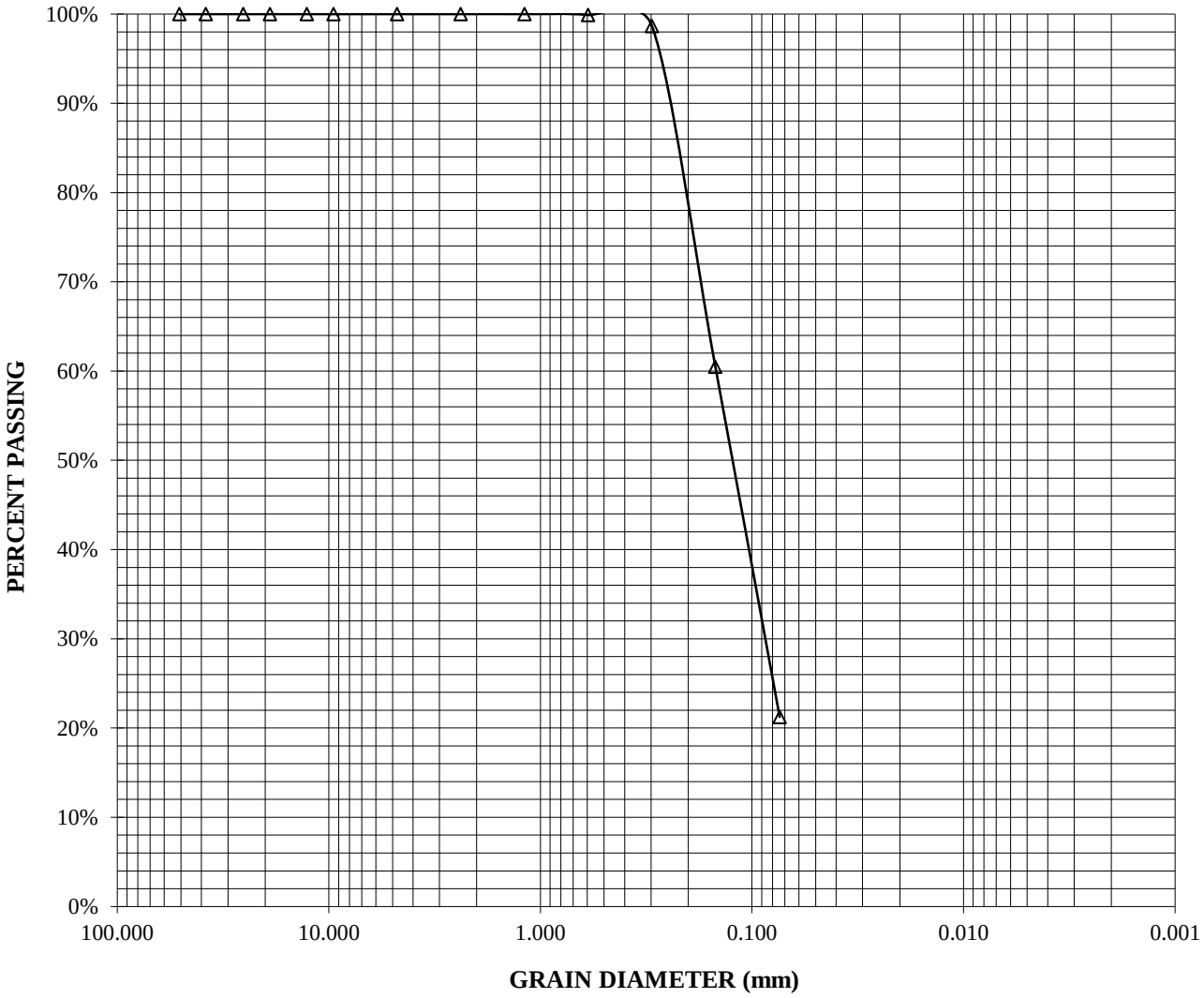
Four sieves were performed on representative sample in accordance with ASTM C 117 and C 136. The grain size distributions from the results of the particle size analyses are shown on Figures C-1 through C-4.

BORING:	B2-3	PERCENT	PERCENT
DEPTH (ft):	5.0	PASSING No. 4	PASSING No. 200
SOIL TYPE (USCS):	SM	89.8%	30.2%



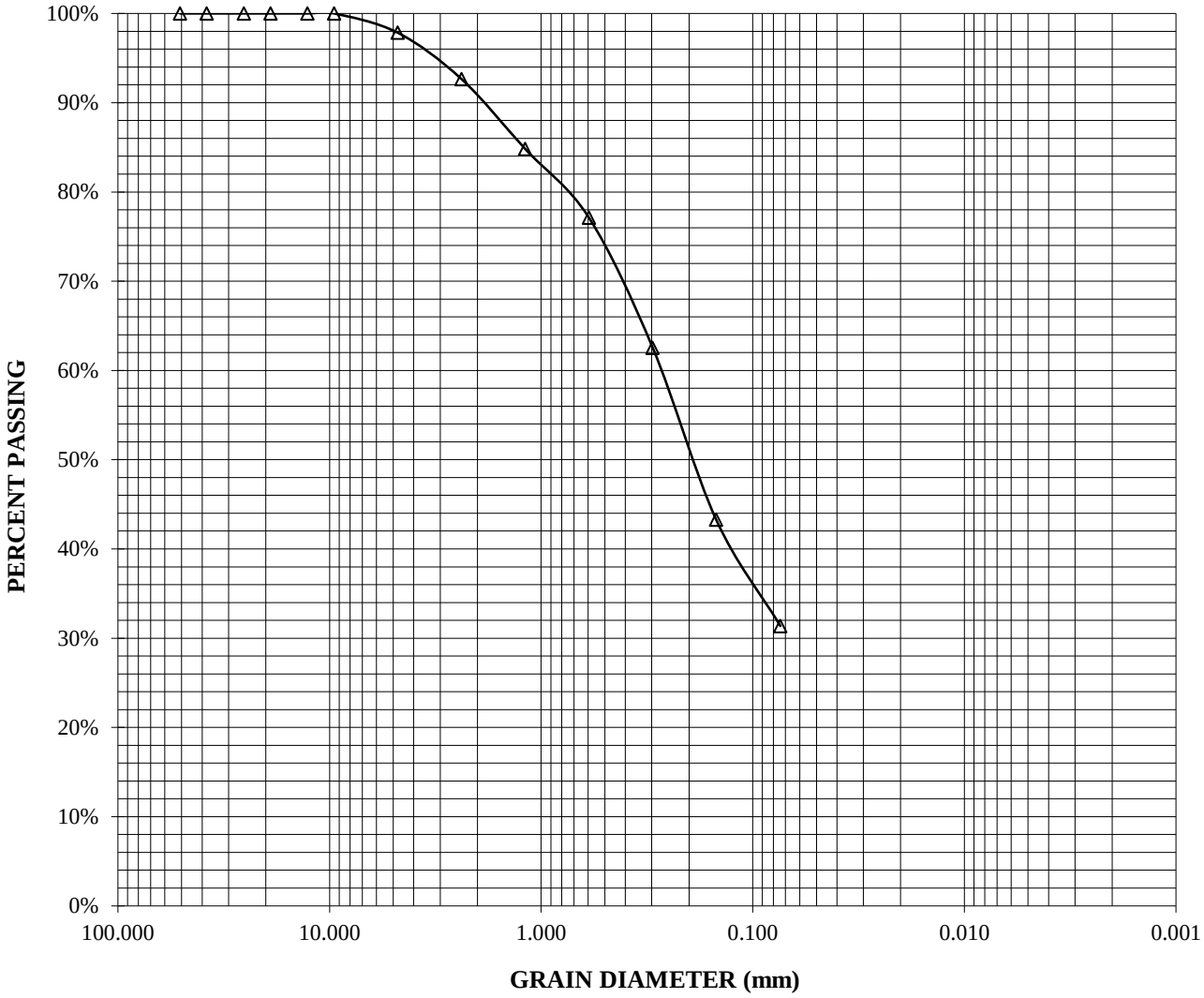
BUTANO	**GRAIN SIZE DISTRIBUTION**	FIGURE
GEOTECHNICAL ENGINEERING, INC.	2202 Soquel Ave	C-1

BORING:	B4-4	PERCENT	PERCENT
DEPTH (ft):	25.0	PASSING No. 4	PASSING No. 200
SOIL TYPE (USCS):	SM	100.0%	21.3%



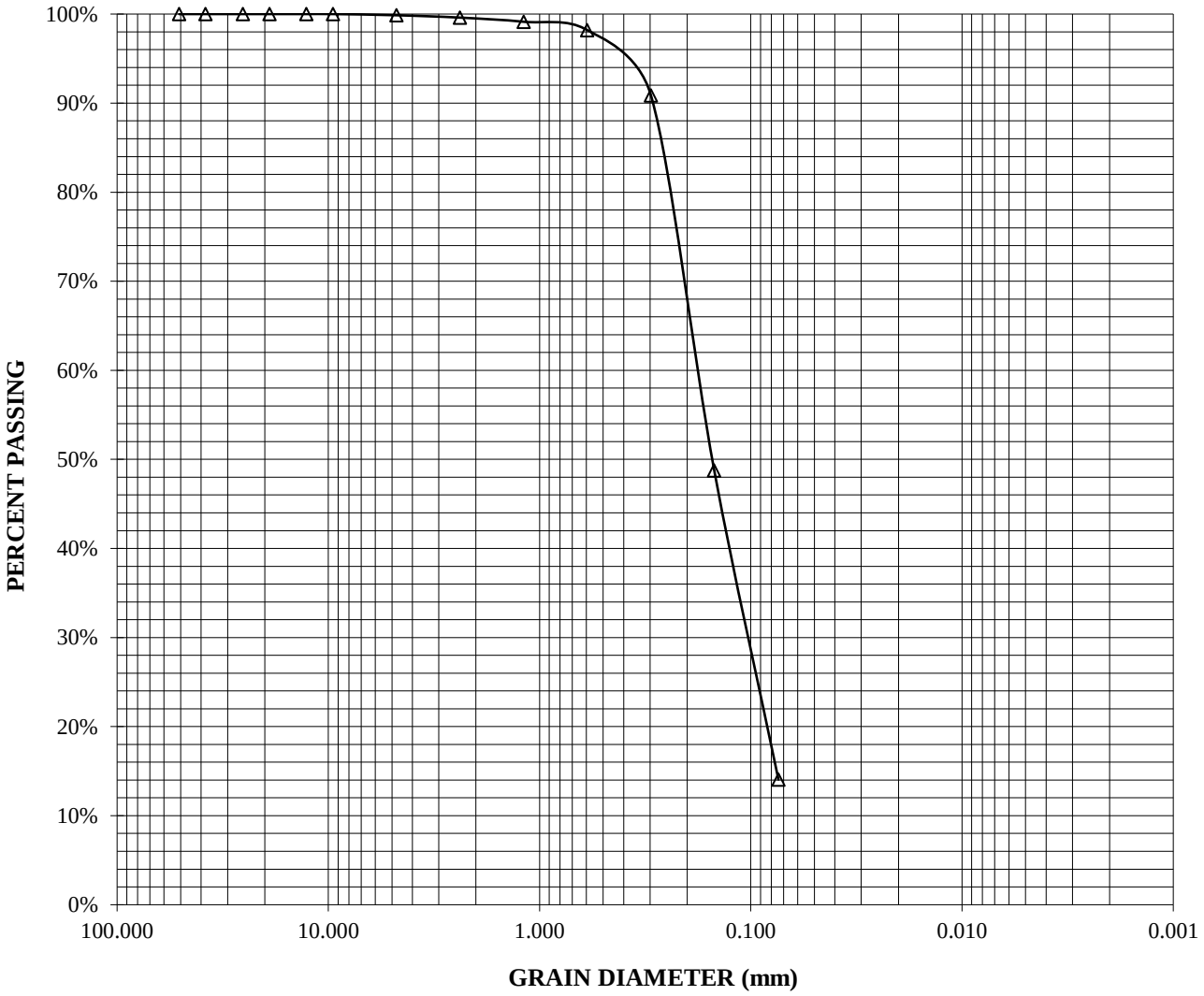
BUTANO	**GRAIN SIZE DISTRIBUTION**	FIGURE
GEOTECHNICAL ENGINEERING, INC.	2202 Soquel Ave	C-2

BORING:	B7-4	PERCENT	PERCENT
DEPTH (ft):	5.0	PASSING No. 4	PASSING No. 200
SOIL TYPE (USCS):	SM	97.8%	31.4%



BUTANO	**GRAIN SIZE DISTRIBUTION**	FIGURE
GEOTECHNICAL ENGINEERING, INC.	2202 Soquel Ave	C-3

BORING:	B8-6	PERCENT	PERCENT
DEPTH (ft):	25.0	PASSING No. 4	PASSING No. 200
SOIL TYPE (USCS):	SM	99.9%	14.1%



BUTANO	**GRAIN SIZE DISTRIBUTION**	FIGURE
GEOTECHNICAL ENGINEERING, INC.	2202 Soquel Ave	C-4

SUPPLEMENTAL CONDITIONS

EXHIBIT "C"

County of Santa Cruz
GENERAL SERVICES DEPARTMENT
FACILITIES MAINTENANCE & PROJECT OPERATIONS
1110 EMELINE AVENUE, SANTA CRUZ, CA 95060-4073

SUPPLEMENTAL & SPECIAL CONDITIONS

PROJECT 23TI-064

The Supplemental Conditions enumerated below shall be applicable to the noted Project above and shall be enforced by County Facilities Maintenance & Project Operations with the support of County Risk Management and Counsel.

1. Contractor (Bidder) **MUST** ensure ALL Workers onsite are wearing Safety PP&E which will include Hardhats, orange or bright green safety vests, steel toed shows, jeans or other applicable work pants, appropriate work shirt preferably with the Contractor name written on said shirt, safety glasses, and safety gloves, and ear protection when applicable.
2. Contractor (Bidder) **MUST** abide by COVID 19 Compliance regulations if and when enforced. If enforced, while walking to and from the work site or outside the work site during the day said Contractor shall ensure all Crew have and wear proper face coverings. While in the work zone area Contractor can remove face coverings if Contractor policy permits. *(Applicable to Interior Remodel or Renovation Projects)*
3. The successful Contractor (Bidder) **is required** to obtain and submit a **"Payment & Performance"** Bond for 100% of the project Bid Value. A **"Performance Bond"** is required if the value of the project exceeds $10,000. A **"Payment Bond"** is required if the value of the project exceeds $25,000. **Payment and Performance Bonds** are required to be submitted with the Bid. These will be requested of the apparent successful Bidder during Post Bid proceedings.
4. This project will be registered with the Department of Industrial Relations (DIR) and assigned a DIR # if the project value exceeds $25,000. County General Services Department (GSD) will issue that # to the successful Contractor (Bidder).
5. Contractor (Bidder) shall start work at 8:00 am and cleanup the work site daily beginning at 3:30 pm. Contractor (Bidder) shall be offsite by 4:00pm unless authorized to work overtime. *Project Work Hours can be deviated if the Sponsoring Department and End Users agree on the work schedule change proposed by the Contractor (Bidder).*
6. Materials and equipment shall be staged accordingly as discussed with the Sponsoring Department.
7. Contractor (Bidder) shall define the required staging and laydown area(s) required for the duration of the project. Area shall be adequately delineated, and proper signage installed if applicable.
8. The successful Contractor (Bidder) **SHALL** collaborate with **ALL** applicable County Departments and Representatives to include Facilities Maintenance & Project Operations.
9. Contractor (Bidder) shall maintain a safe site and comply with OSHA Regulations.

10. Contractor (Bidder) is obligated to comply with applicable building codes and county ordinances.
11. Contractor (Bidder) is responsible for the project schedule which includes a baseline, monthly progress, and look ahead schedules throughout the project duration.
12. Change Conditions shall be discussed in advance of Contractor (Bidder) submitting any **"Proposed Change Order"** to Facilities Maintenance & Project Operations. ALL **"Proposed Change Orders"** MUST be submitted with applicable supporting documentation.
13. Contractor (Bidder) shall, at appropriate project intervals, schedule Facilities Maintenance & Project Operations to conduct a trades specific building inspection ensuring means & methods performance meets code requirements. These observations are equivalent to a typical inspection activity from the Agency Having Jurisdiction for enforcement of applicable codes.
14. Facilities Maintenance & Project Operations will inspect the quality and progress of the Contractor (Bidder) work at irregular intervals.
15. Contractor (Bidder) shall use the County **"Progress Payment Schedule of Values"** when submitting for payment. Payments can be submitted at agreed upon intervals during the project. Progress Payment Applications MUST be submitted to GSDFacilities@santacruzcountyca.gov with copy to Kristine Conley at Kristine.conley@santacruzcountyca.gov and *prior to submitting a formal Progress Payment Application the Contractor (Bidder) shall submit a "Pencil Draft" copy to the assigned Facilities Maintenance & Project Operations Building Project Manager and Field Facilitator for review and comment.*
16. Contractor (Bidder) is required by the County to pay both prevailing wages and ensure a "Living Wage" is paid to all who work on this project.
17. Contractor (Bidder) is required to submit Certified Payroll with all submitted invoices and/or payment applications.
18. Contractor (Bidder) will carry a current and in good standing State of California Contractors License for the work performed.
19. Contractor (Bidder) MUST be a registered Vendor of the County of Santa Cruz and have in possession prior to submitting a Bid or after award a Vendor #.
20. Contractor (Bidder) shall submit applicable certificates of insurance (COI).
21. Contractor (Bidder) will review and execute an Independent Contracting Agreement (ICA) when issued by County General Services Department (GSD) or be issued a Purchase Order (PO). Both bind the Contractor (Bidder) and County to the documents and terms and conditions of the project.
22. Project warranty on material and labor shall be extended to the County by the Contractor (Bidder) during closeout of the project. Warranty on labor and materials shall be separately defined.
23. Taxes (if applicable) shall be included in the Contractor (Bidder) Bid.
24. Facilities Maintenance & Project Operations shall provide to the Contractor a "Notice of Substantial Completion" at a time when the majority of the contracted work is completed and a "Punch List" of the work is scheduled.

25. Contractor (Bidder) before receiving "Retention" payment MUST have completed work to include "Punch Items" and formally submitted ALL closeout required materials and/or documents to include Warranty. AT such time County will issue a "Notice of Completion".

SPECIAL CONDITIONS:

A. This is an abandoned facility on county property identified as 2202 & 2250 Soquel Ave. The property is adjacent to a high traffic commuter street as well as across the street from a school. Traffic control and any access restrictions shall be approved by the project manager and appropriate county agencies.
B. Contractor (Bidder) will be responsible for security and housekeeping for the site.
C. Contractor (Bidder) shall be responsible for all Storm Water Protection Protocol (SWPP) during the project.
D. The Contractor (Bidder) will hold under their contract an Abatement Contractor in advance of any demolition work and will remove all identified hazardous materials.
E. Contractor (Bidder) shall provide their own site Porta Toilets and adequate servicing operations for the toilets.

EXISTING CONDITION PHOTOGRAPHS

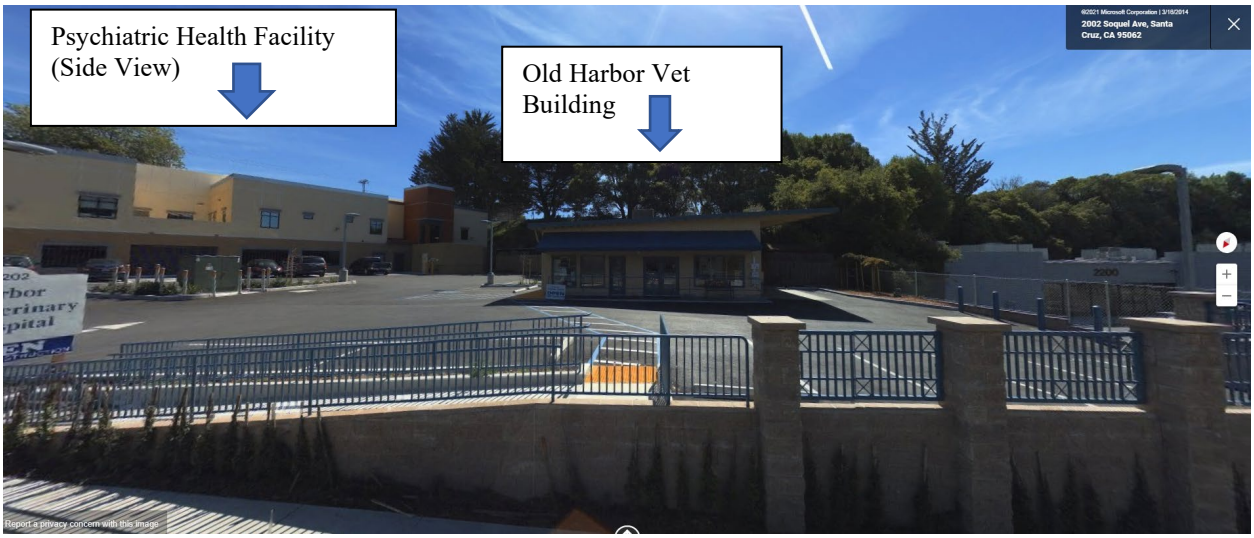
EXHIBIT “D”

County of Santa Cruz
GENERAL SERVICES DEPARTMENT
FACILITIES MAINTENANCE & PROJECT OPERATIONS
1110 EMELINE AVENUE, SANTA CRUZ, CA 95060-4073

EXISTING CONDITION PHOTOGRAPHS

PROJECT 23TI-064

BUILDING DEMOLITION & SITE GRADING



County of Santa Cruz
GENERAL SERVICES DEPARTMENT
FACILITIES MAINTENANCE & PROJECT OPERATIONS
1110 EMELINE AVENUE, SANTA CRUZ, CA 95060-4073

County of Santa Cruz

GENERAL SERVICES DEPARTMENT

FACILITIES MAINTENANCE & PROJECT OPERATIONS

1110 EMELINE AVENUE, SANTA CRUZ, CA 95060-4073

County of Santa Cruz

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County of Santa Cruz
GENERAL SERVICES DEPARTMENT
FACILITIES MAINTENANCE & PROJECT OPERATIONS
1110 EMELINE AVENUE, SANTA CRUZ, CA 95060-4073

SCOPING OF WORK

EXHIBIT “E”

County Of Santa Cruz
GENERAL SERVICES DEPARTMENT

FACILITIES MAINTENANCE & PROJECT OPERATIONS
1110 EMELINE AVE, SANTA CRUZ, CA 95060
(831) 454-5251 OR (831)454-5255

SANTA CRUZ COUNTY FACILITIES MAINTENANCE & PROJECT OPERATIONS

SCOPING DOCUMENT

BUILDING DEMOLITION & SITE GRADING
2022 Soquel Avenue, Santa Cruz, CA

PROJECT #23TI-064

December 15, 2023

PURPOSE:

This is the former site of the Harbor Veterinary Clinic located at 2202 Soquel Avenue, Santa Cruz, CA 95062. The building has been determined to be in poor condition and will be torn down. The lot is owned by the County of Santa Cruz, who has full site control over the property. Geological testing and environmental studies have been conducted.

The building, lot and parking are adjacent to the County of Santa Cruz Psychiatric Health Facility, which is comprised of two programs: A 16-bed, locked inpatient psychiatric unit for adults, and a 14-chair Crisis Stabilization Program for Youth and Adults who are assessed with a disposition plan developed within 24-hours of admission. Youth and Adults in the Crisis Stabilization Program are there on an involuntary hold, called a 5150. The building at 2202 Soquel will be demolished to provide space for a future use of the property, not included in the bid.

The County of Santa Cruz has developed this project Bid Package specifically in an effort to solicit qualified Contractors to review the supporting documents, participate in the Pre-Bid Job Walks, submit when applicable Pre-Bid RFI's, and compile a "Fair Market" competitive and complete Bid.

The Contractor will execute the work professionally and with an industry expected level of acceptable quality. The County of Santa Cruz submits this scoping document as a supporting document in Project 23TI-064 Bid Package.

SCOPE OF WORK:

Phase 1- Demolition

The bid shall be inclusive of the demolition of the exiting building, substructures and fencing within the building footprint. The contractor will be responsible for all entitlements, permitting, and fees associated with the demolition, with full reimbursement by the county. The bid will also include demo and disposal of all materials. The building has been tested for asbestos and hazardous materials, see attached report.

The successful bidder (Contractor) shall be responsible to disconnect, safe-off existing utilities per the Santa Cruz County Building Codes, Santa Cruz County Design Criteria (Sanitation Division & Storm Water), City of Santa Cruz Water Department Standards, and other applicable standards.

Santa Cruz County Demolition Requirements:

- All portions of the structure, including the foundation, shall be removed.
- All debris shall be removed from the lot and no debris from the demolished structure shall be visible on nearby property.
- The land shall be graded to a consistent grade, which provides adequate drainage.
- No debris shall be buried.
- No debris shall be burned.
- If connection to a public sewer exists, the building sewer shall be plugged or capped in an approved manner within 5 feet of the property line.
- All utility terminations shall be coordinated by the contractor with the utility owner and all terminations shall meet the applicable code standards. Post safe-off inspections will be conducted.
- The project shall implement best practices and other measures taken as necessary to prevent erosion.

*For codes related to Erosion Control and Sanitation abandonment see: https://www.dpw.santacruzcounty.us/Portals/19/pdfs/Design%20Crit/2022%20DESIGNCRITERIA.pdf?ver=QjgD7YKftGKlpkn95v3_uw%3d%3d&timestamp=1671064422616
*For Demolition procedures reference: *https://www.santacruzcountyplanning.com/PlanningHome/BuildingSafety/Inspections/DemolitionInspectionProcedures.aspx*>

Phase 2 – Restoration

After Demolition the project will be required to backfill the area with approved base rock and the subgrade should be compacted to a uniform density of **95 percent of the maximum density**. The project maybe required to install Christy Boxes or other terminations for utilities at the request of the Utility. The County will utilize a separate bidding process to select a construction firm to build the new facility at a later date, subject to the availability of sufficient funding to support the full costs of the project.
Base rock shall be Class 2 aggregate base to finish grade.

Bid Alternative #1 – Asphalt Paving Finish
The bidder shall provide a bid for alternate asphalt finish grade paving. The specification for asphalt concrete shall be hot mix Type A. The minimum required base course shall be 9 in of Class 2 aggregate, over 3 in of asphalt concrete. The project shall pave the project to a level finish grade.

Attachments:

- Geotech Report
- ESA Reports
- Hazardous Materials Report
- Site plans

Contractor will upon receiving a **"Notice to Proceed"** mobilize equipment and materials necessary to perform the contracted work.

SCHEDULE:

A schedule will be furnished by the contract awardee at the start of the project.

OTHER DOCUMENTS

EXHIBIT “G”

1038 Leigh Ave. Suite 100A
San Jose, CA 95126
Tel (408) 512-2912
info@GoAdviro.com

ACM present:
YES / NO

September 25, 2023

Attn: County of Santa Cruz

Site: 2202 Soquel Ave., Santa Cruz, CA 95062

Services: Asbestos Survey – Renovation/Demolition
- J# BAAQMD – EPA
- NESHAPS – EPA
- Cal-OSHA/OSHA

Location: Whole Site

Date: September 21st, 2023

#: 2309-67A-CSC

Site:

Asbestos Testing

Various samples were obtained from select building materials associated with the building suspected to contain asbestos in the areas scheduled for renovation. Those samples were submitted to an accredited laboratory for analysis and characterization service using PLM and Point Counting analytical procedures.

Polarized Light Microscopy (PLM):

Bulk samples were analyzed in accordance with U.S. EPA "Test Method for Determination of Asbestos in Bulk Building Materials, 1993," with inclusion of area percent estimates of the sample components. The use of the McCrone Color Dispersion Staining Technique supplements the analysis when considered useful by the analyst. The samples are prepared with refractive immersion oil and are examined under Polarized Light Microscopy (PLM). The accuracy of the visual estimate method is 1%

As per the standard "…The accuracy in the determination of the presence or absence of asbestos of greater than 1 area percent asbestos is greater than 99%." ASTM committee D22.05, 1/18/88, *Standard Method of Testing for Asbestos Containing Materials by Polarized Light Microscopy*.

Point Counting (PC):

The Point Counting method is a much more accurate analytical method for determining the percent of asbestos in a particular material. The laboratory uses a muffle furnace to ash the sample and remove organic compounds. Hydrochloric acid is used to dissolve some of the non-asbestos minerals. If the Point Count Method determines that the material contains less than 1% asbestos, the material being analyzed can be treated as non-hazardous asbestos containing construction waste.

Materials Sampled

PLM Analysis

Layers	Material	Color	Location
7 7	Drywall Joint Compound/Texture	White White	*Walls*
3 3	Vinyl Sheet Flooring Mastic	Beige Beige	*Floors*
3	Grout	Gray	*X-Ray Room*
3 2 1	Mastic Tile Underlayment	Black Beige Gray	*Storage*
3	Ceiling Tile	White	*Lobby & X-Ray Room*
3	Mastic	Brown	*Bathroom*
3	Cement Foundation	Gray	*Foundation*
3 2 1 1 1	Roofing Tar Roof Felt Coating Roof Insulation	Black Black Black White Tan	*Roof*
3	Roofing	Black/Red	*Shed*
3	Stucco	Gray	*Exterior*
3 3	Formica Mastic	Gray Beige	*Lobby*

58 – Total Layers – *PLM Analyzed*

Point Count Analysis

Layers	Material	Color	Location
14 15 16	Mastic	Black	*Storage*

3 – Total Layers – *Point Count Analyzed*

Asbestos Results *Complete lab results attached*

PACM – Presumed Asbestos-Containing Material

Regulated by EPA & OSHA

Material	Color	Location	Approx. Amount
None Identified			

**TSI-insulation material and/or transite cement piping/material may remain hidden within walls and structure. During the course of demolition remain alert to notice these materials. Contact ADVIRO immediately if any new suspect material is identified.*

***transite asbestos cement piping/material can become friable (RACM) when broken or damaged. If broken or damaged transite material is friable. When it is intact and in good condition, Category II asbestos-containing materials are not considered a regulated asbestos-containing material (RACM). Disposal requirements and regulations still apply.*

ACM – Asbestos Containing Material *greater than > 1%*

Regulated by EPA & OSHA

Sample	Layer	Material	Location	Asbestos	Approx. Amount
None Detected					

ACCM – Asbestos Containing Construction Material less than < 1%

Regulated by OSHA, not regulated by EPA

Sample	Layer From PLM	Material	Location	Asbestos
14 15 16	1	**Mastic** *Black*	Storage	*PLM – 2% CHRYSOTILE* ***PC – 0.50% CHRYSOTILE*** ****PC results are final results***

Waste Characterization of ACM

		Cal-OSHA-OSHA			BAAQMD-EPA		
Material	**Estimated Quantity**	**TSI**	**Surfacing**	**Miscellaneous /Other**	**RACM** *friable*	**Category I** *non-friable*	**Category II** *non-friable*
None Identified & None Detected							

**non-friable (Category I & II) can become friable (RACM) when removed by mechanical means. Waste re-categorization is subject to review with Adviro CAC as the definition and methods for mechanical means commonly vary due to materials, conditions, tools, and scope of work.*

***transite asbestos cement piping/material can become friable (RACM) when broken or damaged. If broken or damaged transite material is friable. However, abatement is not required when removed intact however handling and disposal procedures, requirements and regulations still apply.*

****quantities are field estimates; total quantities must be confirmed with a contractor*

Terms of Service

Asbestos

The handling, work practices, and disposal of asbestos is regulated and restricted by certain governmental agencies.

BAAQMD and EPA regulate asbestos containing materials at greater than >1%. Cal-OSHA regulates occupational exposure to asbestos at less than <1%. BAAQMD will require that all asbestos greater than >1% must be removed from the residence prior to scheduled renovation/demolition activity.

Cal-OSHA will require that the contractor performing the renovation or demolition on the structure must protect their employees from asbestos exposure in accordance with the Asbestos In Construction Standard 1529.1101.

ALL work involving asbestos should be performed by a DOSH licensed asbestos contractor.

Limitations

The inspection or testing performed maybe inherently limited in scope and nature. No guarantee is expressed or implied that all asbestos has been identified in the building or at the subject property. Inaccessible areas of the building underneath floor, behind walls, above ceilings were not inspected or subject to testing. If you have any questions, please contact ADVIRO.

Respectfully Submitted,

Frank Valerga, Certified Environmental Consultant
Advanced Environmental, LLC dba: **ADVIRO**

Certified Asbestos Consultant #14-5279
State of California Division of Occupation Safety and Health

Lead Inspector/Assessor #21965
State of California Department of Public Health

The following supporting documents are attached to this report:

- Asbestos Classifications Definitions
- Asbestos Regulators
- Laboratory Analytical Reports
- Photographs of Site and Sample Locations
- Floorplan Showing Sample Locations
- Certifications of CAC and SST Performing This Survey
- ADVIRO Insurance Information

Adviro

Asbestos Classifications Definitions

Homogenous Materials

Homogenous Materials	Materials sampled are representative of all correlating homogenous areas. Homogenous areas of material are defined by the same recurring material that may appear throughout site and are limited to one building; some materials may require additional sampling.

Waste Characterization

ACM	(Asbestos Containing Material) – Commercial asbestos product containing more than 1% asbestos. ACM must be disposed as hazardous waste. Note: Federal OSHA and Cal-OSHA control materials containing any amount of asbestos.
ACBM	(Asbestos Containing Building Material) – AHERA/ASHARA term for material containing more than 1% asbestos in or on interior structural members or other structural components. Includes covered walkways, porticos and exterior HVAC TSI.
ACCM	(Asbestos Containing Construction Material) – California term for a manufactured construction material containing greater than .1% (one tenth of one percent) asbestos.
PACM	(Presumed Asbestos Containing Material) OSHA considers all TSI and surfacing materials installed prior to1980 to be ACM unless proven otherwise.
Friable	Asbestos Containing Material that can be crumbled pulverized or reduced to powder by hand pressure when dry.
NOA	Naturally Occurring Asbestos. CARB defines as having >.25% by point counting.
ACM	CARB term for naturally occurring asbestos >.25% by point counting.
DACM	Designated Asbestos Containing Material: Floor-tile installed before 1981.

AHERA & OSHA Asbestos Categories

(used by EPA AHERA/ASHARA and OSHA/Cal-OSHA)

TSI	(Thermal System Insulation) - "Thermal system insulation (TSI)" means ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain. "Thermal system insulation ACM" is thermal system insulation which contains more than 1% asbestos.
Surface (usually mixed on-site at time of application)	"Surfacing material" means material that is sprayed, troweled-on or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes). "Surfacing ACM" means surfacing material which contains more than 1% asbestos. NOTE: OSHA/Cal-OSHA do not classify skim coat, taping mud, floor tile mastic, stucco, leveling compound, and hard wall plasters or wall texturing as surfacing.
Miscellaneous	All other ACM, including classify taping mud, floor tile mastic, stucco, leveling compound, and hard wall plasters or wall texturing as surfacing.

NESHAPS Asbestos Categories

(used by Air Quality Management Districts for Renovation and Demolition)

Category I	Cat I Non-friable Asbestos Containing Material (ACM) refers to asbestos containing packing, gaskets, resilient floor covering, Galbestos, and asphalt roofing products containing more than 1% asbestos.
Category II	Cat II Non-friable Asbestos-Containing Material (ACM) is any material that is not Cat I that contains greater than 1% asbestos.
RACM	"Regulated Asbestos-Containing Material." – Friable manufactured asbestos material (ACM) or a Category I non-friable ACM that has become friable OR a Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading OR Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations. RACM should be removed prior to renovation or demolition.

Adviro

Asbestos Regulators

	EPA		OSHA	Cal-OSHA	DTSC	BAAQMD	CARB
	AHERA	**NESHAP**					
Facilities	Schools, K-12 public and private	All except for residential bldgs of ≤4	All where employees are present	All in California employees are present	None concerned with waste only	All including residentials of ≤4 units	Naturally occurring asbestos
Trigger Amount of Asbestos	>1%	>1%	>0%	>0%	>1%	>1%	>0.25%
Requires Asbestos Building Survey	Yes	Yes	Yes	Yes	No	Yes	No
Sampling Protocol	Yes 3, 5, 7 Rule for surfacing, 3 Samples for TSI, 1 for TSI patches <6ft. or 6 sq/ft "in a manner sufficient to determine for TSI Mudded Connections and Miscellaneous Materials"	No	Yes for PACM (AHERA Protocol)	Yes for PACM (AHERA Protocol)	No	Yes (AHERA Protocol)	Yes

Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: Adviro (4717)
Address: 1038 Leigh Ave
Unit 100A
San Jose, CA 95126

Attn:

Order #: 533374

Received 09/22/23
Analyzed 09/22/23
Reported 09/22/23

Project: County Of Santa Cruz
Location: 2202 Soquel Ave. Santa Cruz
Number: 2309-67A

PO Number: CA 95062

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763

PLM Analysis

Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
533374-001	09/21/23	01	2202 Soquel Ave		
Layer 1: Drywall White, Powdery				No Asbestos Detected	8% CELLULOSE FIBER 92% NON FIBROUS MATERIAL
Layer 2: Joint Compound/ Texture White, Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL
Unable to separate individual layers.					
533374-002	09/21/23	02	2202 Soquel Ave		
Layer 1: Drywall White, Powdery				No Asbestos Detected	8% CELLULOSE FIBER 92% NON FIBROUS MATERIAL
Layer 2: Joint Compound/ Texture White, Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL
Unable to separate individual layers.					
533374-003	09/21/23	03	2202 Soquel Ave		
Layer 1: Drywall White, Powdery				No Asbestos Detected	8% CELLULOSE FIBER 92% NON FIBROUS MATERIAL
Layer 2: Joint Compound/ Texture White, Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL
Unable to separate individual layers.					

Reporting Limit: 1% Gravimetrically Reduced Reporting Limit: 0.01% PLM analysis is based on Visual Estimation and NESHAP recommends that any friable sample with an asbestos content less than 10 percent be verified by Point Count or TEM Analysis. The EPA recommends that any attic loose fill vermiculite should be treated as asbestos containing material. This report must not be reproduced except in full with the approval of the laboratory. The test results apply to the sample as received.

Project: County Of Santa Cruz
Location: 2202 Soquel Ave. Santa Cruz
Number: 2309-67A **PO Number:** CA 95062

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763 **PLM Analysis**

Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
533374-004	09/21/23	04	2202 Soquel Ave		
Layer 1: Drywall White, Powdery				No Asbestos Detected	8% CELLULOSE FIBER 92% NON FIBROUS MATERIAL
Layer 2: Joint Compound/ Texture White, Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL
Unable to separate individual layers.					
533374-005	09/21/23	05	2202 Soquel Ave		
Layer 1: Drywall White, Powdery				No Asbestos Detected	8% CELLULOSE FIBER 92% NON FIBROUS MATERIAL
Layer 2: Joint Compound/ Texture White, Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL
Unable to separate individual layers.					
533374-006	09/21/23	06	2202 Soquel Ave		
Layer 1: Drywall White, Powdery				No Asbestos Detected	8% CELLULOSE FIBER 92% NON FIBROUS MATERIAL
Layer 2: Joint Compound/ Texture White, Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL
Unable to separate individual layers.					
533374-007	09/21/23	07	2202 Soquel Ave		
Layer 1: Drywall White, Powdery				No Asbestos Detected	8% CELLULOSE FIBER 92% NON FIBROUS MATERIAL
Layer 2: Joint Compound/ Texture White, Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL
Unable to separate individual layers.					
533374-008	09/21/23	08	2202 Soquel Ave		
Layer 1: Vinyl Sheet Flrng Beige, Org.Bound/Fibrous				No Asbestos Detected	20% CELLULOSE FIBER 20% MINERAL/GLASS WOOL 60% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.					
Layer 2: Mastic Beige, Soft				No Asbestos Detected	100% NON FIBROUS MATERIAL

Reporting Limit: 1% Gravimetrically Reduced Reporting Limit: 0.01% PLM analysis is based on Visual Estimation and NESHAP recommends that any friable sample with an asbestos content less than 10 percent be verified by Point Count or TEM Analysis. The EPA recommends that any attic loose fill vermiculite should be treated as asbestos containing material. This report must not be reproduced except in full with the approval of the laboratory. The test results apply to the sample as received.

Project: County Of Santa Cruz
Location: 2202 Soquel Ave. Santa Cruz
Number: 2309-67A **PO Number:** CA 95062

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763 **PLM Analysis**

Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
533374-009	09/21/23	09	2202 Soquel Ave		
Layer 1: Vinyl Sheet Flrng Beige, Org.Bound/Fibrous				No Asbestos Detected	20% CELLULOSE FIBER 20% MINERAL/GLASS WOOL 60% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.					
Layer 2: Mastic Beige, Soft				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-010	09/21/23	10	2202 Soquel Ave		
Layer 1: Vinyl Sheet Flrng Beige, Org.Bound/Fibrous				No Asbestos Detected	20% CELLULOSE FIBER 20% MINERAL/GLASS WOOL 60% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.					
Layer 2: Mastic Beige, Soft				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-011	09/21/23	11	X-Ray Room		
Layer 1: Grout Gray, Hard/Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-012	09/21/23	12	X-Ray Room		
Layer 1: Grout Gray, Hard/Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-013	09/21/23	13	X-Ray Room		
Layer 1: Grout Gray, Hard/Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-014	09/21/23	14	Storage		
Layer 1: Mastic Black, Bituminous				2% CHRYSOTILE	98% NON FIBROUS MATERIAL
Layer 2: Tile Beige, Organically Bound No gray underlayment found.				No Asbestos Detected	100% NON FIBROUS MATERIAL

Reporting Limit: 1% Gravimetrically Reduced Reporting Limit: 0.01% PLM analysis is based on Visual Estimation and NESHAP recommends that any friable sample with an asbestos content less than 10 percent be verified by Point Count or TEM Analysis. The EPA recommends that any attic loose fill vermiculite should be treated as asbestos containing material. This report must not be reproduced except in full with the approval of the laboratory. The test results apply to the sample as received.

Project: County Of Santa Cruz
Location: 2202 Soquel Ave. Santa Cruz
Number: 2309-67A **PO Number:** CA 95062

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763 **PLM Analysis**

Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
533374-015	09/21/23	15	Storage		
Layer 1: Mastic Black, Bituminous				2% CHRYSOTILE	98% NON FIBROUS MATERIAL
Layer 2: Underlayment Gray, Hard/Granular No beige tile found.				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-016	09/21/23	16	Storage		
Layer 1: Mastic Black, Bituminous				2% CHRYSOTILE	98% NON FIBROUS MATERIAL
Layer 2: Tile Beige, Organically Bound No gray underlayment found.				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-017	09/21/23	17	Lobby + X-Ray Room		
Layer 1: Ceiling Tile White, Fibrous				No Asbestos Detected	40% CELLULOSE FIBER 40% MINERAL/GLASS WOOL 20% NON FIBROUS MATERIAL
533374-018	09/21/23	18	Lobby + X-Ray Room		
Layer 1: Ceiling Tile White, Fibrous				No Asbestos Detected	40% CELLULOSE FIBER 40% MINERAL/GLASS WOOL 20% NON FIBROUS MATERIAL
533374-019	09/21/23	19	Lobby + X-Ray Room		
Layer 1: Ceiling Tile White, Fibrous				No Asbestos Detected	40% CELLULOSE FIBER 40% MINERAL/GLASS WOOL 20% NON FIBROUS MATERIAL
533374-020	09/21/23	20	Bathroom		
Layer 1: Mastic Brown, Soft				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-021	09/21/23	21	Bathroom		
Layer 1: Mastic Brown, Soft				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-022	09/21/23	22	Bathroom		
Layer 1: Mastic Brown, Soft				No Asbestos Detected	100% NON FIBROUS MATERIAL

Reporting Limit: 1% Gravimetrically Reduced Reporting Limit: 0.01% PLM analysis is based on Visual Estimation and NESHAP recommends that any friable sample with an asbestos content less than 10 percent be verified by Point Count or TEM Analysis. The EPA recommends that any attic loose fill vermiculite should be treated as asbestos containing material. This report must not be reproduced except in full with the approval of the laboratory. The test results apply to the sample as received.

Project: County Of Santa Cruz
Location: 2202 Soquel Ave. Santa Cruz
Number: 2309-67A **PO Number:** CA 95062

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763 **PLM Analysis**

Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
533374-023	09/21/23	23	Foundation		
Layer 1: Cement Foundation Gray, Hard				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-024	09/21/23	24	Foundation		
Layer 1: Cement Foundation Gray, Hard				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-025	09/21/23	25	Foundation		
Layer 1: Cement Foundation Gray, Hard				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-026	09/21/23	26	Roof		
Layer 1: Roofing Black, Granular/Bituminous/Fibrous No insulation or coating found.				No Asbestos Detected	80% NON FIBROUS MATERIAL 20% SYNTHETIC FIBER
Sample was inhomogenous, subsamples of each component were analyzed separately.					
Layer 2: Tar Black, Bituminous				No Asbestos Detected	100% NON FIBROUS MATERIAL
Layer 3: Roof Felt Black, Bituminous/Fibrous				No Asbestos Detected	40% MINERAL/GLASS WOOL 60% NON FIBROUS MATERIAL
533374-027	09/21/23	27	Roof		
Layer 1: Roofing Black, Bituminous/Fibrous No insulation and tar found.				No Asbestos Detected	60% NON FIBROUS MATERIAL 40% SYNTHETIC FIBER
Layer 2: Coating White, Soft				No Asbestos Detected	100% NON FIBROUS MATERIAL

Reporting Limit: 1% Gravimetrically Reduced Reporting Limit: 0.01% PLM analysis is based on Visual Estimation and NESHAP recommends that any friable sample with an asbestos content less than 10 percent be verified by Point Count or TEM Analysis. The EPA recommends that any attic loose fill vermiculite should be treated as asbestos containing material. This report must not be reproduced except in full with the approval of the laboratory. The test results apply to the sample as received.

Project: County Of Santa Cruz
Location: 2202 Soquel Ave. Santa Cruz
Number: 2309-67A **PO Number:** CA 95062

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763 **PLM Analysis**

Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
533374-028	09/21/23	28	Roof		
Layer 1: Roofing Black, Granular/Bituminous/Fibrous No coating found.				No Asbestos Detected	60% NON FIBROUS MATERIAL 40% SYNTHETIC FIBER
Sample was inhomogenous, subsamples of each component were analyzed separately.					
Layer 2: Tar Black, Bituminous				No Asbestos Detected	100% NON FIBROUS MATERIAL
Layer 3: Roof Insulation Tan, Fibrous				No Asbestos Detected	60% CELLULOSE FIBER 20% MINERAL/GLASS WOOL 20% NON FIBROUS MATERIAL
533374-029	09/21/23	29	Shed		
Layer 1: Roofing Black/Red, Granular/Bituminous/Fibrous				No Asbestos Detected	20% MINERAL/GLASS WOOL 80% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.					
533374-030	09/21/23	30	Shed		
Layer 1: Roofing Black/Red, Granular/Bituminous/Fibrous				No Asbestos Detected	20% MINERAL/GLASS WOOL 80% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.					
533374-031	09/21/23	31	Shed		
Layer 1: Roofing Black, Granular/Bituminous/Fibrous				No Asbestos Detected	20% MINERAL/GLASS WOOL 80% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.					
533374-032	09/21/23	32	Exterior		
Layer 1: Stucco Gray, Hard/Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-033	09/21/23	33	Exterior		
Layer 1: Stucco Gray, Hard/Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-034	09/21/23	34	Exterior		
Layer 1: Stucco Gray, Hard/Granular				No Asbestos Detected	100% NON FIBROUS MATERIAL

Reporting Limit: 1% Gravimetrically Reduced Reporting Limit: 0.01% PLM analysis is based on Visual Estimation and NESHAP recommends that any friable sample with an asbestos content less than 10 percent be verified by Point Count or TEM Analysis. The EPA recommends that any attic loose fill vermiculite should be treated as asbestos containing material. This report must not be reproduced except in full with the approval of the laboratory. The test results apply to the sample as received.

Project: County Of Santa Cruz
Location: 2202 Soquel Ave. Santa Cruz
Number: 2309-67A **PO Number:** CA 95062

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763 **PLM Analysis**

Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
533374-035	09/21/23	35	Lobby		
Layer 1: Formica Gray, Hard/Fibrous				No Asbestos Detected	75% CELLULOSE FIBER 25% NON FIBROUS MATERIAL
Layer 2: Mastic Beige, Soft				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-036	09/21/23	36	Lobby		
Layer 1: Formica Gray, Hard/Fibrous				No Asbestos Detected	75% CELLULOSE FIBER 25% NON FIBROUS MATERIAL
Layer 2: Mastic Beige, Soft				No Asbestos Detected	100% NON FIBROUS MATERIAL
533374-037	09/21/23	37	Lobby		
Layer 1: Formica Gray, Hard/Fibrous				No Asbestos Detected	75% CELLULOSE FIBER 25% NON FIBROUS MATERIAL
Layer 2: Mastic Beige, Soft				No Asbestos Detected	100% NON FIBROUS MATERIAL

EPA Regulatory Limit: 1%
Total layers analyzed on order: 58

533374-09/22/23 02:06 PM

Analyst **Senhory Abdellatif**

Reviewed By: **Thoria Nadiem**
Analyst

Reporting Limit: 1% Gravimetrically Reduced Reporting Limit: 0.01% PLM analysis is based on Visual Estimation and NESHAP recommends that any friable sample with an asbestos content less than 10 percent be verified by Point Count or TEM Analysis. The EPA recommends that any attic loose fill vermiculite should be treated as asbestos containing material. This report must not be reproduced except in full with the approval of the laboratory. The test results apply to the sample as received.

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www.slabinc.com e-mail: info@slabinc.com

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UPS 1Z2E2899847028137

Submitting Co.	ADVIRO	Lab WO#		Phone	408-512-2912
1038 Leigh Ave. #100A		Acct #	4717	Fax / Email	reports@goadviro.com
San Jose, CA 95126		**State of Collection	California	**Cert. Required	☒ Yes ☐ No

Project Name:	County of Santa Cruz
Project Location:	2202 Soquel Ave. Santa Cruz, CA 95062
Project Number:	2309-67A
PO Number:	

Special Instructions [include requests for special reporting or data packages]

Turn Around Time

- ☐ 2 hours*
- ☒ Same day*
- ☐ 1 business day*
- ☐ 2 business day*
- ☐ 3 business days*
- ☐ 5 business days*
- ☐ Full TCLP (10d)
- ☐ Weekend*

* not available for all tests

Schedule rush organics, multi-metals & weekend tests in advance.

Matrix / Sample Type (Select ONE)

All samples on form should be of SAME matrix type. Use additional forms as needed.

- ☐ Air
- ☐ Aqueous
- ☒ Bulk
- ☐ Hi-Vol Filter (PM10)
- ☐ Hi-Vol Filter (TSP)
- ☐ Oil
- ☐ Paint
- ☐ Sludge
- ☐ Soil
- ☐ Solid
- ☐ Waste
- ☐ Wastewater
- ☐ Water,Drinking
- ☐ Compliance
- ☐ Wipe
- ☐ Wipe, Composite
- ☐ _____
- ☐ _____

Tests / Analytes (Select ALL that Apply)

Asbestos Air / Fiber Counts

- ☐ PCM (NIOSH 7400)
- ☐ TEM (AHERA)
- ☐ TEM (EPA Level II)
- ☐ _____

Miscellaneous Tests

- ☐ Total Dust (NIOSH 0500)
- ☐ Resp. Dust (NIOSH 0600)
- ☐ Silica - FTIR (NIOSH 7602)
- ☐ Silica - XRD (NIOSH 7500)
- ☐ Mold Analysis

Asbestos Bulk / Asb ID

- ☒ PLM (EPA 600/R-93/116)
- ☐ PLM (EPA Point Count)
- ☐ PLM (Qualitative only)
- ☐ NYELAP 198.1/.4/.6
- ☐ CAELAP (EPA Interim)
- ☐ TEM (Chatfield)
- ☐ _____

FOR ASBESTOS AIR:

TYPE OF RESPIRATOR USED: _____

Metals-Total Conc.

- ☐ Lead
- ☐ RCRA Metals
- ☐ _____
- ☐ _____

Metals-Extract

- ☐ TCLP / Lead
- ☐ TCLP / RCRA Metals
- ☐ TCLP / Full (w/ organics)

Others

- ☐ _____

Sample #	Date Sampled**	Time Sampled**	Sample Identification (Employee, SSN, Bldg, Material, Type[1])	Wiped Area (ft²)	pH / Temp *	Time[2] Start	Time[2] Stop	Flow Rate[3] Start	Flow Rate[3] Stop	Total[4] Air
01	9/21/23	11:10 am	DW|JC|tft - WALLS							
02		11:10am								
03		11:12am								
04		11:14am								
05		11:15am								
06		11:16am								
07		11:17am								
08		11:21am	VSF - Floors							
09		11:22am								
10		11:23am								
11		11:02am	grout - x-ray Room							
12		11:02am								

[1]Type: A=area B=blank P=personal E=excursion [2]Beginning/End of Sample Period [3]Pump Calibration in Liters/Minute [4]Volume in Liters [time in min * flow in L/min]

Sampled by

NAME Michael Sanchez

SIGNATURE _____

DATE/TIME 9/21/23 @ 1:27pm

Relinquished to lab by

NAME _____

SIGNATURE _____

DATE/TIME _____

Sample Disposal

If samples over req. weight (Refer to Fee Schedule)

- ☐ Return to Sender (Shipping fees)
- ☐ Disposal by lab ($50 fee)

Shipping Methods

- ☐ FX ☐ UPS ☐ USM
- ☐ HD ☐ DB

WB: _____

☐ Sample return requested ☐ Ambient temp ☐ Ice CI ☐R ☐S ☐X ☐ Receive a physical copy of report.

Temperature taken with IR Gun A. **Required.*

Chain-of-Custody documentation continued internally within lab. Terms and conditions page 2.

SCHNEIDER LABORATORIES GLOBAL, INC.

2512 West Cary Street, Richmond, Virginia 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475
www.slabinc.com e-mail: info@slabinc.com

WO Label

Submitting Co.	ADVIRO	Lab WO#		Phone	408-512-2912
1038 Leigh Ave. #100A		Acct #	4717	Fax / Email	reports@goadviro.com
San Jose, CA 95126		**State of Collection	California	**Cert. Required	☒ Yes ☐ No
Project Name:	SAME AS FRONT	Special Instructions [include requests for special reporting or data packages]			
Project Location:					
Project Number:	2369-67A				
PO Number:					

Turn Around Time

- 2 hours*
- ☒ Same day*
- ☐ 1 business day*
- ☐ 2 business day*
- ☐ 3 business days*
- ☐ 5 business days*
- ☐ Full TCLP (10d)
- ☐ Weekend*

* not available for all tests

Schedule rush organics, multi-metals & weekend tests in advance.

Matrix / Sample Type (Select ONE)

All samples on form should be of SAME matrix type. Use additional forms as needed.

- ☐ Air
- ☐ Aqueous
- ☒ Bulk
- ☐ Hi-Vol Filter (PM10)
- ☐ Hi-Vol Filter (TSP)
- ☐ Oil
- ☐ Paint
- ☐ Sludge
- ☐ Soil
- ☐ Solid
- ☐ Waste
- ☐ Wastewater
- ☐ Water,Drinking
- ☐ Compliance
- ☐ Wipe
- ☐ Wipe, Composite
- ☐ _____
- ☐ _____

Tests / Analytes (Select ALL that Apply)

Asbestos Air / Fiber Counts
- ☐ PCM (NIOSH 7400)
- ☐ TEM (AHERA)
- ☐ TEM (EPA Level II)
- ☐ _____

Miscellaneous Tests
- ☐ Total Dust (NIOSH 0500)
- ☐ Resp. Dust (NIOSH 0600)
- ☐ Silica - FTIR (NIOSH 7602)
- ☐ Silica - XRD (NIOSH 7500)
- ☐ Mold Analysis

Asbestos Bulk / Asb ID
- ☒ PLM (EPA 600/R-93/116)
- ☐ PLM (EPA Point Count)
- ☐ PLM (Qualitative only)
- ☐ NYELAP 198.1/.4/.6
- ☐ CAELAP (EPA Interim)
- ☐ TEM (Chatfield)
- ☐ _____

FOR ASBESTOS AIR:

TYPE OF RESPIRATOR USED: _____

Metals-Total Conc.
- ☐ Lead
- ☐ RCRA Metals
- ☐ _____
- ☐ _____

Metals-Extract
- ☐ TCLP / Lead
- ☐ TCLP / RCRA Metals
- ☐ TCLP / Full (w/ organics)

Others
- ☐ _____

Sample #	Date Sampled**	Time Sampled**	Sample Identification (Employee, SSN, Bldg, Material, Type[1])	Wiped Area (ft²)	pH / Temp *	Time[2] Start	Time[2] Stop	Flow Rate[3] Start	Flow Rate[3] Stop	Total[4] Air
13	9/21/23	11:03am	grout - x-ray Room							
14		11:05am	Mastic - Storage							
15		11:06am								
16		11:07am								
17		11:24am	Acoustical ceiling tiles - lobby & x-ray Room							
18		11:26am								
19		11:27am								
20		11:10am	gypsum board mastic - Bathroom							
21		11:11am								
22		11:12am								
23		11:16am	Cement - foundation							
24		11:17am								

[1]Type: A=area B=blank P=personal E=excursion [2]Beginning/End of Sample Period [3]Pump Calibration in Liters/Minute [4]Volume in Liters [time in min * flow in L/min]

Sampled by

NAME Michael Sanchez
SIGNATURE [signature]
DATE/TIME 9/21/23 @ 1:40pm

Relinquished to lab by

NAME _____
SIGNATURE _____
DATE/TIME _____

Sample Disposal
If samples over req. weight (Refer to Fee Schedule)
- ☐ Return to Sender (Shipping fees)
- ☐ Disposal by lab ($50 fee)

Shipping Methods
- ☐ FX ☐ UPS ☐ USM
- ☐ HD ☐ DB

WB: _____

☐ Sample return requested ☐ Ambient temp ☐ Ice Cl ☐R ☐S ☐X ☐ Receive a physical copy of report.

*Temperature taken with IR Gun A. **Required.

Chain-of-Custody documentation continued internally within lab. Terms and conditions page 2.

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2512 West Cary Street, Richmond, Virginia 23220-5117
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www.slabinc.com e-mail: info@slabinc.com

WO Label

Submitting Co.	ADVIRO	**Lab WO#**		**Phone**	408-512-2912
1038 Leigh Ave. #100A		**Acct #**	4717	**Fax / Email**	reports@goadviro.com
San Jose, CA 95126		****State of Collection**	California	****Cert. Required**	☒ Yes ☐ No

Project Name:	~~SAME AS FRONT~~	**Special Instructions [include requests for special reporting or data packages]**
Project Location:		
Project Number:	2304-67A	
PO Number:		

Turn Around Time

- ☐ 2 hours*
- ☒ Same day*
- ☐ 1 business day*
- ☐ 2 business day*
- ☐ 3 business days*
- ☐ 5 business days*
- ☐ Full TCLP (10d)
- ☐ Weekend*

* not available for all tests

Schedule rush organics, multi-metals & weekend tests in advance.

Matrix / Sample Type (Select ONE)

All samples on form should be of SAME matrix type. Use additional forms as needed.

- ☐ Air
- ☐ Aqueous
- ☒ Bulk
- ☐ Hi-Vol Filter (PM10)
- ☐ Hi-Vol Filter (TSP)
- ☐ Oil
- ☐ Paint
- ☐ Sludge
- ☐ Soil
- ☐ Solid
- ☐ Waste
- ☐ Wastewater
- ☐ Water,Drinking
- ☐ Compliance
- ☐ Wipe
- ☐ Wipe, Composite
- ☐ _____
- ☐ _____

Tests / Analytes (Select ALL that Apply)

Asbestos Air / Fiber Counts

- ☐ PCM (NIOSH 7400)
- ☐ TEM (AHERA)
- ☐ TEM (EPA Level II)
- ☐ _____

Miscellaneous Tests

- ☐ Total Dust (NIOSH 0500)
- ☐ Resp. Dust (NIOSH 0600)
- ☐ Silica - FTIR (NIOSH 7602)
- ☐ Silica - XRD (NIOSH 7500)
- ☐ Mold Analysis

Asbestos Bulk / Asb ID

- ☒ PLM (EPA 600/R-93/116)
- ☐ PLM (EPA Point Count)
- ☐ PLM (Qualitative only)
- ☐ NYELAP 198.1/.4/.6
- ☐ CAELAP (EPA Interim)
- ☐ TEM (Chatfield)
- ☐ _____

FOR ASBESTOS AIR:

TYPE OF RESPIRATOR USED: _____

Metals-Total Conc.

- ☐ Lead
- ☐ RCRA Metals
- ☐ _____
- ☐ _____

Metals-Extract

- ☐ TCLP / Lead
- ☐ TCLP / RCRA Metals
- ☐ TCLP / Full (w/ organics)

Others

- ☐ _____

Sample #	Date Sampled**	Time Sampled**	Sample Identification (Employee, SSN, Bldg, Material, Type[1])	Wiped Area (ft^2)	pH / Temp *	Time[2] Start	Time[2] Stop	Flow Rate[3] Start	Flow Rate[3] Stop	Total[4] Air
25	9/21/23	11:17am	Cement - Foundation							
26		10:47am	Roofing - Roof							
27		10:49am	↓							
28		10:51am	↓							
29		11:30am	Roofing - Shed							
30		11:31am	↓							
31		11:32am	↓							
32		11:19am	Stucco - Exterior							
33		11:20am	↓							
34		11:21am	↓							
35		11:35am	Formica - Lobby							
36		11:36am	↓							

[1]Type: A=area B=blank P=personal E=excursion [2]Beginning/End of Sample Period [3]Pump Calibration in Liters/Minute [4]Volume in Liters [time in min * flow in L/min]

Sampled by

NAME Michael Sanchez

SIGNATURE _____

DATE/TIME 9/21/23 @ 1:40pm

Relinquished to lab by

NAME _____

SIGNATURE _____

DATE/TIME _____

Sample Disposal
If samples over req. weight (Refer to Fee Schedule)

- ☐ Return to Sender (Shipping fees)
- ☐ Disposal by lab ($50 fee)

Shipping Methods

- ☐ FX ☐ UPS ☐ USM
- ☐ HD ☐ DB

WB: _____

☐ Sample return requested ☐ Ambient temp ☐ Ice Cl ☐ R ☐ S ☐ X ☐ Receive a physical copy of report.

* Temperature taken with IR Gun A. **Required.

Chain-of-Custody documentation continued internally within lab. Terms and conditions page 2.

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www.slabinc.com e-mail: info@slabinc.com

WO Label

Submitting Co.	ADVIRO	**Lab WO#**		**Phone**	408-512-2912
1038 Leigh Ave. #100A		**Acct #**	4717	**Fax / Email**	reports@goadviro.com
San Jose, CA 95126		****State of Collection**	California	****Cert. Required**	☒ Yes ☐ No

Project Name:	SAME AS FRONT	**Special Instructions [include requests for special reporting or data packages]**
Project Location:		
Project Number:	2307-67A	
PO Number:		

Turn Around Time

- ☐ 2 hours*
- ☒ Same day*
- ☐ 1 business day*
- ☐ 2 business day*
- ☐ 3 business days*
- ☐ 5 business days*
- ☐ Full TCLP (10d)
- ☐ Weekend*

* not available for all tests

Schedule rush organics, multi-metals & weekend tests in advance.

Matrix / Sample Type (Select ONE)

All samples on form should be of SAME matrix type. Use additional forms as needed.

☐ Air	☐ Solid
☐ Aqueous	☐ Waste
☒ Bulk	☐ Wastewater
☐ Hi-Vol Filter (PM10)	☐ Water,Drinking
☐ Hi-Vol Filter (TSP)	☐ Compliance
☐ Oil	☐ Wipe
☐ Paint	☐ Wipe, Composite
☐ Sludge	☐ _____
☐ Soil	☐ _____

Tests / Analytes (Select ALL that Apply)

Asbestos Air / Fiber Counts

- ☐ PCM (NIOSH 7400)
- ☐ TEM (AHERA)
- ☐ TEM (EPA Level II)
- ☐ _____

Miscellaneous Tests

- ☐ Total Dust (NIOSH 0500)
- ☐ Resp. Dust (NIOSH 0600)
- ☐ Silica - FTIR (NIOSH 7602)
- ☐ Silica - XRD (NIOSH 7500)
- ☐ Mold Analysis

Asbestos Bulk / Asb ID

- ☒ PLM (EPA 600/R-93/116)
- ☐ PLM (EPA Point Count)
- ☐ PLM (Qualitative only)
- ☐ NYELAP 198.1/.4/.6
- ☐ CAELAP (EPA Interim)
- ☐ TEM (Chatfield)
- ☐ _____

FOR ASBESTOS AIR:

TYPE OF RESPIRATOR USED: _____

Metals-Total Conc.

- ☐ Lead
- ☐ RCRA Metals
- ☐ _____
- ☐ _____

Metals-Extract

- ☐ TCLP / Lead
- ☐ TCLP / RCRA Metals
- ☐ TCLP / Full (w/ organics)

Others

- ☐ _____

Sample #	Date Sampled**	Time Sampled**	Sample Identification (Employee, SSN, Bldg, Material, Type[1])	Wiped Area (ft^2)	pH / Temp *	Time[2] Start	Time[2] Stop	Flow Rate[3] Start	Flow Rate[3] Stop	Total[4] Air
37	9/21/23	11:37am	Formica - Lobby							

[1]Type: A=area B=blank P=personal E=excursion [2]Beginning/End of Sample Period [3]Pump Calibration in Liters/Minute [4]Volume in Liters [time in min * flow in L/min]

Sampled by

NAME Michael Sanchez

SIGNATURE _____

DATE/TIME 9/21/23 @ 1:41pm

Relinquished to lab by

NAME _____

SIGNATURE _____

DATE/TIME _____

Sample Disposal
If samples over req. weight (Refer to Fee Schedule)

- ☐ Return to Sender (Shipping fees)
- ☐ Disposal by lab ($50 fee)

Shipping Methods

☐ FX ☐ UPS ☐ USM ☐ HD ☐ DB

WB: _____

☐ Sample return requested ☐ Ambient temp ☐ Ice Cl ☐ R ☐ S ☐ X ☐ Receive a physical copy of report.

** Temperature taken with IR Gun A.* ***Required.*

Chain-of-Custody documentation continued internally within lab. Terms and conditions page 2.

Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: Adviro (4717)
Address: 1038 Leigh Ave
Unit 100A
San Jose, CA 95126

Attn:

Order #: 533735

Received 09/22/23
Analyzed 09/25/23
Reported 09/25/23

Project: County Of Santa Cruz
Location: 2202 Soquel Ave. Santa Cruz
Number: 2309-67A

PO Number: CA 95062

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763 with Point Count **PLM Analysis**

Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
533735-001	09/21/23	14	Storage		
Layer 1: Mastic Black, Bituminous, Homogenous				0.50% CHRYSOTILE	99.50% NON FIBROUS MATERIAL
533735-002	09/21/23	15	Storage		
Layer 1: Mastic Black, Bituminous, Homogenous				0.50% CHRYSOTILE	99.50% NON FIBROUS MATERIAL
533735-003	09/21/23	16	Storage		
Layer 1: Mastic Black, Bituminous, Homogenous				0.50% CHRYSOTILE	99.50% NON FIBROUS MATERIAL

EPA Regulatory Limit: 1%
Total layers analyzed on order: 3

533735-09/25/23 06:15 PM

Analyst **Senhory Abdellatif**

Reviewed By: **Ben Wood**
Laboratory Director

Reporting limit: 0.25% Samples analyzed by the EPA Point Count test method. The EPA recommends that any attic loose fill vermiculite sample with a trace (<1) or greater amount of asbestos is a concern and should be treated as asbestos containing material. This report must not be reproduced except in full with the approval of the lab, and must not be used to claim NVLAP or other government agency endorsement. The test results apply to the sample as received.

SCHNEIDER LABORATORIES GLOBAL, INC.

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804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475
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533735

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ajones 9/22/2023 12:45:00 PM

Hand Delivered N/A

Submitting Co.	ADVIRO	Lab WO#		Phone	408-512-2912
1038 Leigh Ave. #100A		Acct #	4717	Fax / Email	reports@goadviro.com
San Jose, CA 95126		**State of Collection	California	**Cert. Required	☒ Yes ☐ No

Project Name:	SAME AS FRONT	Special Instructions [Include requests for special reporting or data packages]
Project Location:		
Project Number:	2369-67A	
PO Number:		

Turn Around Time

- 2 hours*
- ☒ Same day*
- ☐ 1 business day*
- ☐ 2 business day*
- ☐ 3 business days*
- ☐ 5 business days*
- ☐ Full TCLP (10d)
- ☐ Weekend*

* not available for all tests

Schedule rush organics, multi-metals & weekend tests in advance.

Matrix / Sample Type (Select ONE)

All samples on form should be of SAME matrix type. Use additional forms as needed.

- ☐ Air
- ☐ Aqueous
- ☒ Bulk
- ☐ Hi-Vol Filter (PM10)
- ☐ Hi-Vol Filter (TSP)
- ☐ Oil
- ☐ Paint
- ☐ Sludge
- ☐ Soil
- ☐ Solid
- ☐ Waste
- ☐ Wastewater
- ☐ Water,Drinking
- ☐ Compliance
- ☐ Wipe
- ☐ Wipe, Composite
- ☐ _____
- ☐ _____

Tests / Analytes (Select ALL that Apply)

Asbestos Air / Fiber Counts

- ☐ PCM (NIOSH 7400)
- ☐ TEM (AHERA)
- ☐ TEM (EPA Level II)
- ☐ _____

Miscellaneous Tests

- ☐ Total Dust (NIOSH 0500)
- ☐ Resp. Dust (NIOSH 0600)
- ☐ Silica - FTIR (NIOSH 7602)
- ☐ Silica - XRD (NIOSH 7500)
- ☐ Mold Analysis

Asbestos Bulk / Asb ID

- ☒ PLM (EPA 600/R-93/116)
- ☐ PLM (EPA Point Count)
- ☐ PLM (Qualitative only)
- ☐ NYELAP 198.1/.4/.6
- ☐ CAELAP (EPA Interim)
- ☐ TEM (Chatfield)
- ☐ _____

FOR ASBESTOS AIR:

TYPE OF RESPIRATOR USED: _____

Metals-Total Conc.

- ☐ Lead
- ☐ RCRA Metals
- ☐ _____
- ☐ _____

Metals-Extract

- ☐ TCLP / Lead
- ☐ TCLP / RCRA Metals
- ☐ TCLP / Full (w/ organics)

Others

- ☐ _____

Sample #	Date Sampled**	Time Sampled**	Sample Identification (Employee, SSN, Bldg, Material, Type[1])	Wiped Area (ft²)	pH / Temp *	Time[2] Start	Time[2] Stop	Flow Rate[3] Start	Flow Rate[3] Stop	Total[4] Air
13	9/21/23	11:03am	grout - x-ray Room							
14		11:05am	Mastic - Storage							
15		11:06am								
16		11:07am								
17		11:24am	Acoustical ceiling tiles - lobby & x-ray Room							
18		11:26am								
19		11:27am								
20		11:40am	gypsum board Mastic - Bathroom							
21		11:11am								
22		11:12am								
23		11:16am	Cement - foundation							
24		11:17am								

[1]Type: A=area B=blank P=personal E=excursion [2]Beginning/End of Sample Period [3]Pump Calibration in Liters/Minute [4]Volume in Liters [time in min * flow in L/min]

Sampled by

NAME Michael Sanchez

SIGNATURE

DATE/TIME 9/21/23 @ 1:40pm

Relinquished to lab by

NAME _____

SIGNATURE _____

DATE/TIME _____

☐ Sample return requested ☐ Ambient temp ☐ Ice Cl ☐R ☐S ☐X ☐ Receive a physical copy of report.

Temperature taken with IR Gun A. **Required.*

Chain-of-Custody documentation continued internally within lab. Terms and conditions page 2.

Sample Disposal

If samples over req. weight (Refer to Fee Schedule)

- ☐ Return to Sender (Shipping fees)
- ☐ Disposal by lab ($50 fee)

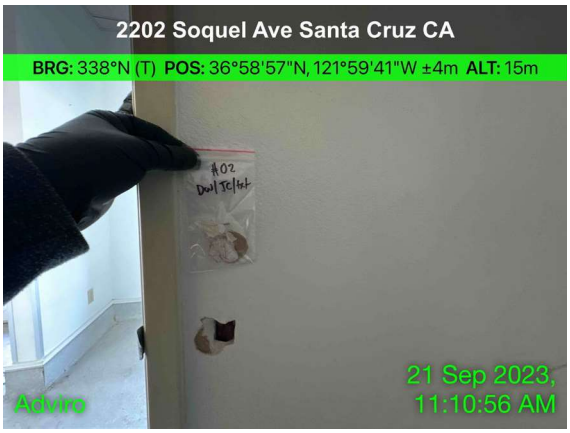
Shipping Methods

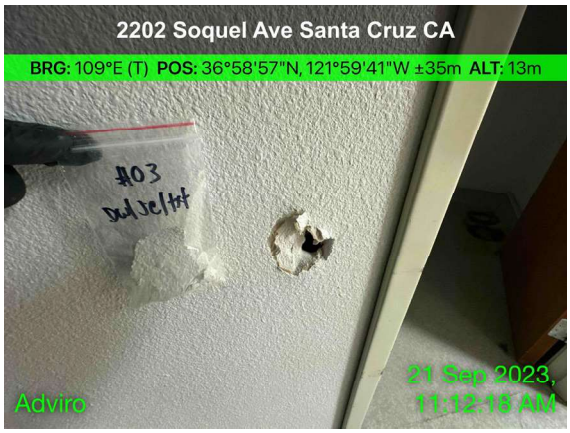
- ☐ FX ☐ UPS ☐ USM
- ☐ HD ☐ DB

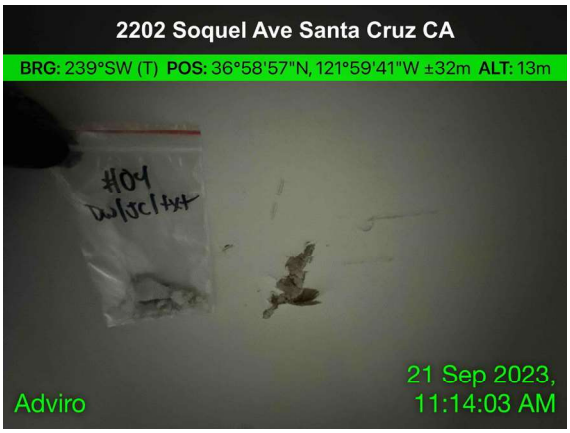
WB: _____

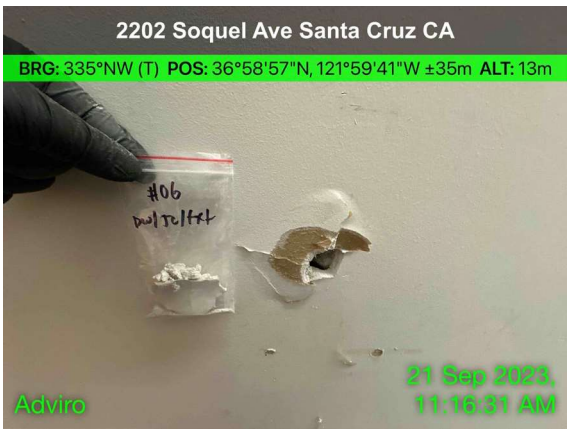
Pictures

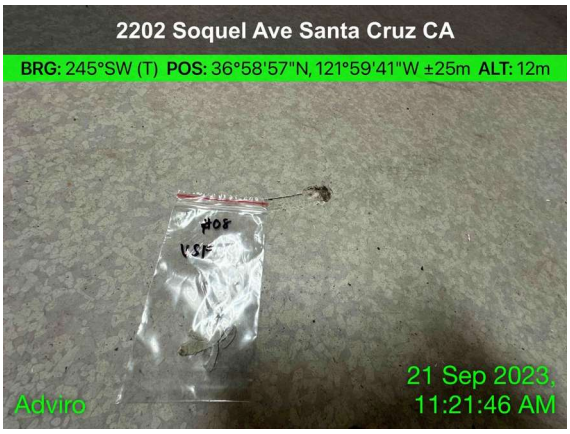
Samples:



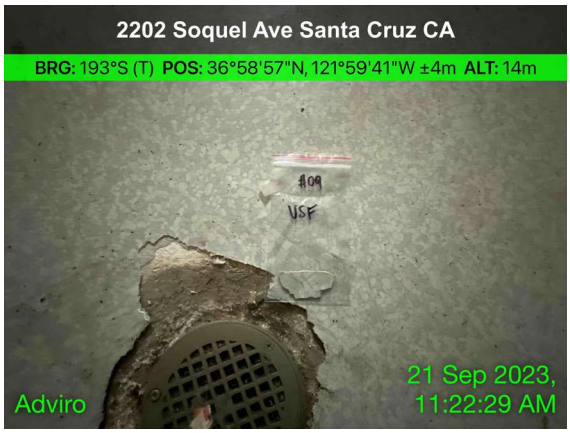








Pictures


2202 Soquel Ave Santa Cruz CA
BRG: 193°S (T) POS: 36°58'57"N, 121°59'41"W ±4m ALT: 14m
#09
VSF
Adviro
21 Sep 2023,
11:22:29 AM


2202 Soquel Ave Santa Cruz CA
BRG: 152°SE (T) POS: 36°58'57"N, 121°59'41"W ±4m ALT: 10m
#10
VSF
Adviro
21 Sep 2023,
11:23:27 AM


2202 Soquel Ave Santa Cruz CA
220°SW (T) 36°58'57"N, 121°59'42"W ±35m ▲12m
#11
grout
x-ray
room
Adviro
Sep 21 2023,
11:02:01 AM


Unknown area
267°W (T) 36°58'57"N, 121°59'42"W ±7m ▲13m
#12
grout
x-ray
Room
Adviro
Sep 21 2023,
11:02:30 AM


Unknown area
43°NE (T) 36°58'57"N, 121°59'42"W ±9m ▲13m
#13
grout
x-ray
room
Adviro
Sep 21 2023,
11:03:31 AM


Unknown area
43°NE (T) 36°58'57"N, 121°59'42"W ±35m ▲12m
Adviro
Sep 21 2023,
11:05:54 AM

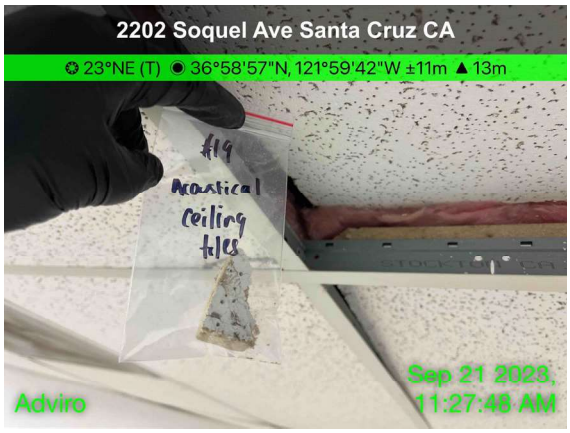

Unknown area
19°N (T) 36°58'57"N, 121°59'42"W ±17m ▲12m
Adviro
Sep 21 2023,
11:06:42 AM

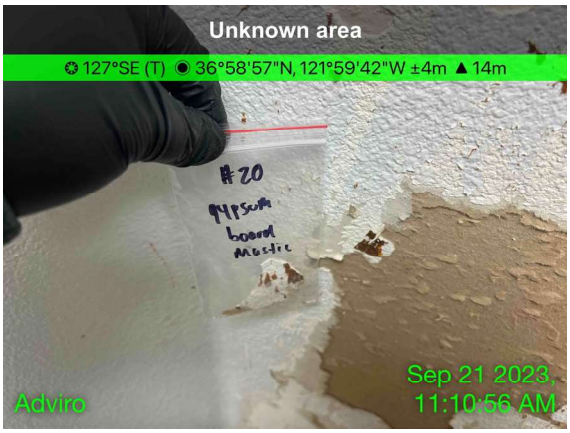

Unknown area
72°E (T) 36°58'57"N, 121°59'42"W ±16m ▲12m
Adviro
Sep 21 2023,
11:07:53 AM

Pictures


2202 Soquel Ave Santa Cruz CA
260°W (T) 36°58'57"N, 121°59'42"W ±5m 13m
#17
Acoustical ceiling tiles
Adviro
Sep 21 2023, 11:24:40 AM

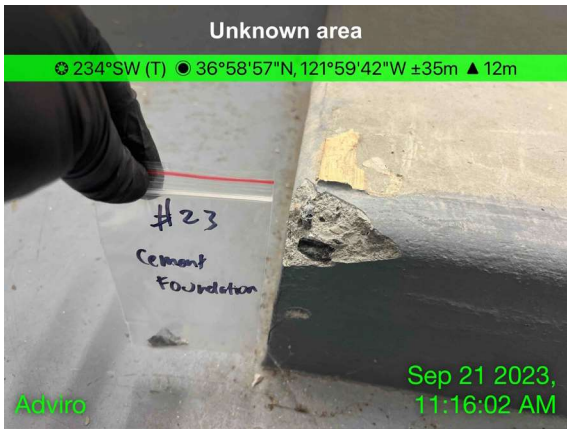

2202 Soquel Ave Santa Cruz CA
143°SE (T) 36°58'57"N, 121°59'42"W ±3m 13m
#18
Acoustical ceiling tiles
Adviro
Sep 21 2023, 11:26:18 AM


2202 Soquel Ave Santa Cruz CA
23°NE (T) 36°58'57"N, 121°59'42"W ±11m 13m
#19
Acoustical ceiling tiles
Adviro
Sep 21 2023, 11:27:48 AM


Unknown area
127°SE (T) 36°58'57"N, 121°59'42"W ±4m 14m
#20
Gypsum board Mastic
Adviro
Sep 21 2023, 11:10:56 AM

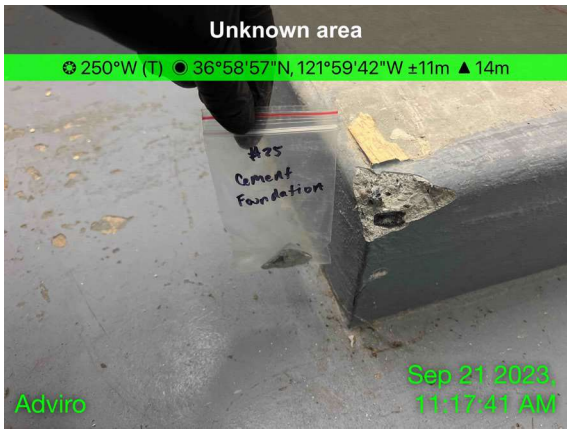

Unknown area
155°SE (T) 36°58'57"N, 121°59'42"W ±5m 14m
#21
Gypsum Board Mastic
Adviro
Sep 21 2023, 11:11:37 AM

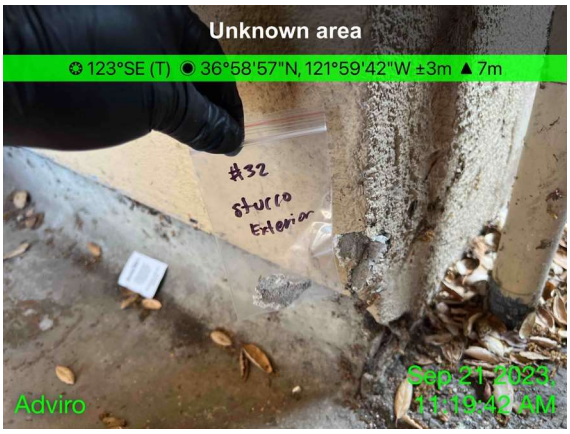

Unknown area
152°SE (T) 36°58'57"N, 121°59'42"W ±5m 14m
#22
Gypsum Board Mastic
Adviro
Sep 21 2023, 11:12:10 AM


Unknown area
234°SW (T) 36°58'57"N, 121°59'42"W ±35m 12m
#23
Cement Foundation
Adviro
Sep 21 2023, 11:16:02 AM

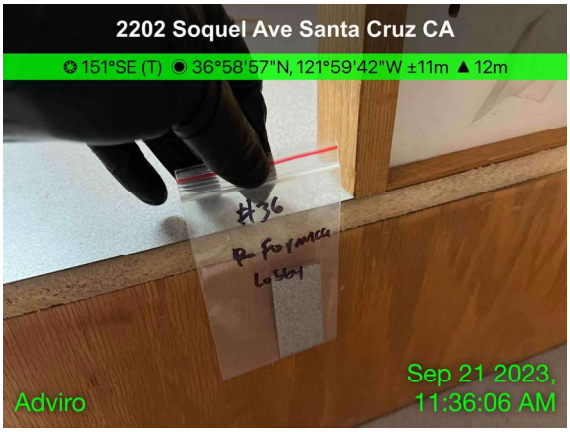

Unknown area
298°NW (T) 36°58'57"N, 121°59'42"W ±21m 14m
#24
Cement Foundation
Adviro
Sep 21 2023, 11:17:02 AM

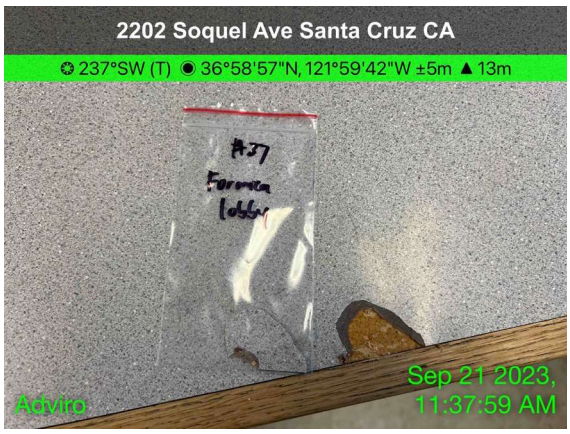
Pictures





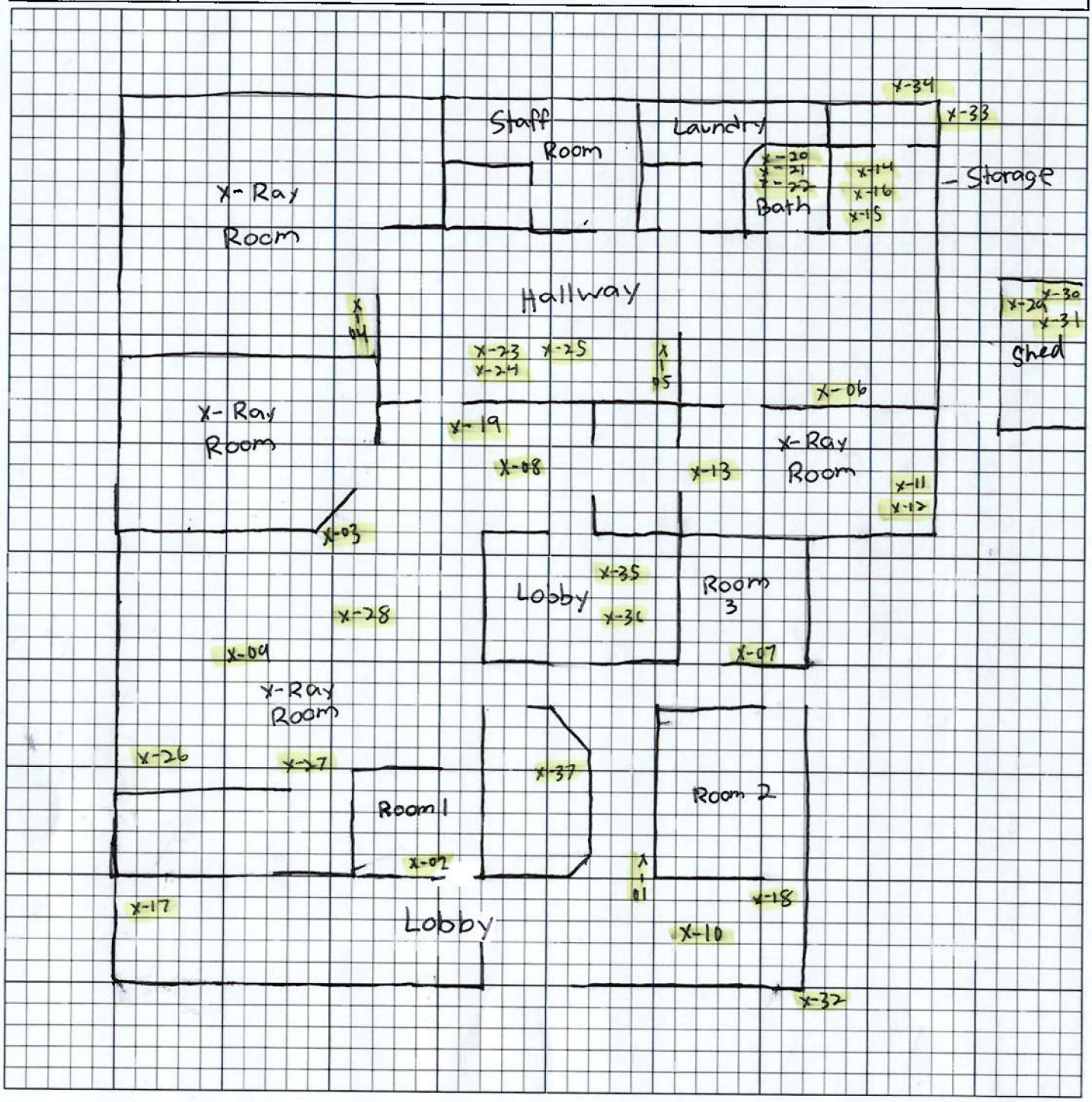
Pictures





Site Map: Asbestos Survey

Project #:	**2309-67L-CSC**
Address:	**2202 Soquel Ave., Santa Cruz, CA 95062**
Date:	**September 21, 2023**
Project Manager:	**Frank V.**



Legend:

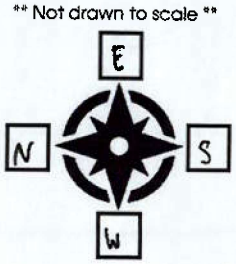
X – Bulk

FN – Furnace

WH – Water Heater

T – Transite Pipe

** Not drawn to scale **



Adviro

Certifications: Frank Valerga

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

Frank A Valerga
Name

Certification No. 14-5279

Expires on 08/13/24

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

California Department of PublicHealth

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:	CERTIFICATE TYPE:	NUMBER:	EXPIRATION DATE:
 Frank Valerga	Lead Inspector/Assessor	LRC-00004234	5/17/2024

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

National Radon Proficiency Program

NRPP

Frank A Valerga
Radon Measurement Professional
ID Number: #111130-RMP **Valid 2022-03-03 - 2024-03-31**

To confirm validity of this certification call 828-348-0185. Verification of adherence to state and local regulations is advised. See reverse for specific certification designations.

Frank A Valerga **# 111130-RMP**

This individual is certified for the use of passive measurement devices to be analyzed by NRPP certified Analytical Laboratories and also certified to provide Analytical Services using the following device(s):

AC-4040 RTCA 3"
AC-8201 Air Chek Pro Chek
AC-0210 RTCA 4"

The radon office for the state in which this person resides may be contacted for information on radon and local requirements. For additional information contact NRPP at 828-348-0185, or visit the NRPP web-site at nrpp.info
State Radon Program Contact Number: (916) 440-7942

NRPP

Frank A Valerga

Has satisfactorily fulfilled the requirements set forth by the National Radon Proficiency Program and is therefore certified as a:

Radon Measurement Professional
with Standard Services

NRPP ID 111130-RMP
Issued On: 2022-03-03 Expires: 2024-03-31

Valid for specific activities or measurement devices, which can be verified with NRPP. State and local agencies may have additional requirements.

In witness Whereof,
I have subscribed my name as a Representative of NRPP
Christina Johnson
Christina Johnson
NRPP Credentialing Manager

National Registry of Environmental Professionals

For
Environmental Certifications

This is to Certify that

Frank Anthony Valerga

having sucessfully demonstrated to the Academic Board of this organisation the required level of knowledge and ability, is here by awarded the distinction of

Registered Environmental Property Assessor

together with all rights, benefits and privileges attached thereto and that the name and title of the aforementioned registrant is today placed upon the register of the organisation.

Given under our hands on this 13th day of March, 2013.

Executive Director

838300
Registrant Number

This Certificate is the property of the National Registry of Environmental Professionals and must, upon demand, be returned.

NREP

National Registry of Environmental Professionals ®

P.O. Box 2099, Glenview, IL 60025-6099 (847) 724-6631 FAX (847) 724-4223
WEBSITE: www.nrep.org EMAIL: customerservice@nrep.org

LETTER OF GOOD STANDING

Date: 06/27/2023

To Whom It May Concern:

We are pleased to inform you that **Mr. Frank Valerga** has registered with us for **REPA - Registered Environmental Property Assessor** certification in the academic **2023** year and is in good standing.

Certification #: 838300
Expiration Date: 06/26/26

For any more questions, please feel free to email us at customerservice@nrep.org.

Sincerely,

National Registry of Environmental Professionals
Christopher Young
Executive Director

State of California
California Environmental Protection Agency
Department of Toxic Substances Control

Frank Valerga

has fulfilled the requirements for registration as a
Registered Environmental Assessor I (REA I)

Date Registered: January 19, 2012
Registration Number: 20264

Deborah O. Raphael, Director
Department of Toxic Substances Control

Adviro

Certifications: Michael Sanchez

California Department of PublicHealth

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:	CERTIFICATE TYPE:	NUMBER:	EXPIRATION DATE:
 Michael Sanchez	Lead Sampling Technician	LRC-00010315	8/31/2024

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

Asbestos 40 Hr. Contractor / Supervisor Course

Michael Sanchez

CERT #: ASI0912220004N31384
Training Date: 09/12/2022
Exam Date: 09/16/2022
Expiration: 09/16/2023
DOSH #: CA-015-03

Michael W. Horner, Training Director

Successfully completed 40 hours of the education requirements for Asbestos accreditation under TSCA Title II

NATEC INTERNATIONAL INCORPORATED
1100 Technology Circle, Suite A, Anaheim, CA 92805 | 8390 Capwell Drive, Oakland, CA 94621
800-969-3228 | www.NATECIntl.com

M & C Environmental Training

Asbestos Inspector
Initial Training Course

Michael Sanchez

Has successfully completed the Asbestos Inspector Initial course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., P.O. Box 6419, Concord, California. Tel. # (510) 499 - 5646

Course Approval Number: CA-003-05

Location:	Concord, California	Examination: January 20, 2023
Dates:	January 18-20, 2023	Expiration: January 20, 2024

Director of Training: John McGinnis

Certificate Number 52069 I

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 06/21/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER

Chase Tedsen (0M93504)
4835 Soquel Dr
Soquel CA 95073-2428

CONTACT NAME: Chase Tedsen
PHONE (A/C, NO, EXT): 831-479-7200
FAX (A/C, NO): 831-621-1120
E-MAIL ADDRESS: Chase@TedsenAgency.com

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	Truck Insurance Exchange	21709
INSURER B:	Farmers Insurance Exchange	21652
INSURER C:	Mid Century Insurance Company	21687
INSURER D:	Beazley	37540
INSURER E:	Colony Specialty	39993
INSURER F:	Sequoia Insurance Company	22985

INSURED

ADVANCED ENVIRONMENTAL, LLC
1038 LEIGH AVE
STE 100A
SAN JOSE CA 95126

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAME ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDTL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
D	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [ ] OCCUR [X] *Contractors Pollution Liability GEN'L AGGREGATE LIMIT APPLIES PER: [X] POLICY [ ] PROJECT [ ] LOC [ ] OTHER:	Y	Y	ENC 0004679-03	06/17/23	06/17/24	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea Occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG *Contractors Pollution L	$ 1,000,000 $ 100,000 $ 25,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $ 5,000,000
A	AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] OWNED AUTOS ONLY [X] SCHEDULED AUTOS [X] HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY	Y	Y	606800363	07/11/2022	07/11/2024	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
	[ ] UMBRELLA LIAB [ ] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $						EACH OCCURRENCE AGGREGATE	$ $
F	WORKERS COMPENSATION AND EMPLOYERS ' LIABILITY ANY PROPRIETOR/PARTNER/ EXECUTIVE OFFICER/MEMBER EXCLUDED? **(Mandatory in NH)** Y/N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		QWC1183735	12/27/22	12/27/23	[X] PER STATUTE [ ] OTHER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Chase Tedsen

Adviro
1038 Leigh Ave. Suite 100A
San Jose, CA 95126
Tel (408) 512-2912
info@GoAdviro.com

LBP present:
YES / NO

September 26, 2023

Attn: County of Santa Cruz

Site: 2202 Soquel Ave., Santa Cruz, CA 95062

Service:
1) Lead Based Paint XRF Survey – Renovation/Demolition
   - RRP – EPA
   - Lead in Construction – OSHA
2) Lead Screening
   - Lead Bulk

Location: Whole Site

Date: September 21st, 2023

#: 2309-67L-CSC

Site:

VISIT OUR WEBSITE **GoAdviro.com**

Lead XRF Testing

"Federal law requires that disturb painted surfaces in homes, childcare facilities and schools, built before 1978 to be certified and follow specific work practices to prevent lead contamination." – United States Environmental Protection Agency (EPA)

This law is known as the Renovate, Repair and Paint (RRP) Rule and applies to all renovation/demolition work of pre 1978 homes, childcare facilities or schools disturbing six square feet or more of painted surfaces. The objective of "Lead-Safe" work practices and procedures are to protect against lead contamination in the form of paint chips and dust that could lead to subsequent poisoning and exposure concerns. All painted surfaces at these locations must be presumed Lead-Based Paint unless tested & proven otherwise.

Lead-Based Paint is defined as paint or other surface coatings that, by definition, contain lead in excess of 1.0 milligrams per square centimeter (mg/cm²) or 5,000 parts per million (ppm).

Sampling Method – EPA Approved

Model:	Heuresis PB200i Lead Paint Analyzer
Serial Number:	2613
Date Performed:	September 21st, 2023
Start Time:	9:00 a.m.
Initial # Calibration Avg.: (mg/cm²)	147 – 0.9 | 148 – 0.9 | 149 – 1.0 | ~0.93
Sample Reading #'s:	150 – 321
Final Calibration Avg.: (mg/cm²)	322 – 1.0 | 323 – 1.0 | 324 – 1.0 | ~1.0

All results are digitally logged and encrypted by ADVIRO using EPA approved Heuresis PB200i Lead Paint Analyzer XRF technology and software. Unique XRF analyzer information and the actual XRF sample numbers recorded are provided for future research of this report, individual sample results are available upon request. For the purpose of this report only samples indicating Lead Based Pant are identified.

Lead Results

Only sample results indicating Lead-Based Paint (LBP) are highlighted. Sample results equal to or greater than 1.0 mg/cm² = LBP

Interior

LBP	Sample #'s	Reading (mg/cm²)	Location	Substrate	Color Paint (Top Layer)
NO	197 – 211	0.0 – 0.1	Walls – Lobby	Drywall	White
NO	212 – 215	0.0	Walls – Room 1	Drywall	White
NO	216 – 219	0.0 – 0.1	Walls – Room 2	Drywall	White
NO	220 – 221	0.0 – 0.1	Window Frame – Room 2	Wood	White
NO	222 – 225	0.0 – 0.1	Walls – Room 3	Drywall	White
YES	226 – 258	0.0 – 10.1	Walls – X-Ray Room	Drywall	White
NO	259 – 266	0.1 – 0.2	Walls – Hallway	Drywall	White
NO	267 – 275	0.0 – 0.1	Walls – Staff Room	Drywall	White
NO	276 – 283	0.1	Walls – Laundry	Drywall	White
NO	284 – 288	0.1	Walls – Bathroom	Drywall	White
NO	289 – 296	0.0 – 0.1	Walls – Storage	Drywall	White
NO	297 – 318	0.1	Doors/Frames	Wood/Metal	White

Exterior

LBP	Sample #'s	Reading (mg/cm²)	Location	Substrate	Color Paint (Top Layer)
NO	150 – 157	0.0 – 0.1	Walls	Stucco/Wood	Beige
NO	158 – 167	0.1 – 0.5	Gutters/Piping	Metal	Beige
NO	168 – 172	0.0	Doors	Wood	Beige/Blue
NO	173 – 178	0.0 – 0.1	Door Frames	Wood	Beige/Blue
NO	179 – 186	0.0 – 0.5	Window Frames	Wood	Blue
NO	187 – 196	0.0 – 0.4	Fascia/Sofit	Wood	Beige
NO	319 – 321	0.0	Walls – Shed	Wood	Red

172 – Total Samples – *XRF Analyzed*

NOTE: Per EPA, ceramic tile is not subject to RRP Rule.

Please see attached pictures and diagram to confirm color and location of Lead-Based Paint. All other colors of paint or locations were not identified as LBP.

Lead Paint Chip – OSHA

Painted/coated surfaces were tested in the field using an X-Ray fluorescence (XRF) spectrum analyzer and/or sampled (paint chips) and submitted to a certified laboratory for analysis by atomic absorption spectroscopy (AAS). Lead paint samples fell into 1 of 3 types – as follows:

Lead Types	Definition	Lead Content Standard
LBP	Lead-based paint (or material)	By Paint Chip: ≥0.5 weight % or ≥5,000 mg/kg
LCM	Lead containing material (or paint)	By Paint Chip: <0.5 weight % or <5,000 mg/kg
ND	No Lead Detected	By Paint Chip: ≤0.006 weight % or ≤60 mg/kg

LEAD PAINT CHIP RESULTS

Sample #	Location	Lead Concentration (mg/kg)	Lead Levels
Pb-01	Exterior Wall – Stucco	36.7	**ND**
Pb-02	Exterior Window – Frame	652	**LCM**
Pb-03	Interior Wall – Drywall	35.3	**ND**
Pb-04	Interior Window – Frame	<32.5	**ND**

Findings

- ✓ Paint chip sample **Pb-02** taken at **Exterior Window – Frame** indicates to be a lead containing material. Workers disturbing this material must have lead in construction training per OSHA requirements.

Lead – EPA Guideline References

- Renovate Repair and Painting Rule: Childproof your home improvements
  https://www.epa.gov/sites/production/files/2014-09/documents/epa_con_sell_9.5.14.pdf

OSHA – Lead in Construction

- Occupational Safety and Health Administration: Lead in Construction
  https://www.osha.gov/Publications/osha3142.pdf

Terms of Service

- ADVIRO has performed Lead Screening service and provided this report as valid evidence of Lead or Lead-based Paint in accordance with EPA guidelines.
- Further assurance and reduced liability are also provided due to this third-party, licensed, certified and fully insured reporting by ADVIRO.
- No guarantee is expressed or implied that all lead conditions or Lead-Based Paint has been identified in the home or at the subject property.
- This report makes no claim to be in accordance with any other lead inspection, assessment or testing for The U.S. Department of Housing and Urban Development (HUD), California Department of Public Health (CDPH) or Occupational Safety and Health Administration (OSHA).
- Further information of circumstances and additional sampling may be needed. Please call or email our office if there are questions or concerns.

Limitations

The inspection or testing performed maybe inherently limited in scope and nature. No guarantee is expressed or implied that all asbestos has been identified in the building or at the subject property. Inaccessible areas of the building underneath floors, behind walls, above ceilings were not inspected or subject to testing. If you have any questions, please contact ADVIRO.

Signed off by,

Frank Valerga, Certified Environmental Consultant
Advanced Environmental, LLC dba: **ADVIRO**

Certified Asbestos Consultant #14-5279
State of California Division of Occupation Safety and Health

Lead Inspector/Assessor #21965
State of California Department of Public Health

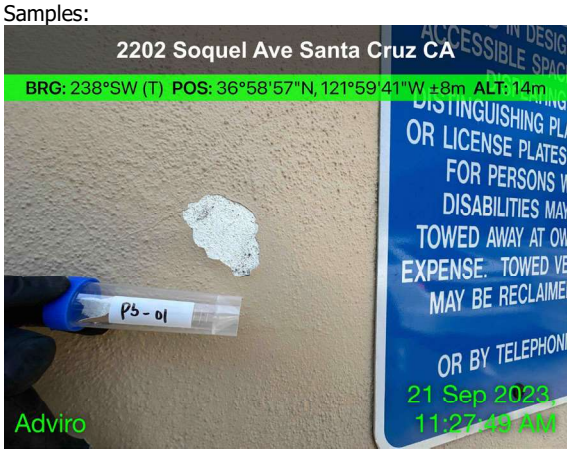
The following supporting documents are attached to this report:

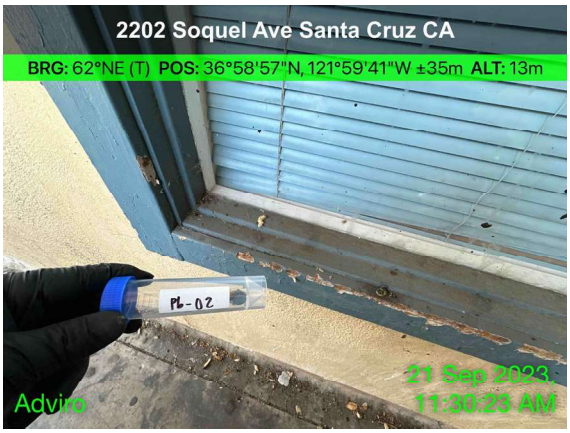
- Photographs of Site and Sample Locations
- Laboratory Analytical Reports
- Floorplan Showing Sample Locations
- CDPH Lead Form-8552
- Lead in Construction – OSHA
- Certifications of Inspector-Assessor/Sampling Technician Performing This Survey
- ADVIRO Insurance Information

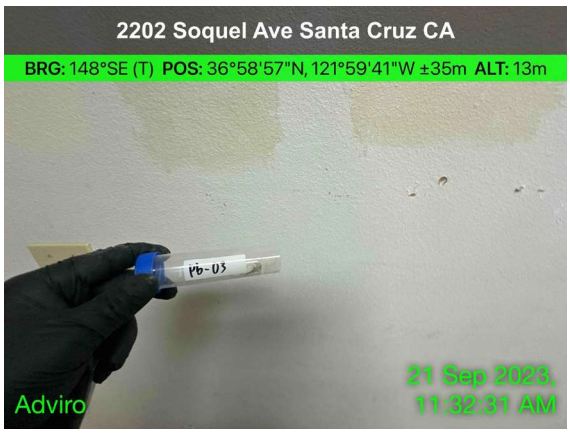
Pictures

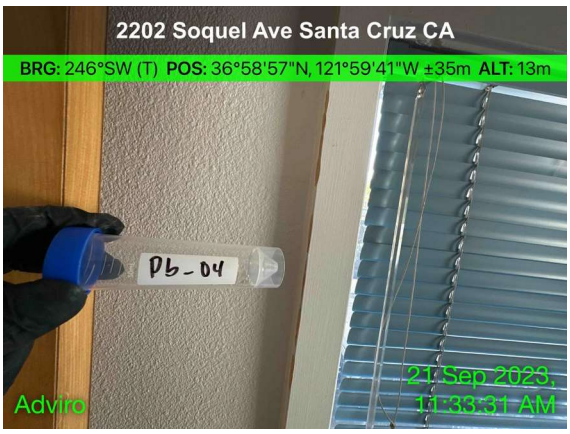
Lead Based Paint:

Samples:









Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: Adviro (4717)
Address: 1038 Leigh Ave
Unit 100A
San Jose, CA 95126

Attn:

Project: County Of Santa Cruz
Location: 2202 Soquel Ave Santa Cruz
Number: 2307-67L

Order #: 533373

Matrix Paint
Received 09/22/23
Analyzed 09/22/23
Reported 09/22/23

PO Number: CA 95062

Sample ID / Parameter	Cust. Sample ID	Location / Method	Sample Date	Weight / Total µg	% / Wt.	Conc.	RL*
533373-001	Pb-01	Exterior Wall Stucco	09/21/23	319 mg			
Lead		EPA 7000B		11.7 µg	0.00367 %	36.7 mg/kg	31.3 mg/kg
533373-002	Pb-02	Exterior Window Frame	09/21/23	337 mg			
Lead		EPA 7000B		220 µg	0.0652 %	652 mg/kg	29.7 mg/kg
533373-003	Pb-03	Interior Wall Drywall	09/21/23	331 mg			
Lead		EPA 7000B		11.7 µg	0.00353 %	35.3 mg/kg	30.2 mg/kg
533373-004	Pb-04	Interior Window Frame	09/21/23	308 mg			
Lead		EPA 7000B		<10.0 µg	<0.00325 %	<32.5 mg/kg	32.5 mg/kg

Analyst: DM
533373-09/22/23 05:00 PM

Kelly Muncy

Reviewed By: **Kelly Muncy**
Manager

Federal Lead Paint Statute

Location	Level	Unit
Lead in paint by wt.	0.50	%
Lead in paint PPM	5000	mg/kg

Minimum reporting limit: 10.0 µg. All internal QC parameters were met. Unusual sample conditions, if any, are described. Do not reproduce this report except in full. Values are reported to three significant figures. PPM = mg/kg | PPB = µg/kg. The test results apply to the sample as received. AIHA LAP, LLC accredited for Lead (Lab ID 100527).

SCHNEIDER LABORATORIES GLOBAL, INC.

2512 West Cary Street, Richmond, Virginia 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475
www.slabinc.com e-mail: info@slabinc.com

X 4

533373

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ielamin 9/22/2023 9:34:39 AM

UPS 1Z2E2899847028137

Submitting Co.	ADVIRO	Lab WO#		Phone	408-512-2912
1038 Leigh Ave. #100A		Acct #	4717	Fax / Email	reports@goadviro.com
San Jose, CA 95126		**State of Collection	California	**Cert. Required	☒ Yes ☐ No

Project Name:	County of Santa Cruz
Project Location:	2202 Soquel Ave. Santa Cruz, CA 95062
Project Number:	2307-67L
PO Number:	

Special Instructions [include requests for special reporting or data packages]

Turn Around Time

- ☐ 2 hours*
- ■ Same day*
- ☐ 1 business day*
- ☐ 2 business day*
- ☐ 3 business days*
- ☐ 5 business days*
- ☐ Full TCLP (10d)
- ☐ Weekend*

* not available for all tests

Schedule rush organics, multi-metals & weekend tests in advance.

Matrix / Sample Type (Select ONE)

All samples on form should be of SAME matrix type. Use additional forms as needed.

- ☐ Air
- ☐ Aqueous
- ■ Bulk
- ☐ Hi-Vol Filter (PM10)
- ☐ Hi-Vol Filter (TSP)
- ☐ Oil
- ☐ Paint
- ☐ Sludge
- ☐ Soil
- ☐ Solid
- ☐ Waste
- ☐ Wastewater
- ☐ Water,Drinking
- ☐ Compliance
- ☐ Wipe
- ☐ Wipe, Composite
- ☐ _____
- ☐ _____

Tests / Analytes (Select ALL that Apply)

Asbestos Air / Fiber Counts

- ☐ PCM (NIOSH 7400)
- ☐ TEM (AHERA)
- ☐ TEM (EPA Level II)
- ☐ _____

Miscellaneous Tests

- ☐ Total Dust (NIOSH 0500)
- ☐ Resp. Dust (NIOSH 0600)
- ☐ Silica - FTIR (NIOSH 7602)
- ☐ Silica - XRD (NIOSH 7500)
- ☐ Mold Analysis

Asbestos Bulk / Asb ID

- ☐ PLM (EPA 600/R-93/116)
- ☐ PLM (EPA Point Count)
- ☐ PLM (Qualitative only)
- ☐ NYELAP 198.1/.4/.6
- ☐ CAELAP (EPA Interim)
- ☐ TEM (Chatfield)
- ☐ _____

FOR ASBESTOS AIR:

TYPE OF RESPIRATOR USED: _____

Metals-Total Conc.

- ■ Lead
- ☐ RCRA Metals
- ☐ _____
- ☐ _____

Metals-Extract

- ☐ TCLP / Lead
- ☐ TCLP / RCRA Metals
- ☐ TCLP / Full (w/ organics)

Others

- ☐ _____

Sample #	Date Sampled**	Time Sampled**	Sample Identification (Employee, SSN, Bldg, Material, Type[1])	Wiped Area (ft²)	pH / Temp *	Time[2] Start	Time[2] Stop	Flow Rate[3] Start	Flow Rate[3] Stop	Total[4] Air
Pb - 01	9/21/23	11:27am	Exterior wall - Stucco - Beige							
Pb - 02		11:30am	Exterior window Frame - wood - Blue							
Pb - 03		11:32am	Interior wall - Drywall - white							
Pb - 04		11:33am	Interior window Frame - wood - Beige							

[1]Type: A=area B=blank P=personal E=excursion [2]Beginning/End of Sample Period [3]Pump Calibration in Liters/Minute [4]Volume in Liters [time in min * flow in L/min]

Sampled by

NAME Michael Sanchez

SIGNATURE _____

DATE/TIME 9/21/23 @ 1:48pm

Relinquished to lab by

NAME _____

SIGNATURE _____

DATE/TIME _____

☐ Receive a physical copy of report.

Sample Disposal
If samples over req. weight (Refer to Fee Schedule)

- ☐ Return to Sender (Shipping fees)
- ☐ Disposal by lab ($50 fee)

Shipping Methods

☐ FX ☐ UPS ☐ USM ☐ HD ☐ DB

WB: _____

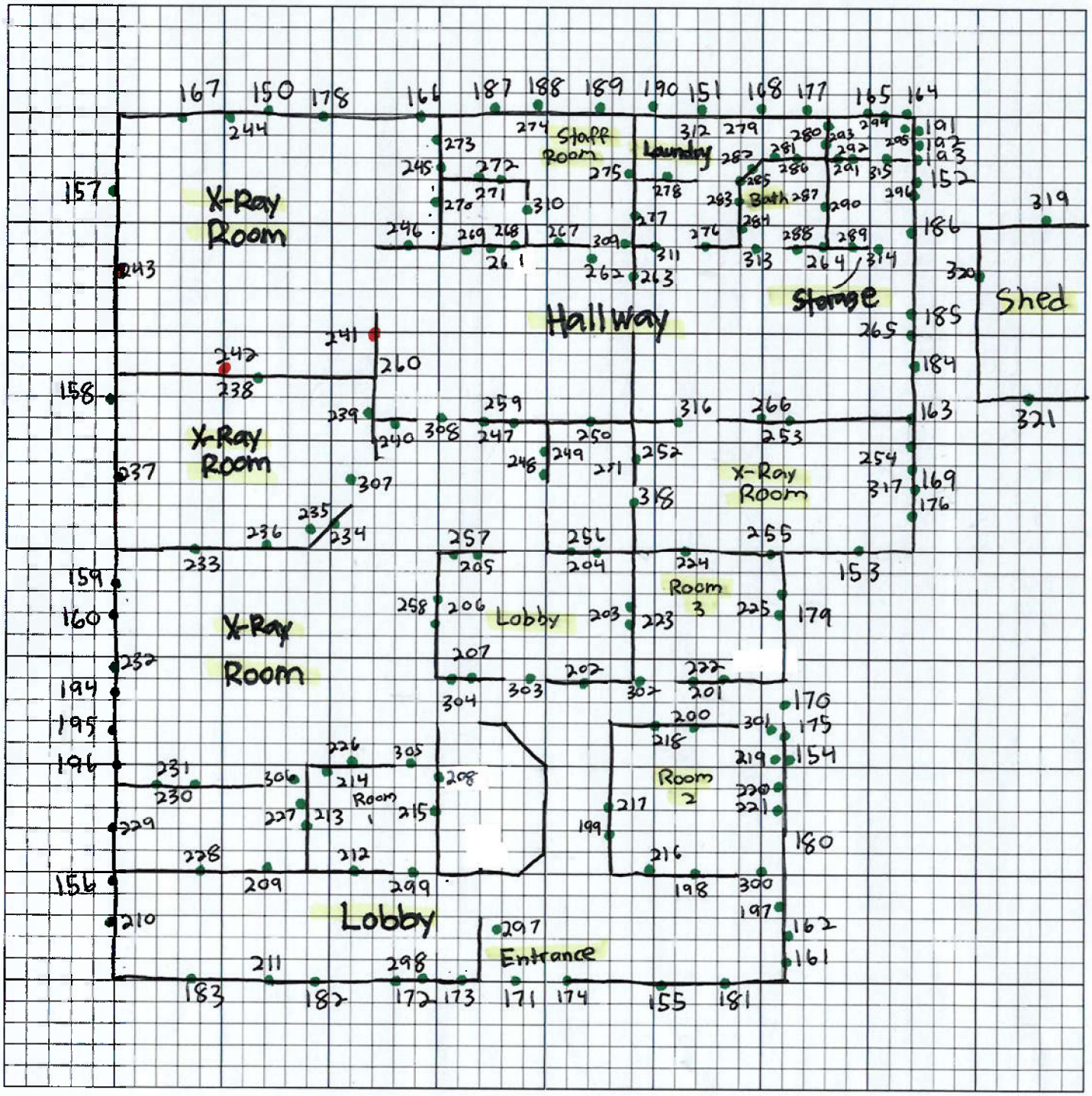
☐ Sample return requested ☐ Ambient temp ☐ Ice Cl ☐R ☐S ☐X

* Temperature taken with IR Gun A. **Required.

Chain-of-Custody documentation continued internally within lab. Terms and conditions page 2.

Site Map: Lead Survey

Project #:	**2309-67L-CSC**
Address:	**2202 Soquel Ave., Santa Cruz, CA 95062**
Date:	**September 21, 2023**
Project Manager:	**Frank V.**



Legend:

B – Bulk Sample

– Lead Based Paint Detected

– No Lead Based Paint Detected

** Not drawn to scale **

E N S W

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation September 21st, 2023

Section 2 — Type of Lead Hazard Evaluation (Check one box only)

☑ Lead Inspection ☐ Risk assessment ☐ Clearance Inspection ☐ Other (specify) _____

Section 3 — Structure Where Lead Hazard Evaluation Was Conducted

Address [number, street, apartment (if applicable)]	City	County	Zip Code
2202 Soquel Ave.	Santa Cruz	Santa Cruz County	95062

Construction date (year) of structure	Type of structure		Children living in structure?	
pre 1978	☐ Multi-unit building	☐ School or daycare	☐ Yes	☐ No
	☑ Single family dwelling	☐ Other_____	☑ Don't Know	

Section 4 — Owner of Structure (if business/agency, list contact person)

Name	Telephone number
Kristine Conley	831-247-7471

Address [number, street, apartment (if applicable)]	City	State	Zip Code
1110 Emeline Ave.	Santa Cruz	CA	95060

Section 5 — Results of Lead Hazard Evaluation (check all that apply)

☐ No lead-based paint detected ☑ Intact lead-based paint detected ☐ Deteriorated lead-based paint detected

☐ No lead hazards detected ☐ Lead-contaminated dust found ☐ Lead-contaminated soil found ☑ Other Lead Containing Material

Section 6 — Individual Conducting Lead Hazard Evaluation

Name	Telephone number
Frank A. Valerga	408-512-2912

Address [number, street, apartment (if applicable)]	City	State	Zip Code
1038 Leigh Ave. #100A	San Jose	CA	95126

CDPH certification number	Signature	Date
LRC-00004234		September 25th, 2023

Name and CDPH certification number of any other individuals conducting sampling or testing (if applicable)

Daniel Alvarado LRC-00009787

Section 7 — Attachments

A. A foundation diagram or sketch of the structure indicating the specifc locations of each lead hazard or presence of lead-based paint;
B. Each testing method, device, and sampling procedure used;
C. All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector

Second copy and attachments retained by owner

Third copy only (no attachments) mailed or faxed to:

California Department of Public Health
Childhood Lead Poisoning Prevention Branch Reports
850 Marina Bay Parkway, Building P, Third Floor
Richmond, CA 94804-6403
Fax: (510) 620-5656

Safety & Health Fact Sheets

Revised: June 2018

California Department of Industrial Relations

State of California CAL OSHA Department of Industrial Relations

Division of Occupational Safety and Health
Cal/OSHA Publications Unit

Lead in Construction

T8 CCR Section 1532.1 covers the requirements on lead safety in construction, and makes employers responsible for complying with those requirements. Employers can reduce the hazard from lead in construction by meeting these requirements and following industry best practices.

Why employers need to be concerned?

- Lead is highly toxic and it can cause damage to brain, kidney, reproductive system, etc.
- Lead poisoning occurs through ingestion or inhalation even at a very low level of exposure.
- The risk to families, especially children, from take-home lead, carried on employees' bodies, shoes or clothing is great.

Benefits of controlling lead exposure

Consider the alternatives to failing to protect your employees from lead exposure: fines up to $70,000 per violation, medical removal payments to workers with high blood lead levels, and costly job shutdowns. Some companies find that following the lead exposure regulations increases their business since clients want jobs that are safe for both workers and the environment.

What do I need to do to protect my employees from lead poisoning?

Assess lead exposure

Lead can be present in a wide range of materials including paints and other coatings, lead mortars, and base metals to be welded on or treated with abrasive blasting.

- Look at the age of the building or structure, the presence of coatings and other materials that may contain lead.
- Ask the property owner for relevant information.
- Also check the MSDS' of the materials in use to see if they contain lead.

Send samples of materials to a laboratory for lead analysis. Laboratories accredited by the U.S. EPA National Lead Laboratory Accreditation Program are listed at www.epa.gov/lead/pubs/nllap.htm. Testing methods for lead must meet requirements of Title 8 Section 1532.1(d)(9).

Regularly assess the exposure level

Employers must assess the amounts of lead breathed by workers on a regular basis for each task as per Section 1532.1(d). This is usually done by employee breathing-zone air sampling. Air sampling results are used to determine the protective measures needed as well as the type of respirator that must be worn for protection.

Have a written compliance program

Prior to starting the job, you shall establish and implement a written compliance program as per 1532.1(e). In addition, you need to provide a written Pre-Job Notification to the nearest Cal/OSHA office within 24 hours of start of the work. The notification can also be made online at http://www.dir.ca.gov/dosh/Permits.html. See Section 1532.1(p) for details on required information and types of jobs covered.

Reduce and maintain low lead level

On all construction jobs where lead is present, the employer should reduce and maintain lead levels as low as possible by:

- **Housekeeping**. Lead dust on surfaces, especially in eating areas, must be controlled by HEPA vacuuming, wet clean-up, or other effective methods.
- **Hand and face washing**. Workers must have washing facilities with soap and clean water.
- **Training**. Workers must receive training on lead hazards and how to protect themselves including:
  - Requirements of Section 1532.1
  - Nature of the operations – scraping, demolition etc.
  - Respiratory protection
  - Medical surveillance and removal
  - Engineering controls–vacuum with HEPA filter, etc.
  - Good work practices – eat in area free of lead, etc.
  - Let employees know of their rights to their records
  - Notify employees in writing of the blood-lead test results within 5 days of receiving the results.
- **Using proper respirators**. For certain highly hazardous tasks, called trigger tasks, special protective measures must be taken—including specified respirators—until the employer determines that worker airborne exposures to lead are below levels specified in Section 1532.1:

Continued in next page ……..

Contacting Cal/OSHA Consultation Service

Consultation Programs: http://www.dir.ca.gov/dosh/consultation.html
Toll-free Number: **1-800-963-9424**
Publications: http://www.dir.ca.gov/dosh/puborder.asp
eTools: http://www.dir.ca.gov/dosh/etools/etools.htm
Onsite Assistance Program Area Offices

Central Valley: 559-445-6800
No. California: 916-263-0704
SF/Bay Area: 510-622-2891
Santa Fe Springs/LA/Orange: 714-562-5525
San Diego/Imperial: 619-767-2060
San Bernardino: 909-383-4567
San Fernando Valley: 818-901-5754

- **Level 1 trigger tasks**
  Any of the following with lead-containing coatings or materials: spray painting, manual demolition, manual scraping or sanding, use of heat gun, power tool cleaning with dust collection system.
  Minimum required respirator: half-mask respirator with N-100, R-100 or P-100 filters.
- **Level 2 trigger tasks**
  Any of the following with lead-containing coatings or materials: using lead-containing mortar, lead burning, rivet busting, power tool cleaning without dust collection system, clean-up activities using dry expendable abrasives, abrasive blasting enclosure movement or removal.
  Minimum required respirator: air-supplied hood or helmet, or loose fitting hood or helmet powered air-purifying respirator with N-100, R-100 or P-100 filters.
- **Level 3 trigger tasks**
  Abrasive blasting, welding, cutting, or torch burning on structures where lead-containing coatings or materials are present.
  Minimum required respirator: full-face supplied-air respirator operated in positive pressure or continuous flow mode or full-face PAPR with N-100, R-100 or P-100 filters.

The Pre-Job Notification is required for all jobs involving trigger tasks.

- **Providing interim protective measures**

  Followings are the interim protective measures required for all trigger tasks until worker airborne exposures are shown to be below levels specified in Section 1532.1:

  - Respirators, protective equipment and clothing
  - Areas for clothes changing and hand washing
  - Blood test for lead and zinc protoporphyrin (ZPP)
  - Basic lead hazard, respirator, and safety training

- **Posting warning signs.** Section 1532.1(i)(6) requires regulated areas with warning signs for all trigger tasks and any other tasks that may reasonably cause hazardous lead exposure at or above the Permissible Exposure Limit (PEL).
- **Using special measures for exposures above PEL.** When air sampling shows employee exposures above the PEL from any operation, the following controls are required in addition to those for the trigger tasks:
  - Provide respirator protection as per 1532.1(f)
  - Provide protective work clothing as per 1532.1(g)
  - Provide changing and eating areas, and hand washing and showering facilities as per 1532.1(i)
  - Provide medical monitoring as per 1532.1(j)
  - Provide medical removal protection as per 1532.1(k)
  - Employee training as per 1532.1(l)
- **Maintaining certification**. On jobs at residential and public access buildings, workers exposed to lead above the PEL- and their supervisors - must receive state approved training and be certified by the California Dept. of Public Health Services (CDPH).

  Information on lead worker certification:
  Phone: **800-597-LEAD**
  Web: http://www.cdph.ca.gov/programs/CLPPB/

Where can I get help?

The Cal/OSHA Consultation Service helps employers at no cost. Employers can request an industrial hygienist to come to a construction job site, show how air sampling is done and assist in employee training. The Consultation Service is independent of Cal/OSHA's Enforcement Unit.

Frequently Asked Questions

Q. Before starting work on a job that involves disturbance of paint or other coatings, am I required to have a sample of the paint analyzed for lead content?

A. This is the best way to begin assessing the lead hazard at the jobsite. While not specifically required by the Cal/OSHA regulation, material sampling—combined with knowledge of the tasks being done—is the best indicator of the chance of high airborne lead levels, and can help guide the air sampling and exposure control efforts and the choice of required respirators.

Q. If I'm already doing air monitoring and protecting workers with respirators during tasks with high exposures, why do I also need to do blood lead and ZPP monitoring?

A. Blood lead and ZPP monitoring are tools that help assess workers' total exposure to lead—including through ingestion, unmonitored operations, and lead contamination in the vehicle and home. It is the most important benchmark for answering the question: "Am I protecting my workers from the hazards of lead on the job?"

Q. What should my respirator program include?

A. Your respirator program must include respirator selection, medical evaluation, fit testing, and all other required elements as per Section 5144.

Q. How do I get started with a lead medical monitoring program and where do I find a physician to do this?

A. The Department of Public Health Occupational Lead Poisoning Prevention Program listed below can help you get started with your lead compliance program.

Resources

T8 CCR1532.1 http://www.dir.ca.gov/title8/1532_1.html

CDPH, Occupational Lead Poisoning Prevention Program
Website: www.cdph.ca.gov/olppp CA Toll Free: 1(866) 627-1587; Out of State: (510) 620-5740

Painting and Decorating Contractors of America
Website: www.pdca.org Phone: 703-383-0800

SSPC: Society for Protective Coatings
Website: www.sspc.org Phone: 412-281-2331

US EPA: Lead in Paint, Dust, and Soil
Website: www.epa.gov/opptintr/lead Phone:1(800) 424-LEAD

OSHA: Lead in Construction
http://www.osha.gov/Publications/osha3142.pdf

http://www.osha.gov/OshDoc/data_Hurricane_Facts/lead_in_construction.pdf

http://www.osha.gov/OshDoc/data_Hurricane_Facts/lead_hazards_fs.pdf

Adviro

Certifications: Frank Valerga

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

Frank A Valerga
Name

Certification No. 14-5279

Expires on 08/13/24

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

California Department of PublicHealth

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:	CERTIFICATE TYPE:	NUMBER:	EXPIRATION DATE:
 Frank Valerga	Lead Inspector/Assessor	LRC-00004234	5/17/2024

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

National Radon Proficiency Program

NRPP

Frank A Valerga
Radon Measurement Professional
ID Number: #111130-RMP **Valid 2022-03-03 - 2024-03-31**

To confirm validity of this certification call 828-348-0185. Verification of adherence to state and local regulations is advised. See reverse for specific certification designations.

Frank A Valerga **# 111130-RMP**

This individual is certified for the use of passive measurement devices to be analyzed by NRPP certified Analytical Laboratories and also certified to provide Analytical Services using the following device(s):

AC-4040 RTCA 3"
AC-8201 Air Chek Pro Chek
AC-0210 RTCA 4"

The radon office for the state in which this person resides may be contacted for information on radon and local requirements. For additional information contact NRPP at 828-348-0185, or visit the NRPP web-site at nrpp.info
State Radon Program Contact Number: (916) 440-7942

NRPP

Frank A Valerga

Has satisfactorily fulfilled the requirements set forth by the National Radon Proficiency Program and is therefore certified as a:

Radon Measurement Professional
with Standard Services

NRPP ID 111130-RMP
Issued On: 2022-03-03 Expires: 2024-03-31

Valid for specific activities or measurement devices, which can be verified with NRPP. State and local agencies may have additional requirements.

In witness Whereof,
I have subscribed my name as a Representative of NRPP
Christina Johnson
Christina Johnson
NRPP Credentialing Manager

National Registry of Environmental Professionals

For
Environmental Certifications

This is to Certify that

Frank Anthony Valerga

having sucessfully demonstrated to the Academic Board of this organisation the required level of knowledge and ability, is here by awarded the distinction of

Registered Environmental Property Assessor

together with all rights, benefits and privileges attached thereto and that the name and title of the aforementioned registrant is today placed upon the register of the organisation.

Given under our hands on this 13th day of March, 2013.

Executive Director

838300
Registrant Number

This Certificate is the property of the National Registry of Environmental Professionals and must, upon demand, be returned.

NREP

National Registry of Environmental Professionals ®

P.O. Box 2099, Glenview, IL 60025-6099 (847) 724-6631 FAX (847) 724-4223
WEBSITE: www.nrep.org EMAIL: customerservice@nrep.org

LETTER OF GOOD STANDING

Date: 06/27/2023

To Whom It May Concern:

We are pleased to inform you that **Mr. Frank Valerga** has registered with us for **REPA - Registered Environmental Property Assessor** certification in the academic **2023** year and is in good standing.

Certification #: 838300
Expiration Date: 06/26/26

For any more questions, please feel free to email us at customerservice@nrep.org.

Sincerely,

National Registry of Environmental Professionals
Christopher Young
Executive Director

State of California
California Environmental Protection Agency
Department of Toxic Substances Control

Frank Valerga

has fulfilled the requirements for registration as a
Registered Environmental Assessor I (REA I)

Date Registered: January 19, 2012
Registration Number: 20264

Deborah O. Raphael, Director
Department of Toxic Substances Control

Adviro

Certifications: Daniel Alvarado

California Department of PublicHealth

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:	CERTIFICATE TYPE:	NUMBER:	EXPIRATION DATE:
 Daniel Alvarado	Lead Sampling Technician	LRC-00009787	3/4/2024

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

Asbestos Contractor/Supervisor Refresher Course

Daniel Alvarado

CERT #: ASR0712230001N35646
Training Date: 07/12/2023
Exam Date: 07/12/2023
Expiration: 07/12/2024
DOSH #: CA-015-04

Michael W. Horner, Training Director

Successfully completed 8 hours of the education requirements for Asbestos accreditation under TSCA Title II

NATEC INCORPORATED
4100 Technology Circle, Suite A, Anaheim, CA 92805 | 8390 Capwell Drive, Oakland, CA 9462
800-969-3228 | www.NATECIntl.com

National Radon Proficiency Program

NRPP NATIONAL RADON PROFICIENCY PROGRAM

Jose D Alvarado
Radon Measurement Professional
ID Number: #113284-RMP Valid 2022-09-20 - 2024-09-30

To confirm validity of this certification call 828-348-0185. Verification of adherence to state and local regulations is advised. See reverse for specific certification designations.

Jose D Alvarado #113284-RMP

This individual is certified for the use of passive measurement devices to be analyzed by NRPP certified Analytical Laboratories and also certified to provide Analytical Services using the following device(s):

AC-8201 Air Chek Pro Chek
AC-8200 Air Chek Foil Bag

The radon office for the state in which this person resides may be contacted for information on radon and local requirements. For additional information contact NRPP at 828-348-0185, or visit the NRPP web-site at nrpp.info
State Radon Program Contact Number: (916) 650-6884

Certificate Of Completion

Asbestos Building Inspector Initial Course

DOSH #:CA-015-05

Daniel Alvarado

ABII0718220003N31442

Alan Dages — Principal Instructor
Michael W. Horner — Training Director

7/18/2022	7/25/2022	7/25/2022	7/25/2023
Course Start Date	Course End Date	Exam Date	Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California

NATEC International, Inc.
National Association of Training and Environmental Consulting
1100 Technology Circle, Suite A, Anaheim, CA 92805 • www.natecintl.com • 800-969-3228

Important Industry Contacts

CAL OSHA: PHF (916) 574-2993 (916) 483-0572 Fax Notification Web: www.dir.ca.gov or calocha.com
CDPH/CLPPB: PHF (510) 620-5600 Web: www.cdph.ca.gov/programs/CLPPB
SCAQMD: PHF (909) 396-3719 Fax#(909) 396-3342
BAAQMD: PHF (415) 749-4762

NATEC International, Inc.
National Association of Training and Environmental Consulting
Asbestos • Lead • Mold • HAZWOPER
P.O. Box 25205 Anaheim, CA 92825-5205
(714) 678-2750, (800) 969-3228, Fax (714) 678-2757
www.natecintl.com

NATEC International, Inc.
National Association of Training and Environmental Consulting
This Card Acknowledges That
Daniel Alvarado
Holds Training Certification For
Asbestos Building Inspector Initial Course
Expiration: 7/25/2023
Training Dates: 7/18/2022
Certificate No: ABII0718220003N31442
Michael W. Horner
Training Director

NRPP NATIONAL RADON PROFICIENCY PROGRAM

Jose D Alvarado

Has satisfactorily fulfilled the requirements set forth by the National Radon Proficiency Program and is therefore certified as a:

Radon Measurement Professional
with Standard Services

NRPP ID 113284-RMP
Issued On: 2022-09-20 Expires: 2024-09-30

Valid for specific activities or measurement devices, which can be verified with NRPP. State and local agencies may have additional requirements.

NATIONAL RADON PROFICIENCY PROGRAM AARST

In witness Whereof,
I have subscribed my name as a
Representative of NRPP
Christina Johnson
Christina Johnson
NRPP Credentialing Manager

NRPP Radon Measurement Professional Course Online

Completion Certificate

awarded to

Daniel Alvarado

NRPP KSU-3000 - NRPP 16 CE hours

presented by

KANSAS STATE UNIVERSITY
Radon Courses

April 14, 2022
Instructor - Bruce Snead

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 06/21/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER

Chase Tedsen (0M93504)
4835 Soquel Dr
Soquel CA 95073-2428

CONTACT NAME: Chase Tedsen
PHONE (A/C, NO, EXT): 831-479-7200
FAX (A/C, NO): 831-621-1120
E-MAIL ADDRESS: Chase@TedsenAgency.com

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	Truck Insurance Exchange	21709
INSURER B:	Farmers Insurance Exchange	21652
INSURER C:	Mid Century Insurance Company	21687
INSURER D:	Beazley	37540
INSURER E:	Colony Specialty	39993
INSURER F:	Sequoia Insurance Company	22985

INSURED

ADVANCED ENVIRONMENTAL, LLC
1038 LEIGH AVE
STE 100A
SAN JOSE CA 95126

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAME ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDTL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
D	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [ ] OCCUR [X] *Contractors Pollution Liability GEN'L AGGREGATE LIMIT APPLIES PER: [X] POLICY [ ] PROJECT [ ] LOC [ ] OTHER:	Y	Y	ENC 0004679-03	06/17/23	06/17/24	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea Occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG *Contractors Pollution L	$ 1,000,000 $ 100,000 $ 25,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $ 5,000,000
A	AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] OWNED AUTOS ONLY [X] SCHEDULED AUTOS [X] HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY	Y	Y	606800363	07/11/2022	07/11/2024	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
	[ ] UMBRELLA LIAB [ ] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $						EACH OCCURRENCE AGGREGATE	$ $
F	WORKERS COMPENSATION AND EMPLOYERS ' LIABILITY ANY PROPRIETOR/PARTNER/ EXECUTIVE OFFICER/MEMBER EXCLUDED? **(Mandatory in NH)** Y/N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		QWC1183735	12/27/22	12/27/23	[X] PER STATUTE [ ] OTHER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Chase Tedsen