



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A California Corporation

March 23, 2022

AG-CRG Highland, LLC
2000 Avenue of the Stars, Suite 1020
Los Angeles, California 90067

Attention: Mr. Mike Tonkonogy
Manager

Project No.: **21G193-3**

Subject: **Results of Infiltration Testing**
Two Proposed Warehouses
NEC of East 3rd Street and Central Avenue
Highland, California

Reference: Geotechnical Investigation, Two Proposed Warehouses, NEC of East 3rd Street and Central Avenue, Highland, California, prepared for AG-CRG Highland, LLC by Southern California Geotechnical, Inc. (SCG), SCG Project No. 21G193-4, dated March 22, 2022.

Dear Mr. Tonkonogy:

In accordance with your request, we have conducted infiltration testing at the subject site. We are pleased to represent this report summarizing the results of the infiltration testing and our design recommendations.

Scope of Services

The scope of services performed for this project was in general accordance with our Proposal No. 21P295R, dated July 7, 2021, and Change Order No. 21G193-COR1, dated March 9, 2022. The scope of services included site reconnaissance, subsurface exploration, field testing, and engineering analysis to determine the infiltration rates of the on-site soils. The infiltration testing was performed in general accordance with ASTM Test Method D-3385-03, Standard Test Method for Infiltration Rate of Soils in Field Using Double Ring Infiltrometer.

Site and Project Description

The overall site is located at the northeast corner of East 3rd Street and Central Avenue in Highland, California. The site is separated by two (2) rectangular-shaped properties into two (2) portions, west and east. The west site is bounded to the north by West 5th Street, to the west by Central Avenue, to the south by East 3rd Street, and to the east by a restaurant business and a retail center. The east site is bounded to the north by West 5th Street, to the west by a restaurant business and a retail center, to the south by East 3rd Street, and to the east by a self-storage facility. The general locations of both sites are illustrated on the Site Location Map, enclosed as Plate 1 of this report.

West Site

The site consists of an irregular-shaped property, 6.92± acres in size. The site consists of numerous rectangular-shaped parcels which are developed for various uses, such as, truck and trailer parking facilities, small industrial/manufacturing buildings and equipment storage, and vacant lots. The existing buildings range from 1,000± to 3,000± ft² in size. The majority of the buildings are single-story structures of wood frame and stucco construction or steel frame and metal panel construction, and are presumed to be supported on conventional shallow foundations with concrete slab-on-grade floors. The buildings are generally surrounded by asphaltic concrete (AC) and crushed aggregate base (CAB) pavements, with isolated Portland cement concrete (PCC) pavements and exposed soil with sparse to moderate grass and weed growth. The existing pavements are generally in poor condition with noticeable cracking throughout. Some medium-to large-size trees are scattered throughout the site. Detailed topographic information for this site was not available at the time of this report. Based on elevations obtained from Google Earth, and visual observations made at the time of the subsurface investigation, the overall site topography slopes downward to the west at a gradient of less than 2± percent.

East Site

The site consists of an irregular-shaped property, 11.09± acres in size. The site consists of numerous rectangular-shaped parcels which are developed for various uses, such as, truck and trailer parking facilities, small industrial/manufacturing buildings and equipment storage, and single-family residence (SFR) properties. The existing buildings range from 1,000± to 3,000± ft² in size. The majority of the buildings are single-story structures of wood frame and stucco construction or steel frame and metal panel construction, and are presumed to be supported on conventional shallow foundations with concrete slab-on-grade floors. The buildings are generally surrounded by AC and CAB pavements, with isolated PCC pavements and exposed soil with sparse to moderate grass and weed growth. The existing pavements are generally in poor condition with noticeable cracking throughout. Some medium-to large-size trees are scattered throughout the site. Detailed topographic information for this site was not available at the time of this report. Based on elevations obtained from Google Earth, and visual observations made at the time of the subsurface investigation, the overall site topography slopes downward to the west at a gradient of less than 2± percent.

Proposed Development

The most current conceptual site plans for both the west and east sites, prepared RGA, have been provided to our office by the client. Based on these plans, the sites will be developed as follows:

West Site

The west site will be developed with a 147,066± ft² warehouse located in the west-central portion of the site. Dock-high doors will be constructed along a portion of the east building wall. The proposed building is expected to be surrounded by AC pavements in the parking and drive

areas, PCC pavements in the loading dock area, and concrete flatwork and landscaped planters throughout the site.

The west site will utilize on-site storm water disposal. Based on email correspondence with Thienes Engineering, Inc. (Thienes), the project civil engineer, two (2) infiltration systems identified as System "A" and System "B" will be constructed to the southwest and southeast of the proposed building, respectively. The proposed infiltration systems will consist of below-grade chambers. The bottoms of the infiltration systems are expected to be 10 to 12± feet below the existing site grades.

East Site

The east site will be developed with a 248,511± ft² warehouse located in the south-central region of the site. Dock-high doors will be constructed along a portion of the north building wall. The proposed building is expected to be surrounded by AC pavements in the parking and drive areas, PCC pavements in the loading dock area, and concrete flatwork and landscaped planters throughout the site.

The east site will also utilize on-site storm water disposal. Based on email correspondence with Thienes, three (3) infiltration systems identified as System "C," System "D" and System "E" will be constructed to the southwest, southeast and northwest of the proposed building, respectively. The proposed infiltration systems will consist of below-grade chambers. The bottoms of the infiltration systems are expected to be 10 to 13± feet below the existing site grades.

Concurrent Study

SCG concurrently conducted a geotechnical investigation at the subject site, which is referenced above. As part of this study, twenty-seven (27) borings (identified as Boring Nos. B-1 through B-27) were advanced to depths of 6½ to 35± feet below the existing site grades. It should be noted that Boring Nos. B-3, B-10 and B-11 were performed outside the currently proposed development.

AC pavements were encountered at the ground surface of Boring Nos. B-7, B-9, B-12, B-15, and B-16. The pavement sections at these locations consist of 1 to 4± inches of AC, underlain by 0 to 2± inches of aggregate base. A 3½±-inch-thick PCC section was encountered at the ground surface at Boring No. B-26. Artificial fill soils were encountered beneath the existing pavements or at the ground surface at most of the boring locations, with the exception of Boring Nos. B-1, B-3, B-4, B-8, B-10, and B-22, extending to depths of 1½ to 5½± feet below the existing site grades. The fill soils generally consist of medium dense to very dense sands and silty sands, with occasional gravelly sands. Occasional cobbles were encountered at the ground surface at Boring Nos. B-6, B-13 and B-19. Native alluvium was encountered at the ground surface at Boring Nos. B-1, B-3, B-4, B-8, B-10, and B-22, and beneath the fill soils at the remaining boring locations, extending to at least the maximum depth explored of 35± feet. The alluvium generally consists of medium dense to very dense sands and gravelly sands with varying silt content, and occasional medium dense to very dense silty sands. Boring Nos. B-3 and B-10 encountered loose sands at depths of 2½ to 4± feet and 0 to 3± feet, respectively. Boring No.

B-14 countered dense silty sands to sandy silts at a depth of 27 to 30± feet. Occasional cobbles were encountered during drilling at most of the boring locations at various depths, and at the ground surface at Boring No. B-22.

Groundwater

Free water was not encountered during the drilling of any of the borings. Based on the lack of any water within the borings, and the moisture contents of the recovered soil samples, the static groundwater table is considered to have existed at a depth in excess of 35± feet at the time of the subsurface exploration.

As part of our research, we reviewed available groundwater data in order to determine groundwater levels for the site. Water level data was obtained from the California Department of Water Resources Water Data Library website, <https://wdl.water.ca.gov/waterdatalibrary/>. The nearest monitoring well on record (identified as State Well Number: 01S03W09E002S) is located as close as 2,200± feet southeast of the project site. Water level readings within this monitoring well indicate a high groundwater level of 52± feet below the ground surface in October 1984.

Subsurface Exploration

Scope of Exploration

The subsurface exploration for the infiltration testing consisted of nineteen (19) backhoe-excavated trenches, extending to depths of 6 to 13± feet below the existing site grades. The trenches were logged during excavation by a member of our staff. The approximate locations of the infiltration trenches (identified as I-1 through I-19) are indicated on the Infiltration Test Location Plan, enclosed as Plate 2 of this report. It should be noted that Infiltration Test Nos. I-1, I-2, and I-3 were performed outside the currently proposed infiltration systems.

Geotechnical Conditions

AC pavements were encountered at the ground surface of Infiltration Test Nos. I-8 and I-9. The pavement sections at these locations consist of 2½± inches of AC, with no discernible layer of underlying aggregate base. Artificial fill soils were encountered beneath the existing pavements or at the ground surface at most of the infiltration trenches, with the exception of Infiltration Test Nos. I-13, I-14 and I-16, extending to depths of 1 to 4± feet below the existing site grades. The fill soils generally consist of very loose to medium dense silty sands, with varying gravel content. Infiltration Test No. I-6 encountered dense sands with some debris, consisting of electrical wiring and PCC fragments, extending to a depth of 4± feet from the ground surface. Occasional cobbles were encountered at the ground surface at Infiltration Test Nos. I-6 and I-12. The fill soils possess a disturbed appearance resulting in their classification as artificial fill. Native alluvium was encountered at the ground surface at Infiltration Test Nos. I-13, I-14 and I-16, and beneath the fill soils at the remaining infiltration trenches, extending to at least the maximum depth explored of 13± feet. The alluvial soils consist of loose to dense sands and gravelly sands with varying silt content. Infiltration Test No. I-16 encountered dense gravelly sands to sandy gravel, extending to a depth of 13± feet from the ground surface. Occasional to extensive cobbles, and even occasional boulders, were encountered at most of the infiltration

trenches at various depths, and at the ground surface at Infiltration Test Nos. I-14 and I-16. The Trench Logs, which illustrate the conditions encountered at the infiltration test locations, are presented in this report.

Infiltration Testing

We understand that the results of the testing will be used to prepare a preliminary design for the storm water infiltration systems that will be used at the west and east sites. As previously mentioned, the infiltration testing was performed in general accordance with ASTM Test Method D-3385-03, Standard Test Method for Infiltration Rate of Soils in Field Using Double Ring Infiltrometer.

Two stainless steel infiltration rings were used for the infiltration testing. The outer infiltration ring is 2 feet in diameter and 20 inches in height. The inner infiltration ring is 1 foot in diameter and 20 inches in height. At the test locations, the outer ring was driven 3± inches into the soil at the base of each trench. The inner ring was centered inside the outer ring and subsequently driven 3± inches into the soil at the base of the trench. The rings were driven into the soil using a ten-pound sledge hammer. The soil surrounding the wall of the infiltration rings was only slightly disturbed during the driving process.

Infiltration Testing Procedure

Infiltration testing was performed at all of the trench locations. The infiltration testing consisted of filling the inner ring and the annular space (the space between the inner and outer rings) with water, approximately 3 to 4 inches above the soil. To prevent the flow of water from one ring to the other, the water level in both the inner ring and the annular space between the rings was maintained using constant-head float valves. The volume of water that was added to maintain a constant head in the inner ring and the annular space during each time interval was determined and recorded. A cap was placed over the rings to minimize the evaporation of water during the tests.

The schedule for readings was determined based on the observed soil type at the base of each backhoe-excavated trench. Based on the existing soils at the trench locations, the volumetric measurements were made at 3-minute increments. The water volume measurements are presented on the spreadsheets enclosed with this report. The infiltration rates for each of the timed intervals are also tabulated on these spreadsheets.

The infiltration rates for the infiltration tests are calculated in centimeters per hour and then converted to inches per hour. The rates are summarized below:

<u>Infiltration Test No.</u>	<u>Depth (feet)</u>	<u>Soil Description</u>	<u>Infiltration Rate (inches/hour)</u>
I-1	6	Gravelly fine to medium Sand, some coarse Sand, trace Silt, abundant Cobbles	21.0
I-2	6	Fine to medium Sand, little coarse Sand, trace fine Gravel, trace Silt, occasional to abundant Cobbles	20.2
I-3	6	Fine to medium Sand, little coarse Sand, occasional to extensive Cobbles	22.1
I-4	10	Gravelly fine to coarse Sand, occasional Cobbles, occasional Boulders	21.6
I-5	10	Fine to coarse Sand, trace fine Gravel, occasional to extensive Cobbles, occasional Boulders	23.2
I-6	10	Gravelly fine to coarse Sand, trace Silt, occasional to extensive Cobbles, occasional Boulders	21.6
I-7	12	Fine to medium Sand, little coarse Sand, little fine Gravel, occasional to extensive Cobbles	21.0
I-8	12	Gravelly fine to coarse Sand, trace Silt, occasional to extensive Cobbles	20.5
I-9	12	Gravelly fine to coarse Sand, trace Silt, occasional to extensive Cobbles	22.7
I-10	12	Fine to coarse Sand, little fine Gravel, occasional Cobbles, occasional Boulders	21.6
I-11	10	Gravelly fine to coarse Sand, trace Silt, occasional Cobbles	20.5
I-12	10	Gravelly fine to coarse Sand, trace to little Silt	20.0
I-13	13	Fine to coarse Sand, trace fine Gravel	21.0
I-14	13	Fine to coarse Sand, trace Silt, occasional Cobbles	23.7
I-15	13	Fine to coarse Sand, little fine Gravel	20.5
I-16	13	Gravelly fine to coarse Sand to fine to coarse Sandy Gravel, occasional to extensive Cobbles, occasional Boulders	24.3
I-17	13	Gravelly fine to coarse Sand, trace Silt	20.2
I-18	13	Fine to coarse Sand, little fine Gravel, occasional Cobbles	23.2
I-19	13	Gravelly fine to medium Sand, trace coarse Sand, occasional Cobbles	22.7

Laboratory Testing

Moisture Content

The moisture contents for the recovered soil samples within the trenches were determined in accordance with ASTM D-2216 and are expressed as a percentage of the dry weight. These test results are presented on the Trench Logs.

Grain Size Analysis

The grain size distribution of selected soils collected from the base of each infiltration test location have been determined using a range of wire mesh screens. These tests were

performed in general accordance with ASTM D-422 and/or ASTM D-1140. The weight of the portion of the sample retained on each screen is recorded and the percentage finer or coarser of the total weight is calculated. The results of these tests are presented on Plates C-1 through C-19 of this report.

Design Recommendations

Seven (7) infiltration tests were performed within the proposed infiltration systems at the western site, and nine (9) infiltration tests were performed within the proposed infiltration systems at the eastern site. Three (3) infiltration tests (Infiltration Test Nos. I-1, I-2 and I-3) were performed outside the currently proposed infiltration systems. As noted above, the calculated infiltration rates at the infiltration test locations range from 20.0 to 24.3 inches per hour. **Based on the results of infiltration testing, we recommend that an infiltration rate of 20.0 inches per hour be used for the proposed infiltration systems at the western as eastern sites if the bottom of each infiltration system is supported by sands or gravelly sands.** No factor of safety has been applied to this infiltration rate. As discussed further below, the project civil engineer or system designer should apply any appropriate safety factors.

The design of the storm water infiltration systems should be performed by the project civil engineer, in accordance with the City of Highland and/or County of San Bernardino guidelines. It is recommended that the systems be constructed so as to facilitate removal of silt and clay, or other deleterious materials from any water that may enter the systems. The presence of such materials would decrease the effective infiltration rates. **It is recommended that the project civil engineer apply an appropriate factor of safety. The infiltration rates recommended above is based on the assumption that only clean water will be introduced to the subsurface profile. Any fines, debris, or organic materials could significantly impact the infiltration rate.** It should be noted that the recommended infiltration rates are based on infiltration testing at nineteen (19) discrete locations and that the overall infiltration rate of the proposed infiltration systems could vary considerably.

Infiltration Rate Considerations

The infiltration rate presented herein was determined in accordance with the San Bernardino County guidelines and are considered valid only for the time and place of the actual test. Varying subsurface conditions will exist in other areas of the site, which could alter the recommended infiltration rate presented above. The infiltration rate will decline over time between maintenance cycles as silt or clay particles accumulate on the BMP surface. The infiltration rate is highly dependent upon a number of factors, including density, silt and clay content, grain size distribution throughout the range of particle sizes, and particle shape. Small changes in these factors can cause large changes in the infiltration rate.

Infiltration rates are based on unsaturated flow. As water is introduced into soils by infiltration, the soils become saturated and the wetting front advances from the unsaturated zone to the saturated zone. Once the soils become saturated, infiltration rates become zero, and water can only move through soils by hydraulic conductivity at a rate determined by pressure head and soil permeability. Changes in soil moisture content will affect the infiltration rate. Infiltration rates should be expected to decrease until the soils become saturated. Soil permeability values

will then govern groundwater movement. Permeability values may be on the order of 10 to 20 times less than infiltration rates. The system designer should incorporate adequate factors of safety and allow for overflow design into appropriate traditional storm drain systems, which would transport storm water off-site.

Construction Considerations

The infiltration rates presented in this report are specific to the tested locations and tested depths. Infiltration rates can be significantly reduced if the soils are exposed to excessive disturbance or compaction during construction. Compaction of the soils at the bottom of the infiltration system can significantly reduce the infiltration ability of the chamber system. Therefore, the subgrade soils within the proposed infiltration system areas should not be over-excavated, undercut or compacted in any significant manner. **It is recommended that a note to this effect be added to the project plans and/or specifications.**

We recommend that a representative from the geotechnical engineer be on-site during the construction of the proposed infiltration system to identify the soil classification at the base of each system. It should be confirmed that the soils at the base of the proposed infiltration systems correspond with those presented in this report to ensure that the performance of the systems will be consistent with the rate reported herein.

We recommend that scrapers and other rubber-tired heavy equipment not be operated near the infiltration systems bottom, or at levels lower than 2 feet above the bottom of the system, particularly within basins. As such, the bottom 24 inches of the infiltration system should be excavated with non-rubber-tired equipment, such as excavators.

Basin Maintenance

The proposed project may include infiltration basins. Water flowing into these basins will carry some level of sediment. Wind-blown sediments and erosion of the basin side walls will also contribute to sediment deposition at the bottom of the basin. This layer has the potential to significantly reduce the infiltration rate of the basin subgrade soils. Therefore, a formal basin maintenance program should be established to ensure that these silt and clay deposits are removed from the basin on a regular basis. Appropriate vegetation on the basin sidewalls and bottom may reduce erosion and sediment deposition.

Basin maintenance should also include measures to prevent animal burrows, and to repair any burrows or damage caused by such. Animal burrows in the basin sidewalls can significantly increase the risk of erosion and piping failures.

Location of Infiltration Systems

The use of on-site storm water infiltration systems carries a risk of creating adverse geotechnical conditions. Increasing the moisture content of the soil can cause the soil to lose internal shear strength and increase its compressibility, resulting in a change in the designed engineering properties. Overlying structures and pavements in the infiltration area could potentially be damaged due to saturation of the subgrade soils. **The proposed infiltration systems for this site should be located at least 25 feet away from any structures,**

including retaining walls. Even with this provision of locating the infiltration system at least 25 feet from the building(s), it is possible that infiltrating water into the subsurface soils could have an adverse effect on the proposed or existing structures. It should also be noted that utility trenches which happen to collect storm water can also serve as conduits to transmit storm water toward the structure, depending on the slope of the utility trench. Therefore, consideration should also be given to the proposed locations of underground utilities which may pass near the proposed infiltration system.

The infiltration system designer should also give special consideration to the effect that the proposed infiltration systems may have on nearby subterranean structures, open excavations, or descending slopes. In particular, infiltration systems should not be located near the crest of descending slopes, particularly where the slopes are comprised of granular soils. Such systems will require specialized design and analysis to evaluate the potential for slope instability, piping failures and other phenomena that typically apply to earthen dam design. This type of analysis is beyond the scope of this infiltration test report, but these factors should be considered by the infiltration system designer when locating the infiltration systems.

Closure

We sincerely appreciate the opportunity to be of service on this project. We look forward to providing additional consulting services during the course of the project. If we may be of further assistance in any manner, please contact our office.

Respectfully Submitted,

SOUTHERN CALIFORNIA GEOTECHNICAL, INC.



Joseph Lozano Leon
Staff Engineer

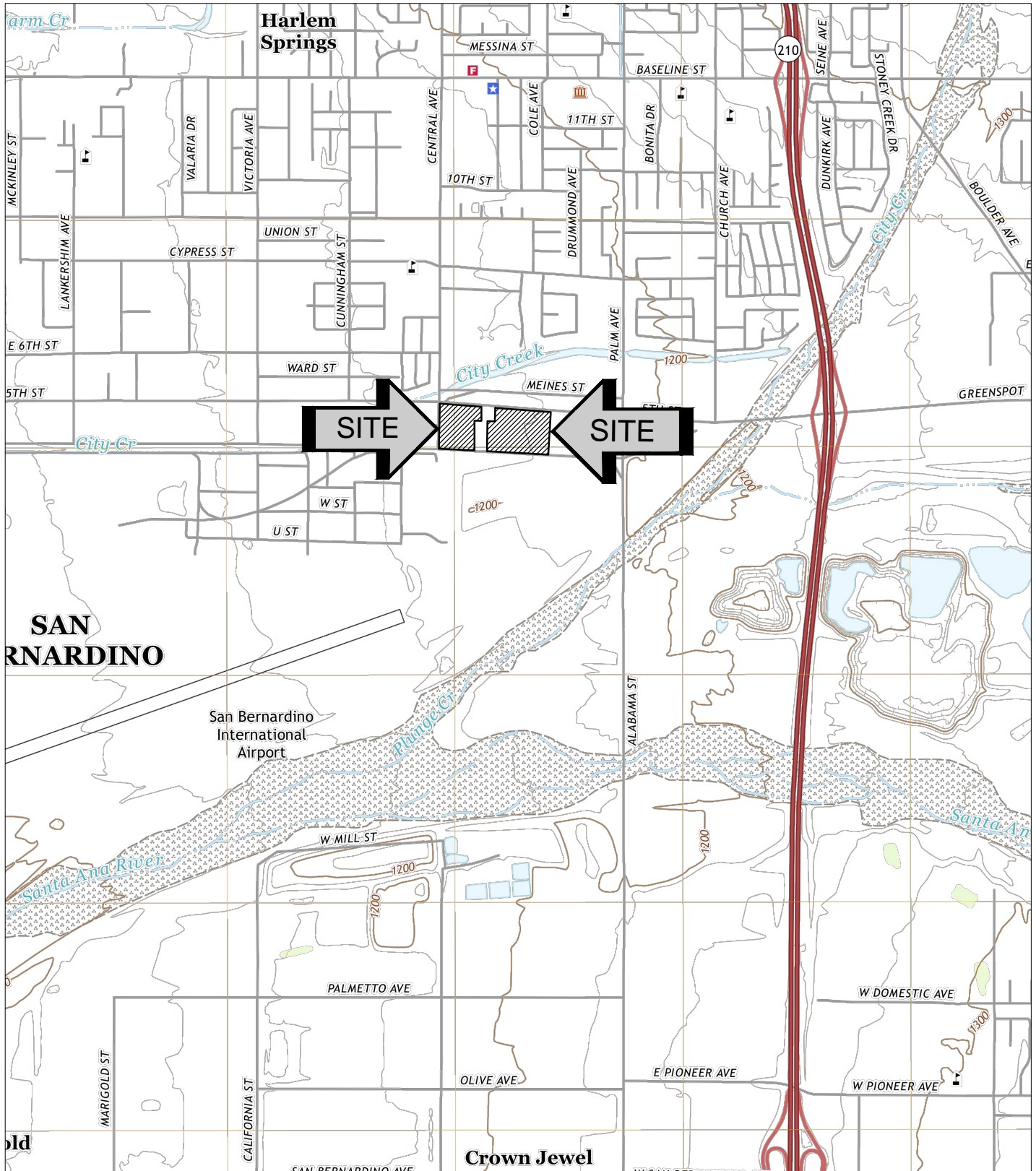


Robert G. Trazo, GE 2655
Principal Engineer



Distribution: (1) Addressee

Enclosures: Plate 1 - Site Location Map
Plate 2 - Infiltration Test Location Plan
Trench Log Legend and Logs (21 pages)
Infiltration Test Results Spreadsheets (95 pages)
Grain Size Distribution Graphs (19 pages)



SAN BERNARDINO

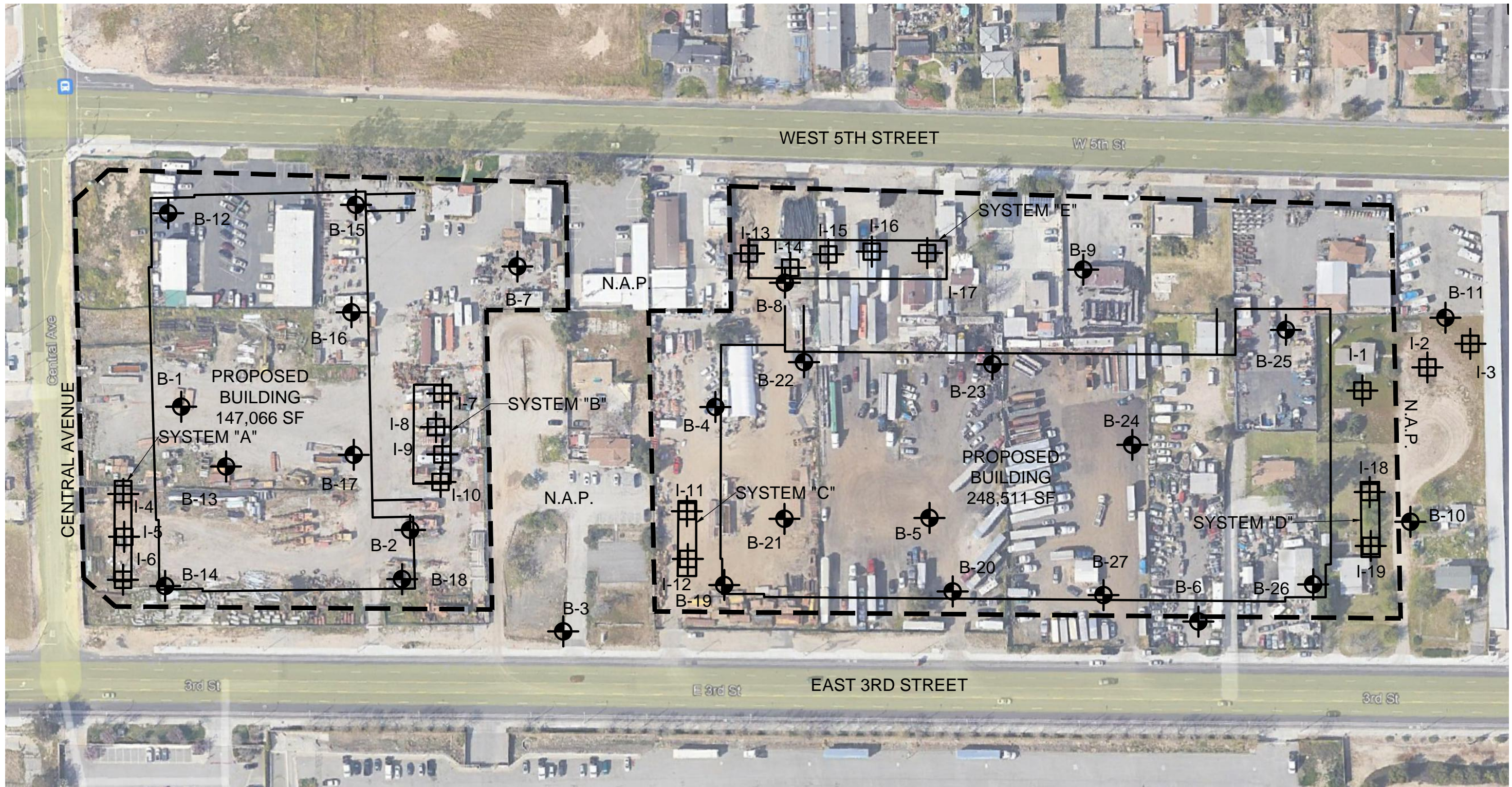
San Bernardino International Airport

Crown Jewel



SOURCE: USGS TOPOGRAPHIC MAP OF THE REDLANDS QUADRANGLE, SAN BERNARDINO COUNTY, CALIFORNIA, 2021.



SITE LOCATION MAP	
TWO PROPOSED WAREHOUSES	
ONTARIO, CALIFORNIA	
SCALE: 1" = 2000'	 SOUTHERN CALIFORNIA GEOTECHNICAL
DRAWN: JLL	
CHKD: RGT	
SCG PROJECT 21G193-3	
PLATE 1	



GEOTECHNICAL LEGEND




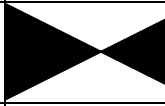

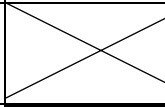


-  APPROXIMATE INFILTRATION TEST LOCATION
-  APPROXIMATE BORING LOCATION FROM CONCURRENT STUDY (SCG PROJECT NO. 21G193-4)



NOTE: SITE PLAN PREPARED BY RGA.
AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH.

INFILTRATION TEST LOCATION PLAN	
TWO PROPOSED WAREHOUSES	
HIGHLAND, CALIFORNIA	
SCALE: 1" = 120'	 SOUTHERN CALIFORNIA GEOTECHNICAL
DRAWN: JLL	
CHKD: RGT	
SCG PROJECT 21G193-3	
PLATE 2	

TRENCH LOG LEGEND

SAMPLE TYPE	GRAPHICAL SYMBOL	SAMPLE DESCRIPTION
AUGER		SAMPLE COLLECTED FROM AUGER CUTTINGS, NO FIELD MEASUREMENT OF SOIL STRENGTH. (DISTURBED)
CORE		ROCK CORE SAMPLE: TYPICALLY TAKEN WITH A DIAMOND-TIPPED CORE BARREL. TYPICALLY USED ONLY IN HIGHLY CONSOLIDATED BEDROCK.
GRAB		SOIL SAMPLE TAKEN WITH NO SPECIALIZED EQUIPMENT, SUCH AS FROM A STOCKPILE OR THE GROUND SURFACE. (DISTURBED)
CS		CALIFORNIA SAMPLER: 2-1/2 INCH I.D. SPLIT BARREL SAMPLER, LINED WITH 1-INCH HIGH BRASS RINGS. DRIVEN WITH SPT HAMMER. (RELATIVELY UNDISTURBED)
NSR		NO RECOVERY: THE SAMPLING ATTEMPT DID NOT RESULT IN RECOVERY OF ANY SIGNIFICANT SOIL OR ROCK MATERIAL.
SPT		STANDARD PENETRATION TEST: SAMPLER IS A 1.4 INCH INSIDE DIAMETER SPLIT BARREL, DRIVEN 18 INCHES WITH THE SPT HAMMER. (DISTURBED)
SH		SHELBY TUBE: TAKEN WITH A THIN WALL SAMPLE TUBE, PUSHED INTO THE SOIL AND THEN EXTRACTED. (UNDISTURBED)
VANE		VANE SHEAR TEST: SOIL STRENGTH OBTAINED USING A 4 BLADED SHEAR DEVICE. TYPICALLY USED IN SOFT CLAYS-NO SAMPLE RECOVERED.

COLUMN DESCRIPTIONS

DEPTH:

Distance in feet below the ground surface.

SAMPLE:

Sample Type as depicted above.

BLOW COUNT:

Number of blows required to advance the sampler 12 inches using a 140 lb hammer with a 30-inch drop. 50/3" indicates penetration refusal (>50 blows) at 3 inches. WH indicates that the weight of the hammer was sufficient to push the sampler 6 inches or more.

POCKET PEN.:

Approximate shear strength of a cohesive soil sample as measured by pocket penetrometer.

GRAPHIC LOG:

Graphic Soil Symbol as depicted on the following page.

DRY DENSITY:

Dry density of an undisturbed or relatively undisturbed sample in lbs/ft³.

MOISTURE CONTENT:

Moisture content of a soil sample, expressed as a percentage of the dry weight.

LIQUID LIMIT:

The moisture content above which a soil behaves as a liquid.

PLASTIC LIMIT:

The moisture content above which a soil behaves as a plastic.

PASSING #200 SIEVE:

The percentage of the sample finer than the #200 standard sieve.

UNCONFINED SHEAR:

The shear strength of a cohesive soil sample, as measured in the unconfined state.

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS	
			GRAPH	LETTER		
<p>COARSE GRAINED SOILS</p> <p>MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE</p>	<p>GRAVEL AND GRAVELLY SOILS</p>	<p>CLEAN GRAVELS</p> <p>(LITTLE OR NO FINES)</p>		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES	
		<p>MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE</p>	<p>GRAVELS WITH FINES</p> <p>(APPRECIABLE AMOUNT OF FINES)</p>		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
			<p>GRAVELS WITH FINES</p> <p>(APPRECIABLE AMOUNT OF FINES)</p>		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
		<p>MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE</p>	<p>CLEAN SANDS</p> <p>(LITTLE OR NO FINES)</p>		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	<p>MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE</p>		<p>SANDS WITH FINES</p> <p>(APPRECIABLE AMOUNT OF FINES)</p>		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		<p>SANDS WITH FINES</p> <p>(APPRECIABLE AMOUNT OF FINES)</p>		SM	SILTY SANDS, SAND - SILT MIXTURES	
	<p>SANDS WITH FINES</p> <p>(APPRECIABLE AMOUNT OF FINES)</p>		SC	CLAYEY SANDS, SAND - CLAY MIXTURES		
	<p>FINE GRAINED SOILS</p> <p>MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE</p>	<p>SILTS AND CLAYS</p> <p>LIQUID LIMIT LESS THAN 50</p>		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, 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	
<p>SILTS AND CLAYS</p> <p>LIQUID LIMIT GREATER THAN 50</p>			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS		
			CH	INORGANIC CLAYS OF HIGH PLASTICITY		
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS		
<p>HIGHLY ORGANIC SOILS</p>				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS	

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS



JOB NO.: 21G193-3	EXCAVATION DATE: 7/13/21	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Caleb Brackett	READING TAKEN: At Completion

FIELD RESULTS					DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG		DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
5					<p style="text-align: center;">SURFACE ELEVATION: --- MSL</p> <p><u>FILL</u>: Brown Silty fine to medium Sand, trace fine Gravel, trace fine root fibers, medium dense-dry</p> <p><u>ALLUVIUM</u>: Gray Brown Gravelly fine to medium Sand, some coarse Sand, trace Silt, abundant Cobbles, loose-damp</p>		2			3		
Trench Terminated at 6'												

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 7/12/21	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Caleb Brackett	READING TAKEN: At Completion

FIELD RESULTS					DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG		DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
5					<p style="text-align: center;">SURFACE ELEVATION: --- MSL</p> <p>FILL: Brown Silty fine to medium Sand, trace to little fine Gravel, loose-dry</p> <p>ALLUVIUM: Gray Brown fine to medium Sand, little coarse Sand, trace fine Gravel, trace Silt, occasional to extensive Cobbles, occasional Boulders, loose-damp</p>		3			2		
Trench Terminated at 6'												

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 7/12/21	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Caleb Brackett	READING TAKEN: At Completion

FIELD RESULTS					DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG		DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
SURFACE ELEVATION: --- MSL												
5					FILL: Brown Silty fine to medium Sand, trace fine Gravel, loose-dry ALLUVIUM: Gray Brown fine to medium Sand, little coarse Sand, occasional to extensive Cobbles, loose-dry to damp		2			1		
Trench Terminated at 6'												

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22





JOB NO.: 21G193-3	EXCAVATION DATE: 3/1/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Oscar Sandoval	READING TAKEN: At Completion

FIELD RESULTS					DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG		DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
SURFACE ELEVATION: --- MSL												
5					<p><u>FILL</u>: Brown Silty fine to coarse Sand, trace fine to coarse Gravel, trace fine root fibers, medium dense-dry to damp</p> <hr/> <p><u>ALLUVIUM</u>: Gray Brown Gravelly fine to coarse Sand, occasional Cobbles, occasional Boulders, dense-damp</p>		3		1			
10					Trench Terminated at 10'							

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 3/1/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Oscar Sandoval	READING TAKEN: At Completion

FIELD RESULTS					DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG		DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
SURFACE ELEVATION: --- MSL												
5					<p><u>FILL</u>: Light Brown Silty fine to coarse Sand, trace fine Gravel, trace fine root fibers, medium dense-dry to damp</p> <p><u>ALLUVIUM</u>: Light Gray Brown fine to coarse Sand, trace fine Gravel, occasional to extensive Cobbles, occasional Boulders, dense-damp</p>		3		1			
10					Trench Terminated at 10'							

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 3/1/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Oscar Sandoval	READING TAKEN: At Completion

FIELD RESULTS					DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG		DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
SURFACE ELEVATION: --- MSL												
5					<u>FILL</u> : Dark Brown fine to coarse Sand, little fine to coarse Gravel, trace Silt, occasion Cobbles, trace electric wires, trace Portland Cement Concrete fragments, dense-damp							
10					<u>ALLUVIUM</u> : Light Brown to Brown Gravelly fine to coarse Sand, trace Silt, occasional to extensive Cobbles, occasional Boulders, dense-dry		1			4		
					Trench Terminated at 10'							

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 3/1/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Oscar Sandoval	READING TAKEN: At Completion

FIELD RESULTS				DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)		GRAPHIC LOG	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	
				SURFACE ELEVATION: --- MSL							
5				FILL: Light Brown Silty fine to medium Sand, little fine to coarse Gravel, occasional Cobbles, very loose-dry to damp ALLUVIUM: Light Brown fine to medium Sand, little coarse Sand, little fine Gravel, occasional to extensive Cobbles, dense-damp							
10						2			2		
					Trench Terminated at 12'						

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 2/24/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Caleb Brackett	READING TAKEN: At Completion

FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
				SURFACE ELEVATION: --- MSL								
5					2½± inches Asphaltic Concrete, no discernible Aggregate Base FILL: Light Brown Silty fine to medium Sand, trace to little fine to coarse Gravel, loose-damp ALLUVIUM: Light Brown Gravelly fine to coarse Sand, trace Silt, occasional to extensive Cobbles, dense-damp							
10	✎						3			4		
					Trench Terminated at 12'							

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22






JOB NO.: 21G193-3	EXCAVATION DATE: 2/24/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Caleb Brackett	READING TAKEN: At Completion

FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
					SURFACE ELEVATION: --- MSL							
5					2½± inches Asphaltic Concrete, no discernible Aggregate Base FILL: Light Brown Silty fine to medium Sand, trace to little fine to coarse Gravel, very loose-damp ALLUVIUM: Light Brown Gravelly fine to coarse Sand, trace Silt, occasional to extensive Cobbles, medium dense to dense-dry							
10						1			4			
					Trench Terminated at 12'							

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22





JOB NO.: 21G193-3	EXCAVATION DATE: 2/24/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Caleb Brackett	READING TAKEN: At Completion

FIELD RESULTS				DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)		GRAPHIC LOG	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	
SURFACE ELEVATION: --- MSL											
5					FILL: Light Brown to Brown Silty fine Sand, trace to little fine Gravel, loose-damp						
10					ALLUVIUM: Light Brown fine to coarse Sand, little fine Gravel, occasional Cobbles, occasional Boulders, dense-dry		1			1	
					Trench Terminated at 12'						

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 2/24/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Caleb Brackett	READING TAKEN: At Completion

FIELD RESULTS					DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG		DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
SURFACE ELEVATION: --- MSL												
5					<u>FILL:</u> Brown Silty fine to medium Sand, trace fine Gravel, loose-damp <u>ALLUVIUM:</u> Gray Brown Gravelly fine to coarse Sand, trace Silt, occasional Cobbles, medium dense-damp		2		3			
10					Trench Terminated at 10'							

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 2/24/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Sam Bergeland	READING TAKEN: At Completion

FIELD RESULTS					DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG		DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
SURFACE ELEVATION: --- MSL												
5					<p><u>FILL</u>: Brown Silty fine to coarse Sand, trace to little fine Gravel, occasional Cobbles, medium dense-damp</p> <hr/> <p><u>ALLUVIUM</u>: Gray Brown Gravelly fine to coarse Sand, trace to little Silt, dense-damp</p>		2		8			
10					Trench Terminated at 10'							

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 2/24/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Sam Bergeland	READING TAKEN: At Completion

FIELD RESULTS				DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)		GRAPHIC LOG	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	
				SURFACE ELEVATION: --- MSL							
5					<u>ALLUVIUM</u> : Light Gray Brown fine to coarse Sand, trace fine Gravel, medium dense-dry						
10							1				2
					Trench Terminated at 13'						

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 2/21/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Sam Bergeland	READING TAKEN: At Completion

FIELD RESULTS				DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)		GRAPHIC LOG	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	
				SURFACE ELEVATION: --- MSL							
5					ALLUVIUM: Light Gray Gravelly fine to coarse Sand, trace Silt, occasional Cobbles, dense-damp						
10							2				3
					Trench Terminated at 13'						

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 2/21/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Sam Bergeland	READING TAKEN: At Completion

FIELD RESULTS					DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG		DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
					SURFACE ELEVATION: --- MSL							
5					FILL: Light Gray Brown Silty fine to medium Sand, little fine Gravel, medium dense-dry to damp ALLUVIUM: Light Gray Brown fine to coarse Sand, little fine Gravel, medium dense-dry		1		2			
10												
					Trench Terminated at 13'							

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 2/21/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Sam Bergeland	READING TAKEN: At Completion

FIELD RESULTS					DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG		DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
				SURFACE ELEVATION: --- MSL								
5					<u>ALLUVIUM:</u> Light Gray Gravelly fine to coarse Sand to fine to coarse Sandy Gravel, occasional to extensive Cobbles, occasional Boulders, dense-dry							
10							1				1	
					Trench Terminated at 13'							

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3 EXCAVATION DATE: 2/21/22 WATER DEPTH: Dry
 PROJECT: Two Proposed Warehouses EXCAVATION METHOD: Backhoe CAVE DEPTH: --
 LOCATION: Highland, California LOGGED BY: Sam Bergeland READING TAKEN: At Completion

FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
					SURFACE ELEVATION: --- MSL							
					<u>FILL</u> : Brown Silty fine to medium Sand, little fine to coarse Gravel, loose-damp							
5					<u>ALLUVIUM</u> : Gray Gravelly fine to coarse Sand, trace Silt, dense-damp to moist							
10												
						5			4			
					Trench Terminated at 13'							

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 2/24/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Sam Bergeland	READING TAKEN: At Completion

FIELD RESULTS					DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG		DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
SURFACE ELEVATION: --- MSL												
5					<p><u>FILL</u>: Brown Silty fine Sand, trace medium Sand, little fine Gravel, loose-damp</p> <p><u>ALLUVIUM</u>: Gray Brown fine to coarse Sand, little fine Gravel, occasional Cobbles, dense-damp</p>							
10						2			2			
					Trench Terminated at 13'							

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22



JOB NO.: 21G193-3	EXCAVATION DATE: 2/24/22	WATER DEPTH: Dry
PROJECT: Two Proposed Warehouses	EXCAVATION METHOD: Backhoe	CAVE DEPTH: --
LOCATION: Highland, California	LOGGED BY: Sam Bergeland	READING TAKEN: At Completion

FIELD RESULTS				DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)		GRAPHIC LOG	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	
				SURFACE ELEVATION: --- MSL							
5					<p>FILL: Brown Silty fine Sand, trace to little medium to coarse Sand, little fine Gravel, loose-damp</p> <p>ALLUVIUM: Gray Brown Gravelly fine to medium Sand, trace coarse Sand, occasional Cobbles, medium dense-damp</p>		2		2		
10					Trench Terminated at 13'						

TBL 21G193-3.GPJ_SOCALGEO.GDT 3/23/22

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Caleb Brackett

Infiltration Test No I-1

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	7:30 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	7:33 AM	3	4500	4500	14500	14500	123.35	132.49	48.56	52.16
2	Initial	7:33 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	7:36 AM	6	4750	4750	14500	14500	130.20	132.49	51.26	52.16
3	Initial	7:36 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	7:39 AM	9	4500	4500	14500	14500	123.35	132.49	48.56	52.16
4	Initial	7:39 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	7:42 AM	12	4650	4650	14500	14500	127.46	132.49	50.18	52.16
5	Initial	7:42 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	7:45 AM	15	4650	4650	14500	14500	127.46	132.49	50.18	52.16
6	Initial	7:45 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	7:48 AM	18	4500	4500	14500	14500	123.35	132.49	48.56	52.16
7	Initial	7:48 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	7:51 AM	21	4750	4750	14500	14500	130.20	132.49	51.26	52.16
8	Initial	7:51 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	7:54 AM	24	4500	4500	14500	14500	123.35	132.49	48.56	52.16
9	Initial	7:54 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	7:57 AM	27	4650	4650	14500	14500	127.46	132.49	50.18	52.16
10	Initial	7:57 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:00 AM	30	4650	4650	14500	14500	127.46	132.49	50.18	52.16
11	Initial	8:00 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:03 AM	33	4500	4500	14500	14500	123.35	132.49	48.56	52.16
12	Initial	8:03 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:06 AM	36	4750	4750	14500	14500	130.20	132.49	51.26	52.16
13	Initial	8:06 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:09 AM	39	4500	4500	14500	14500	123.35	132.49	48.56	52.16
14	Initial	8:09 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:12 AM	42	4650	4650	14500	14500	127.46	132.49	50.18	52.16
15	Initial	8:12 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:15 AM	45	4650	4650	14500	14500	127.46	132.49	50.18	52.16
16	Initial	8:15 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:18 AM	48	4500	4500	14500	14500	123.35	132.49	48.56	52.16
17	Initial	8:18 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:21 AM	51	4750	4750	14500	14500	130.20	132.49	51.26	52.16

18	Initial	8:21 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:24 AM	54	4500		14500					
19	Initial	8:24 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:27 AM	57	4650		14500					
20	Initial	8:27 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:30 AM	60	4650		14500					
21	Initial	8:30 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:33 AM	63	4500		14500					
22	Initial	8:33 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:36 AM	66	4750		14500					
23	Initial	8:36 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:39 AM	69	4500		14500					
24	Initial	8:39 AM	3	0	4200	0	14500	115.13	132.49	45.33	52.16
	Final	8:42 AM	72	4200		14500					
25	Initial	8:42 AM	3	0	4100	0	14500	112.38	132.49	44.25	52.16
	Final	8:45 AM	75	4100		14500					
26	Initial	8:45 AM	3	0	4000	0	14500	109.64	132.49	43.17	52.16
	Final	8:48 AM	78	4000		14500					
27	Initial	8:48 AM	3	0	4100	0	14500	112.38	132.49	44.25	52.16
	Final	8:51 AM	81	4100		14500					
28	Initial	8:51 AM	3	0	4000	0	14500	109.64	132.49	43.17	52.16
	Final	8:54 AM	84	4000		14500					
29	Initial	8:54 AM	3	0	4150	0	14100	113.76	128.83	44.79	50.72
	Final	8:57 AM	87	4150		14100					
30	Initial	8:57 AM	3	0	3900	0	14100	106.90	128.83	42.09	50.72
	Final	9:00 AM	90	3900		14100					
31	Initial	9:00 AM	3	0	3900	0	14000	106.90	127.92	42.09	50.36
	Final	9:03 AM	93	3900		14000					
32	Initial	9:03 AM	3	0	3850	0	14100	105.53	128.83	41.55	50.72
	Final	9:06 AM	96	3850		14100					
33	Initial	9:06 AM	3	0	3750	0	13900	102.79	127.00	40.47	50.00
	Final	9:09 AM	99	3750		13900					
34	Initial	9:09 AM	3	0	3700	0	13800	101.42	126.09	39.93	49.64
	Final	9:12 AM	102	3700		13800					
35	Initial	9:12 AM	3	0	3600	0	13850	98.68	126.55	38.85	49.82
	Final	9:15 AM	105	3600		13850					
36	Initial	9:15 AM	3	0	3550	0	13700	97.31	125.18	38.31	49.28
	Final	9:18 AM	108	3550		13700					
37	Initial	9:18 AM	3	0	3550	0	13500	97.31	123.35	38.31	48.56
	Final	9:21 AM	111	3550		13500					
38	Initial	9:21 AM	3	0	3600	0	13650	98.68	124.72	38.85	49.10
	Final	9:24 AM	114	3600		13650					
39	Initial	9:24 AM	3	0	3400	0	13700	93.20	125.18	36.69	49.28
	Final	9:27 AM	117	3400		13700					
40	Initial	9:27 AM	3	0	3300	0	13600	90.46	124.26	35.61	48.92
	Final	9:30 AM	120	3300		13600					
41	Initial	9:30 AM	3	0	3000	0	13500	82.23	123.35	32.38	48.56
	Final	9:33 AM	123	3000		13500					
42	Initial	9:33 AM	3	0	3100	0	13550	84.97	123.81	33.45	48.74
	Final	9:36 AM	126	3100		13550					
43	Initial	9:36 AM	3	0	3050	0	13400	83.60	122.44	32.91	48.20
	Final	9:39 AM	129	3050		13400					

44	Initial	9:39 AM	3	0	3100	0	13300	13300	84.97	121.52	33.45	47.84
	Final	9:42 AM	132	3100		13300						
45	Initial	9:42 AM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	9:45 AM	135	3000		13300						
46	Initial	9:45 AM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	9:48 AM	138	2900		13400						
47	Initial	9:48 AM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	9:51 AM	141	2950		13400						
48	Initial	9:51 AM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	9:54 AM	144	2800		13500						
49	Initial	9:54 AM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	9:57 AM	147	2750		13300						
50	Initial	9:57 AM	3	0	2800	0	13400	13400	76.75	122.44	30.22	48.20
	Final	10:00 AM	150	2800		13400						
51	Initial	10:00 AM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	10:03 AM	153	2500		13300						
52	Initial	10:03 AM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	10:06 AM	156	2400		13400						
53	Initial	10:06 AM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	10:09 AM	159	2300		13500						
54	Initial	10:09 AM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	10:12 AM	162	2350		13400						
55	Initial	10:12 AM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	10:15 AM	165	2250		13300						
56	Initial	10:15 AM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	10:18 AM	168	2200		13300						
57	Initial	10:18 AM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	10:21 AM	171	2100		13100						
58	Initial	10:21 AM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	10:24 AM	174	2200		13000						
59	Initial	10:24 AM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	10:27 AM	177	2200		13100						
60	Initial	10:27 AM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	10:30 AM	180	2100		13200						
61	Initial	10:30 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	10:33 AM	183	2150		13100						
62	Initial	10:33 AM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	10:36 AM	186	2000		12900						
63	Initial	10:36 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	10:39 AM	189	2150		13100						
64	Initial	10:39 AM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	10:42 AM	192	2200		13000						
65	Initial	10:42 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	10:45 AM	195	2100		12900						
66	Initial	10:45 AM	3	0	2050	0	13000	13000	56.19	118.78	22.12	46.76
	Final	10:48 AM	198	2050		13000						
67	Initial	10:48 AM	3	0	2000	0	13700	13700	54.82	125.18	21.58	49.28
	Final	10:51 AM	201	2000		13700						
68	Initial	10:51 AM	3	0	2050	0	12900	12900	56.19	117.87	22.12	46.40
	Final	10:54 AM	204	2050		12900						
69	Initial	10:54 AM	3	0	2100	0	12800	12800	57.56	116.95	22.66	46.04
	Final	10:57 AM	207	2100		12800						

70	Initial	10:57 AM	3	0	2100	0	12700	12700	57.56	116.04	22.66	45.68
	Final	11:00 AM	210	2100		12700						
71	Initial	11:00 AM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	11:03 AM	213	2100		12500						
72	Initial	11:03 AM	3	0	2000	0	12600	12600	54.82	115.13	21.58	45.33
	Final	11:06 AM	216	2000		12600						
73	Initial	11:06 AM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	11:09 AM	219	2100		12600						
74	Initial	11:09 AM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	11:12 AM	222	2200		12500						
75	Initial	11:12 AM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	11:15 AM	225	2100		12300						
76	Initial	11:15 AM	3	0	2050	0	12200	12200	56.19	111.47	22.12	43.89
	Final	11:18 AM	228	2050		12200						
77	Initial	11:18 AM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	11:21 AM	231	2100		12400						
78	Initial	11:21 AM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	11:24 AM	234	2150		12300						
79	Initial	11:24 AM	3	0	2250	0	12300	12300	61.67	112.38	24.28	44.25
	Final	11:27 AM	237	2250		12300						
80	Initial	11:27 AM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	11:30 AM	240	2100		12000						
81	Initial	11:30 AM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	11:33 AM	243	2150		12200						
82	Initial	11:33 AM	3	0	2000	0	12100	12100	54.82	110.56	21.58	43.53
	Final	11:36 AM	246	2000		12100						
83	Initial	11:36 AM	3	0	2050	0	12000	12000	56.19	109.64	22.12	43.17
	Final	11:39 AM	249	2050		12000						
84	Initial	11:39 AM	3	0	2000	0	11800	11800	54.82	107.82	21.58	42.45
	Final	11:42 AM	252	2000		11800						
85	Initial	11:42 AM	3	0	2000	0	11600	11600	54.82	105.99	21.58	41.73
	Final	11:45 AM	255	2000		11600						
86	Initial	11:45 AM	3	0	2050	0	11400	11400	56.19	104.16	22.12	41.01
	Final	11:48 AM	258	2050		11400						
87	Initial	11:48 AM	3	0	1950	0	11250	11250	53.45	102.79	21.04	40.47
	Final	11:51 AM	261	1950		11250						
88	Initial	11:51 AM	3	0	1950	0	11300	11300	53.45	103.25	21.04	40.65
	Final	11:54 AM	264	1950		11300						
89	Initial	11:54 AM	3	0	1950	0	11200	11200	53.45	102.33	21.04	40.29
	Final	11:57 AM	267	1950		11200						
90	Initial	11:57 AM	3	0	1950	0	11200	11200	53.45	102.33	21.04	40.29
	Final	12:00 PM	270	1950		11200						
91	Initial	12:00 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	12:03 PM	273	1950		11000						
92	Initial	12:03 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	12:06 PM	276	1950		11000						
93	Initial	12:06 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	12:09 PM	279	1950		11000						
94	Initial	12:09 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	12:12 PM	282	1950		11000						
95	Initial	12:12 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	12:15 PM	285	1950		11000						

96	Initial	12:15 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:18 PM	288	1950		11000					
97	Initial	12:18 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:21 PM	291	1950		11000					
98	Initial	12:21 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:24 PM	294	1950		11000					
99	Initial	12:24 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:27 PM	297	1950		11000					
100	Initial	12:27 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:30 PM	300	1950		11000					
101	Initial	12:30 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:33 PM	303	1950		11000					
102	Initial	12:33 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:36 PM	306	1950		11000					
103	Initial	12:36 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:39 PM	309	1950		11000					
104	Initial	12:39 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:42 PM	312	1950		11000					
105	Initial	12:42 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:45 PM	315	1950		11000					
106	Initial	12:45 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:48 PM	318	1950		11000					
107	Initial	12:48 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:51 PM	321	1950		11000					
108	Initial	12:51 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:54 PM	324	1950		11000					
109	Initial	12:54 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	12:57 PM	327	1950		11000					
110	Initial	12:57 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:00 PM	330	1950		11000					
111	Initial	1:00 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:03 PM	333	1950		11000					
112	Initial	1:03 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:06 PM	336	1950		11000					
113	Initial	1:06 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:09 PM	339	1950		11000					
114	Initial	1:09 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:12 PM	342	1950		11000					
115	Initial	1:12 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:15 PM	345	1950		11000					
116	Initial	1:15 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:18 PM	348	1950		11000					
117	Initial	1:18 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:21 PM	351	1950		11000					
118	Initial	1:21 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:24 PM	354	1950		11000					
119	Initial	1:24 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:27 PM	357	1950		11000					
120	Initial	1:27 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:30 PM	360	1950		11000					
121	Initial	1:30 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:33 PM	363	1950		11000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Caleb Brackett

Infiltration Test No I-2

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	7:25 AM	3	0	4800	0	14800	131.57	135.23	51.80	53.24
	Final	7:28 AM	3	4800	4800	14800					
2	Initial	7:28 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	7:31 AM	6	4750	4750	14500					
3	Initial	7:31 AM	3	0	4500	0	14900	123.35	136.14	48.56	53.60
	Final	7:34 AM	9	4500	4500	14900					
4	Initial	7:34 AM	3	0	4650	0	14800	127.46	135.23	50.18	53.24
	Final	7:37 AM	12	4650	4650	14800					
5	Initial	7:37 AM	3	0	4400	0	14500	120.61	132.49	47.48	52.16
	Final	7:40 AM	15	4400	4400	14500					
6	Initial	7:40 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	7:43 AM	18	4500	4500	14500					
7	Initial	7:43 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	7:46 AM	21	4750	4750	14500					
8	Initial	7:46 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	7:49 AM	24	4500	4500	14500					
9	Initial	7:49 AM	3	0	4600	0	14500	126.09	132.49	49.64	52.16
	Final	7:52 AM	27	4600	4600	14500					
10	Initial	7:52 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	7:55 AM	30	4650	4650	14500					
11	Initial	7:55 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	7:58 AM	33	4500	4500	14500					
12	Initial	7:58 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:01 AM	36	4750	4750	14500					
13	Initial	8:01 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:04 AM	39	4500	4500	14500					
14	Initial	8:04 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:07 AM	42	4650	4650	14500					
15	Initial	8:07 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:10 AM	45	4650	4650	14500					
16	Initial	8:10 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:13 AM	48	4500	4500	14500					
17	Initial	8:13 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:16 AM	51	4750	4750	14500					

18	Initial	8:16 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:19 AM	54	4500			14500					
19	Initial	8:19 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:22 AM	57	4650			14500					
20	Initial	8:22 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:25 AM	60	4650			14500					
21	Initial	8:25 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:28 AM	63	4500			14500					
22	Initial	8:28 AM	3	0	4750	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:31 AM	66	4750			14500					
23	Initial	8:31 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:34 AM	69	4500			14500					
24	Initial	8:34 AM	3	0	4200	4200	0	14500	115.13	132.49	45.33	52.16
	Final	8:37 AM	72	4200			14500					
25	Initial	8:37 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	8:40 AM	75	4100			14500					
26	Initial	8:40 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	8:43 AM	78	4000			14500					
27	Initial	8:43 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	8:46 AM	81	4100			14500					
28	Initial	8:46 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	8:49 AM	84	4000			14500					
29	Initial	8:49 AM	3	0	4150	4150	0	14100	113.76	128.83	44.79	50.72
	Final	8:52 AM	87	4150			14100					
30	Initial	8:52 AM	3	0	3900	3900	0	14100	106.90	128.83	42.09	50.72
	Final	8:55 AM	90	3900			14100					
31	Initial	8:55 AM	3	0	3900	3900	0	14000	106.90	127.92	42.09	50.36
	Final	8:58 AM	93	3900			14000					
32	Initial	8:58 AM	3	0	3850	3850	0	14100	105.53	128.83	41.55	50.72
	Final	9:01 AM	96	3850			14100					
33	Initial	9:01 AM	3	0	3750	3750	0	13900	102.79	127.00	40.47	50.00
	Final	9:04 AM	99	3750			13900					
34	Initial	9:04 AM	3	0	3700	3700	0	13800	101.42	126.09	39.93	49.64
	Final	9:07 AM	102	3700			13800					
35	Initial	9:07 AM	3	0	3600	3600	0	13850	98.68	126.55	38.85	49.82
	Final	9:10 AM	105	3600			13850					
36	Initial	9:10 AM	3	0	3550	3550	0	13700	97.31	125.18	38.31	49.28
	Final	9:13 AM	108	3550			13700					
37	Initial	9:13 AM	3	0	3550	3550	0	13500	97.31	123.35	38.31	48.56
	Final	9:16 AM	111	3550			13500					
38	Initial	9:16 AM	3	0	3600	3600	0	13650	98.68	124.72	38.85	49.10
	Final	9:19 AM	114	3600			13650					
39	Initial	9:19 AM	3	0	3400	3400	0	13700	93.20	125.18	36.69	49.28
	Final	9:22 AM	117	3400			13700					
40	Initial	9:22 AM	3	0	3300	3300	0	13600	90.46	124.26	35.61	48.92
	Final	9:25 AM	120	3300			13600					
41	Initial	9:25 AM	3	0	3000	3000	0	13500	82.23	123.35	32.38	48.56
	Final	9:28 AM	123	3000			13500					
42	Initial	9:28 AM	3	0	3100	3100	0	13550	84.97	123.81	33.45	48.74
	Final	9:31 AM	126	3100			13550					
43	Initial	9:31 AM	3	0	3050	3050	0	13400	83.60	122.44	32.91	48.20
	Final	9:34 AM	129	3050			13400					

44	Initial	9:34 AM	3	0	3050	0	13300	13300	83.60	121.52	32.91	47.84
	Final	9:37 AM	132	3050		13300						
45	Initial	9:37 AM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	9:40 AM	135	3000		13300						
46	Initial	9:40 AM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	9:43 AM	138	2900		13400						
47	Initial	9:43 AM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	9:46 AM	141	2950		13400						
48	Initial	9:46 AM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	9:49 AM	144	2800		13500						
49	Initial	9:49 AM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	9:52 AM	147	2750		13300						
50	Initial	9:52 AM	3	0	2600	0	13400	13400	71.27	122.44	28.06	48.20
	Final	9:55 AM	150	2600		13400						
51	Initial	9:55 AM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	9:58 AM	153	2500		13300						
52	Initial	9:58 AM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	10:01 AM	156	2400		13400						
53	Initial	10:01 AM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	10:04 AM	159	2300		13500						
54	Initial	10:04 AM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	10:07 AM	162	2350		13400						
55	Initial	10:07 AM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	10:10 AM	165	2250		13300						
56	Initial	10:10 AM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	10:13 AM	168	2200		13300						
57	Initial	10:13 AM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	10:16 AM	171	2100		13100						
58	Initial	10:16 AM	3	0	2150	0	13000	13000	58.93	118.78	23.20	46.76
	Final	10:19 AM	174	2150		13000						
59	Initial	10:19 AM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	10:22 AM	177	2200		13100						
60	Initial	10:22 AM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	10:25 AM	180	2100		13200						
61	Initial	10:25 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	10:28 AM	183	2150		13100						
62	Initial	10:28 AM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	10:31 AM	186	2000		12900						
63	Initial	10:31 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	10:34 AM	189	2150		13100						
64	Initial	10:34 AM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	10:37 AM	192	2200		13000						
65	Initial	10:37 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	10:40 AM	195	2100		12900						
66	Initial	10:40 AM	3	0	2050	0	13000	13000	56.19	118.78	22.12	46.76
	Final	10:43 AM	198	2050		13000						
67	Initial	10:43 AM	3	0	2000	0	13700	13700	54.82	125.18	21.58	49.28
	Final	10:46 AM	201	2000		13700						
68	Initial	10:46 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	10:49 AM	204	2100		12900						
69	Initial	10:49 AM	3	0	2100	0	12800	12800	57.56	116.95	22.66	46.04
	Final	10:52 AM	207	2100		12800						

70	Initial	10:52 AM	3	0	2100	0	12700	57.56	116.04	22.66	45.68
	Final	10:55 AM	210	2100		12700					
71	Initial	10:55 AM	3	0	2100	0	12500	57.56	114.21	22.66	44.97
	Final	10:58 AM	213	2100		12500					
72	Initial	10:58 AM	3	0	2000	0	12600	54.82	115.13	21.58	45.33
	Final	11:01 AM	216	2000		12600					
73	Initial	11:01 AM	3	0	2100	0	12600	57.56	115.13	22.66	45.33
	Final	11:04 AM	219	2100		12600					
74	Initial	11:04 AM	3	0	2200	0	12500	60.30	114.21	23.74	44.97
	Final	11:07 AM	222	2200		12500					
75	Initial	11:07 AM	3	0	2100	0	12300	57.56	112.38	22.66	44.25
	Final	11:10 AM	225	2100		12300					
76	Initial	11:10 AM	3	0	2050	0	12200	56.19	111.47	22.12	43.89
	Final	11:13 AM	228	2050		12200					
77	Initial	11:13 AM	3	0	2100	0	12400	57.56	113.30	22.66	44.61
	Final	11:16 AM	231	2100		12400					
78	Initial	11:16 AM	3	0	2150	0	12300	58.93	112.38	23.20	44.25
	Final	11:19 AM	234	2150		12300					
79	Initial	11:19 AM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	11:22 AM	237	2250		12300					
80	Initial	11:22 AM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	11:25 AM	240	2100		12000					
81	Initial	11:25 AM	3	0	2150	0	12200	58.93	111.47	23.20	43.89
	Final	11:28 AM	243	2150		12200					
82	Initial	11:28 AM	3	0	2000	0	12100	54.82	110.56	21.58	43.53
	Final	11:31 AM	246	2000		12100					
83	Initial	11:31 AM	3	0	2050	0	12000	56.19	109.64	22.12	43.17
	Final	11:34 AM	249	2050		12000					
84	Initial	11:34 AM	3	0	2100	0	11800	57.56	107.82	22.66	42.45
	Final	11:37 AM	252	2100		11800					
85	Initial	11:37 AM	3	0	2050	0	11600	56.19	105.99	22.12	41.73
	Final	11:40 AM	255	2050		11600					
86	Initial	11:40 AM	3	0	2100	0	11400	57.56	104.16	22.66	41.01
	Final	11:43 AM	258	2100		11400					
87	Initial	11:43 AM	3	0	2150	0	11250	58.93	102.79	23.20	40.47
	Final	11:46 AM	261	2150		11250					
88	Initial	11:46 AM	3	0	2250	0	11300	61.67	103.25	24.28	40.65
	Final	11:49 AM	264	2250		11300					
89	Initial	11:49 AM	3	0	2100	0	11200	57.56	102.33	22.66	40.29
	Final	11:52 AM	267	2100		11200					
90	Initial	11:52 AM	3	0	2150	0	11200	58.93	102.33	23.20	40.29
	Final	11:55 AM	270	2150		11200					
91	Initial	11:55 AM	3	0	2050	0	11200	56.19	102.33	22.12	40.29
	Final	11:58 AM	273	2050		11200					
92	Initial	11:58 AM	3	0	2050	0	11200	56.19	102.33	22.12	40.29
	Final	12:01 PM	276	2050		11200					
93	Initial	12:01 PM	3	0	2100	0	11200	57.56	102.33	22.66	40.29
	Final	12:04 PM	279	2100		11200					
94	Initial	12:04 PM	3	0	2050	0	11200	56.19	102.33	22.12	40.29
	Final	12:07 PM	282	2050		11200					
95	Initial	12:07 PM	3	0	2100	0	11200	57.56	102.33	22.66	40.29
	Final	12:10 PM	285	2100		11200					

96	Initial	12:10 PM	3	0	2150	0	11200	58.93	102.33	23.20	40.29
	Final	12:13 PM	288	2150		11200					
97	Initial	12:13 PM	3	0	2250	0	11200	61.67	102.33	24.28	40.29
	Final	12:16 PM	291	2250		11200					
98	Initial	12:16 PM	3	0	2100	0	11200	57.56	102.33	22.66	40.29
	Final	12:19 PM	294	2100		11200					
99	Initial	12:19 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	12:22 PM	297	1950		11200					
100	Initial	12:22 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	12:25 PM	300	1900		11200					
101	Initial	12:25 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	12:28 PM	303	1900		11200					
102	Initial	12:28 PM	3	0	2000	0	11200	54.82	102.33	21.58	40.29
	Final	12:31 PM	306	2000		11200					
103	Initial	12:31 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	12:34 PM	309	1950		11200					
104	Initial	12:34 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	12:37 PM	312	1900		11200					
105	Initial	12:37 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	12:40 PM	315	1900		11200					
106	Initial	12:40 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	12:43 PM	318	1950		11200					
107	Initial	12:43 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	12:46 PM	321	1900		11200					
108	Initial	12:46 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	12:49 PM	324	1950		11200					
109	Initial	12:49 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	12:52 PM	327	1900		11200					
110	Initial	12:52 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	12:55 PM	330	1900		11200					
111	Initial	12:55 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	12:58 PM	333	1950		11200					
112	Initial	12:58 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:01 PM	336	1900		11200					
113	Initial	1:01 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:04 PM	339	1900		11200					
114	Initial	1:04 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	1:07 PM	342	1875		11200					
115	Initial	1:07 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	1:10 PM	345	1875		11200					
116	Initial	1:10 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	1:13 PM	348	1875		11200					
117	Initial	1:13 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:16 PM	351	1900		11200					
118	Initial	1:16 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	1:19 PM	354	1875		11200					
119	Initial	1:19 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:22 PM	357	1900		11200					
120	Initial	1:22 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:25 PM	360	1900		11200					
121	Initial	1:25 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	1:28 PM	363	1875		11200					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Caleb Brackett

Infiltration Test No I-3

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	8:25 AM	3	0	4400	0	14000	120.61	127.92	47.48	50.36
	Final	8:28 AM	3	4400	4400	14000	14000				
2	Initial	8:28 AM	3	0	4300	0	14300	117.87	130.66	46.40	51.44
	Final	8:31 AM	6	4300	4300	14300	14300				
3	Initial	8:31 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:34 AM	9	4500	4500	14500	14500				
4	Initial	8:34 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:37 AM	12	4650	4650	14500	14500				
5	Initial	8:37 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:40 AM	15	4650	4650	14500	14500				
6	Initial	8:40 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:43 AM	18	4500	4500	14500	14500				
7	Initial	8:43 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:46 AM	21	4750	4750	14500	14500				
8	Initial	8:46 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:49 AM	24	4500	4500	14500	14500				
9	Initial	8:49 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:52 AM	27	4650	4650	14500	14500				
10	Initial	8:52 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:55 AM	30	4650	4650	14500	14500				
11	Initial	8:55 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:58 AM	33	4500	4500	14500	14500				
12	Initial	8:58 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:01 AM	36	4750	4750	14500	14500				
13	Initial	9:01 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:04 AM	39	4500	4500	14500	14500				
14	Initial	9:04 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:07 AM	42	4650	4650	14500	14500				
15	Initial	9:07 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:10 AM	45	4650	4650	14500	14500				
16	Initial	9:10 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:13 AM	48	4500	4500	14500	14500				
17	Initial	9:13 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:16 AM	51	4750	4750	14500	14500				

18	Initial	9:16 AM	3	0	4500	0	14500	14500	123.35	132.49	48.56	52.16
	Final	9:19 AM	54	4500		14500						
19	Initial	9:19 AM	3	0	4650	0	14500	14500	127.46	132.49	50.18	52.16
	Final	9:22 AM	57	4650		14500						
20	Initial	9:22 AM	3	0	4650	0	14500	14500	127.46	132.49	50.18	52.16
	Final	9:25 AM	60	4650		14500						
21	Initial	9:25 AM	3	0	4500	0	14500	14500	123.35	132.49	48.56	52.16
	Final	9:28 AM	63	4500		14500						
22	Initial	9:28 AM	3	0	4750	0	14500	14500	130.20	132.49	51.26	52.16
	Final	9:31 AM	66	4750		14500						
23	Initial	9:31 AM	3	0	4500	0	14500	14500	123.35	132.49	48.56	52.16
	Final	9:34 AM	69	4500		14500						
24	Initial	9:34 AM	3	0	4200	0	14500	14500	115.13	132.49	45.33	52.16
	Final	9:37 AM	72	4200		14500						
25	Initial	9:37 AM	3	0	4100	0	14500	14500	112.38	132.49	44.25	52.16
	Final	9:40 AM	75	4100		14500						
26	Initial	9:40 AM	3	0	4000	0	14500	14500	109.64	132.49	43.17	52.16
	Final	9:43 AM	78	4000		14500						
27	Initial	9:43 AM	3	0	4100	0	14500	14500	112.38	132.49	44.25	52.16
	Final	9:46 AM	81	4100		14500						
28	Initial	9:46 AM	3	0	4000	0	14500	14500	109.64	132.49	43.17	52.16
	Final	9:49 AM	84	4000		14500						
29	Initial	9:49 AM	3	0	4150	0	14100	14100	113.76	128.83	44.79	50.72
	Final	9:52 AM	87	4150		14100						
30	Initial	9:52 AM	3	0	3900	0	14100	14100	106.90	128.83	42.09	50.72
	Final	9:55 AM	90	3900		14100						
31	Initial	9:55 AM	3	0	3900	0	14000	14000	106.90	127.92	42.09	50.36
	Final	9:58 AM	93	3900		14000						
32	Initial	9:58 AM	3	0	3850	0	14100	14100	105.53	128.83	41.55	50.72
	Final	10:01 AM	96	3850		14100						
33	Initial	10:01 AM	3	0	3750	0	13900	13900	102.79	127.00	40.47	50.00
	Final	10:04 AM	99	3750		13900						
34	Initial	10:04 AM	3	0	3700	0	13800	13800	101.42	126.09	39.93	49.64
	Final	10:07 AM	102	3700		13800						
35	Initial	10:07 AM	3	0	3600	0	13850	13850	98.68	126.55	38.85	49.82
	Final	10:10 AM	105	3600		13850						
36	Initial	10:10 AM	3	0	3550	0	13700	13700	97.31	125.18	38.31	49.28
	Final	10:13 AM	108	3550		13700						
37	Initial	10:13 AM	3	0	3550	0	13500	13500	97.31	123.35	38.31	48.56
	Final	10:16 AM	111	3550		13500						
38	Initial	10:16 AM	3	0	3600	0	13650	13650	98.68	124.72	38.85	49.10
	Final	10:19 AM	114	3600		13650						
39	Initial	10:19 AM	3	0	3400	0	13700	13700	93.20	125.18	36.69	49.28
	Final	10:22 AM	117	3400		13700						
40	Initial	10:22 AM	3	0	3300	0	13600	13600	90.46	124.26	35.61	48.92
	Final	10:25 AM	120	3300		13600						
41	Initial	10:25 AM	3	0	3000	0	13500	13500	82.23	123.35	32.38	48.56
	Final	10:28 AM	123	3000		13500						
42	Initial	10:28 AM	3	0	3100	0	13550	13550	84.97	123.81	33.45	48.74
	Final	10:31 AM	126	3100		13550						
43	Initial	10:31 AM	3	0	3050	0	13400	13400	83.60	122.44	32.91	48.20
	Final	10:34 AM	129	3050		13400						

44	Initial	10:34 AM	3	0	3050	0	13300	13300	83.60	121.52	32.91	47.84
	Final	10:37 AM	132	3050		13300						
45	Initial	10:37 AM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	10:40 AM	135	3000		13300						
46	Initial	10:40 AM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	10:43 AM	138	2900		13400						
47	Initial	10:43 AM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	10:46 AM	141	2950		13400						
48	Initial	10:46 AM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	10:49 AM	144	2800		13500						
49	Initial	10:49 AM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	10:52 AM	147	2750		13300						
50	Initial	10:52 AM	3	0	2600	0	13400	13400	71.27	122.44	28.06	48.20
	Final	10:55 AM	150	2600		13400						
51	Initial	10:55 AM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	10:58 AM	153	2500		13300						
52	Initial	10:58 AM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	11:01 AM	156	2400		13400						
53	Initial	11:01 AM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	11:04 AM	159	2300		13500						
54	Initial	11:04 AM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	11:07 AM	162	2350		13400						
55	Initial	11:07 AM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	11:10 AM	165	2250		13300						
56	Initial	11:10 AM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	11:13 AM	168	2200		13300						
57	Initial	11:13 AM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	11:16 AM	171	2100		13100						
58	Initial	11:16 AM	3	0	2150	0	13000	13000	58.93	118.78	23.20	46.76
	Final	11:19 AM	174	2150		13000						
59	Initial	11:19 AM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	11:22 AM	177	2200		13100						
60	Initial	11:22 AM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	11:25 AM	180	2100		13200						
61	Initial	11:25 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	11:28 AM	183	2150		13100						
62	Initial	11:28 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	11:31 AM	186	2100		12900						
63	Initial	11:31 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	11:34 AM	189	2150		13100						
64	Initial	11:34 AM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	11:37 AM	192	2200		13000						
65	Initial	11:37 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	11:40 AM	195	2100		12900						
66	Initial	11:40 AM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	11:43 AM	198	2200		13000						
67	Initial	11:43 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	11:46 AM	201	2100		12900						
68	Initial	11:46 AM	3	0	2150	0	12900	12900	58.93	117.87	23.20	46.40
	Final	11:49 AM	204	2150		12900						
69	Initial	11:49 AM	3	0	2100	0	12800	12800	57.56	116.95	22.66	46.04
	Final	11:52 AM	207	2100		12800						

70	Initial	11:52 AM	3	0	2150	0	12700	12700	58.93	116.04	23.20	45.68
	Final	11:55 AM	210	2150		12700						
71	Initial	11:55 AM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	11:58 AM	213	2200		12500						
72	Initial	11:58 AM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	12:01 PM	216	2100		12600						
73	Initial	12:01 PM	3	0	2200	0	12600	12600	60.30	115.13	23.74	45.33
	Final	12:04 PM	219	2200		12600						
74	Initial	12:04 PM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	12:07 PM	222	2100		12500						
75	Initial	12:07 PM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	12:10 PM	225	2150		12300						
76	Initial	12:10 PM	3	0	2100	0	12200	12200	57.56	111.47	22.66	43.89
	Final	12:13 PM	228	2100		12200						
77	Initial	12:13 PM	3	0	2150	0	12400	12400	58.93	113.30	23.20	44.61
	Final	12:16 PM	231	2150		12400						
78	Initial	12:16 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	12:19 PM	234	2200		12300						
79	Initial	12:19 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	12:22 PM	237	2100		12300						
80	Initial	12:22 PM	3	0	2200	0	12000	12000	60.30	109.64	23.74	43.17
	Final	12:25 PM	240	2200		12000						
81	Initial	12:25 PM	3	0	2100	0	12200	12200	57.56	111.47	22.66	43.89
	Final	12:28 PM	243	2100		12200						
82	Initial	12:28 PM	3	0	2150	0	12100	12100	58.93	110.56	23.20	43.53
	Final	12:31 PM	246	2150		12100						
83	Initial	12:31 PM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	12:34 PM	249	2100		12000						
84	Initial	12:34 PM	3	0	2150	0	11800	11800	58.93	107.82	23.20	42.45
	Final	12:37 PM	252	2150		11800						
85	Initial	12:37 PM	3	0	2200	0	12400	12400	60.30	113.30	23.74	44.61
	Final	12:40 PM	255	2200		12400						
86	Initial	12:40 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	12:43 PM	258	2100		12300						
87	Initial	12:43 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	12:46 PM	261	2200		12300						
88	Initial	12:46 PM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	12:49 PM	264	2100		12000						
89	Initial	12:49 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	12:52 PM	267	2150		12200						
90	Initial	12:52 PM	3	0	2100	0	12100	12100	57.56	110.56	22.66	43.53
	Final	12:55 PM	270	2100		12100						
91	Initial	12:55 PM	3	0	2150	0	12000	12000	58.93	109.64	23.20	43.17
	Final	12:58 PM	273	2150		12000						
92	Initial	12:58 PM	3	0	2200	0	11800	11800	60.30	107.82	23.74	42.45
	Final	1:01 PM	276	2200		11800						
93	Initial	1:01 PM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	1:04 PM	279	2100		12400						
94	Initial	1:04 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	1:07 PM	282	2200		12300						
95	Initial	1:07 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	1:10 PM	285	2100		12300						

96	Initial	1:10 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	1:13 PM	288	2150		12000					
97	Initial	1:13 PM	3	0	2200	0	12200	60.30	111.47	23.74	43.89
	Final	1:16 PM	291	2200		12200					
98	Initial	1:16 PM	3	0	2200	0	12100	60.30	110.56	23.74	43.53
	Final	1:19 PM	294	2200		12100					
99	Initial	1:19 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	1:22 PM	297	2100		12000					
100	Initial	1:22 PM	3	0	2150	0	11800	58.93	107.82	23.20	42.45
	Final	1:25 PM	300	2150		11800					
101	Initial	1:25 PM	3	0	2200	0	12400	60.30	113.30	23.74	44.61
	Final	1:28 PM	303	2200		12400					
102	Initial	1:28 PM	3	0	2150	0	12300	58.93	112.38	23.20	44.25
	Final	1:31 PM	306	2150		12300					
103	Initial	1:31 PM	3	0	2100	0	12300	57.56	112.38	22.66	44.25
	Final	1:34 PM	309	2100		12300					
104	Initial	1:34 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	1:37 PM	312	2200		12000					
105	Initial	1:37 PM	3	0	2300	0	12200	63.05	111.47	24.82	43.89
	Final	1:40 PM	315	2300		12200					
106	Initial	1:40 PM	3	0	2100	0	12100	57.56	110.56	22.66	43.53
	Final	1:43 PM	318	2100		12100					
107	Initial	1:43 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	1:46 PM	321	2150		12000					
108	Initial	1:46 PM	3	0	2100	0	11800	57.56	107.82	22.66	42.45
	Final	1:49 PM	324	2100		11800					
109	Initial	1:49 PM	3	0	2050	0	12400	56.19	113.30	22.12	44.61
	Final	1:52 PM	327	2050		12400					
110	Initial	1:52 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	1:55 PM	330	2100		12000					
111	Initial	1:55 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	1:58 PM	333	2200		12000					
112	Initial	1:58 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:01 PM	336	2100		12000					
113	Initial	2:01 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	2:04 PM	339	2150		12000					
114	Initial	2:04 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:07 PM	342	2100		12000					
115	Initial	2:07 PM	3	0	2050	0	12000	56.19	109.64	22.12	43.17
	Final	2:10 PM	345	2050		12000					
116	Initial	2:10 PM	3	0	2050	0	12000	56.19	109.64	22.12	43.17
	Final	2:13 PM	348	2050		12000					
117	Initial	2:13 PM	3	0	2050	0	12000	56.19	109.64	22.12	43.17
	Final	2:16 PM	351	2050		12000					
118	Initial	2:16 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:19 PM	354	2100		12000					
119	Initial	2:19 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:22 PM	357	2100		12000					
120	Initial	2:22 PM	3	0	2050	0	12000	56.19	109.64	22.12	43.17
	Final	2:25 PM	360	2050		12000					
121	Initial	2:25 PM	3	0	2050	0	12000	56.19	109.64	22.12	43.17
	Final	2:28 PM	363	2050		12000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Oscar Sandoval

Infiltration Test No I-4

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	10:15 AM	3	0	3550	0	5000	97.31	45.68	38.31	17.99
	Final	10:18 AM	3	3550	3550	5000					
2	Initial	10:18 AM	3	0	3550	0	5500	97.31	50.25	38.31	19.78
	Final	10:21 AM	6	3550	3550	5500					
3	Initial	10:21 AM	3	0	3600	0	6000	98.68	54.82	38.85	21.58
	Final	10:24 AM	9	3600	3600	6000					
4	Initial	10:24 AM	3	0	3400	0	5500	93.20	50.25	36.69	19.78
	Final	10:27 AM	12	3400	3400	5500					
5	Initial	10:27 AM	3	0	3500	0	7000	95.94	63.96	37.77	25.18
	Final	10:30 AM	15	3500	3500	7000					
6	Initial	10:30 AM	3	0	3400	0	6500	93.20	59.39	36.69	23.38
	Final	10:33 AM	18	3400	3400	6500					
7	Initial	10:33 AM	3	0	3400	0	5000	93.20	45.68	36.69	17.99
	Final	10:36 AM	21	3400	3400	5000					
8	Initial	10:36 AM	3	0	3500	0	5500	95.94	50.25	37.77	19.78
	Final	10:39 AM	24	3500	3500	5500					
9	Initial	10:39 AM	3	0	3050	0	6000	83.60	54.82	32.91	21.58
	Final	10:42 AM	27	3050	3050	6000					
10	Initial	10:42 AM	3	0	3400	0	5000	93.20	45.68	36.69	17.99
	Final	10:45 AM	30	3400	3400	5000					
11	Initial	10:45 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	10:48 AM	33	3400	3400	14500					
12	Initial	10:48 AM	3	0	3500	0	14500	95.94	132.49	37.77	52.16
	Final	10:51 AM	36	3500	3500	14500					
13	Initial	10:51 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	10:54 AM	39	3400	3400	14500					
14	Initial	10:54 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	10:57 AM	42	3400	3400	14500					
15	Initial	10:57 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	11:00 AM	45	3400	3400	14500					
16	Initial	11:00 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	11:03 AM	48	3400	3400	14500					
17	Initial	11:03 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	11:06 AM	51	3400	3400	14500					

18	Initial	11:06 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	11:09 AM	54	3400		14500					
19	Initial	11:09 AM	3	0	3500	0	14500	95.94	132.49	37.77	52.16
	Final	11:12 AM	57	3500		14500					
20	Initial	11:12 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	11:15 AM	60	3400		14500					
21	Initial	11:15 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	11:18 AM	63	3400		14500					
22	Initial	11:18 AM	3	0	3500	0	14500	95.94	132.49	37.77	52.16
	Final	11:21 AM	66	3500		14500					
23	Initial	11:21 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	11:24 AM	69	3400		14500					
24	Initial	11:24 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	11:27 AM	72	3400		14500					
25	Initial	11:27 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	11:30 AM	75	3400		14500					
26	Initial	11:30 AM	3	0	3500	0	14500	95.94	132.49	37.77	52.16
	Final	11:33 AM	78	3500		14500					
27	Initial	11:33 AM	3	0	3400	0	14500	93.20	132.49	36.69	52.16
	Final	11:36 AM	81	3400		14500					
28	Initial	11:36 AM	3	0	3500	0	14500	95.94	132.49	37.77	52.16
	Final	11:39 AM	84	3500		14500					
29	Initial	11:39 AM	3	0	3050	0	14100	83.60	128.83	32.91	50.72
	Final	11:42 AM	87	3050		14100					
30	Initial	11:42 AM	3	0	3050	0	14100	83.60	128.83	32.91	50.72
	Final	11:45 AM	90	3050		14100					
31	Initial	11:45 AM	3	0	3600	0	14000	98.68	127.92	38.85	50.36
	Final	11:48 AM	93	3600		14000					
32	Initial	11:48 AM	3	0	3400	0	14100	93.20	128.83	36.69	50.72
	Final	11:51 AM	96	3400		14100					
33	Initial	11:51 AM	3	0	3400	0	13900	93.20	127.00	36.69	50.00
	Final	11:54 AM	99	3400		13900					
34	Initial	11:54 AM	3	0	3500	0	13800	95.94	126.09	37.77	49.64
	Final	11:57 AM	102	3500		13800					
35	Initial	11:57 AM	3	0	3600	0	13850	98.68	126.55	38.85	49.82
	Final	12:00 PM	105	3600		13850					
36	Initial	12:00 PM	3	0	3550	0	13700	97.31	125.18	38.31	49.28
	Final	12:03 PM	108	3550		13700					
37	Initial	12:03 PM	3	0	3550	0	13500	97.31	123.35	38.31	48.56
	Final	12:06 PM	111	3550		13500					
38	Initial	12:06 PM	3	0	3600	0	13650	98.68	124.72	38.85	49.10
	Final	12:09 PM	114	3600		13650					
39	Initial	12:09 PM	3	0	3400	0	13700	93.20	125.18	36.69	49.28
	Final	12:12 PM	117	3400		13700					
40	Initial	12:12 PM	3	0	3300	0	13600	90.46	124.26	35.61	48.92
	Final	12:15 PM	120	3300		13600					
41	Initial	12:15 PM	3	0	3000	0	13500	82.23	123.35	32.38	48.56
	Final	12:18 PM	123	3000		13500					
42	Initial	12:18 PM	3	0	3100	0	13550	84.97	123.81	33.45	48.74
	Final	12:21 PM	126	3100		13550					
43	Initial	12:21 PM	3	0	3050	0	13400	83.60	122.44	32.91	48.20
	Final	12:24 PM	129	3050		13400					

44	Initial	12:24 PM	3	0	3050	0	13300	13300	83.60	121.52	32.91	47.84
	Final	12:27 PM	132	3050		13300						
45	Initial	12:27 PM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	12:30 PM	135	3000		13300						
46	Initial	12:30 PM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	12:33 PM	138	2900		13400						
47	Initial	12:33 PM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	12:36 PM	141	2950		13400						
48	Initial	12:36 PM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	12:39 PM	144	2800		13500						
49	Initial	12:39 PM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	12:42 PM	147	2750		13300						
50	Initial	12:42 PM	3	0	2600	0	13400	13400	71.27	122.44	28.06	48.20
	Final	12:45 PM	150	2600		13400						
51	Initial	12:45 PM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	12:48 PM	153	2500		13300						
52	Initial	12:48 PM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	12:51 PM	156	2400		13400						
53	Initial	12:51 PM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	12:54 PM	159	2300		13500						
54	Initial	12:54 PM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	12:57 PM	162	2350		13400						
55	Initial	12:57 PM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	1:00 PM	165	2250		13300						
56	Initial	1:00 PM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	1:03 PM	168	2200		13300						
57	Initial	1:03 PM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	1:06 PM	171	2100		13100						
58	Initial	1:06 PM	3	0	2150	0	13000	13000	58.93	118.78	23.20	46.76
	Final	1:09 PM	174	2150		13000						
59	Initial	1:09 PM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	1:12 PM	177	2200		13100						
60	Initial	1:12 PM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	1:15 PM	180	2100		13200						
61	Initial	1:15 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	1:18 PM	183	2150		13100						
62	Initial	1:18 PM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	1:21 PM	186	2000		12900						
63	Initial	1:21 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	1:24 PM	189	2150		13100						
64	Initial	1:24 PM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	1:27 PM	192	2200		13000						
65	Initial	1:27 PM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	1:30 PM	195	2100		12900						
66	Initial	1:30 PM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	1:33 PM	198	2200		13000						
67	Initial	1:33 PM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	1:36 PM	201	2100		12900						
68	Initial	1:36 PM	3	0	2150	0	12900	12900	58.93	117.87	23.20	46.40
	Final	1:39 PM	204	2150		12900						
69	Initial	1:39 PM	3	0	2000	0	12800	12800	54.82	116.95	21.58	46.04
	Final	1:42 PM	207	2000		12800						

70	Initial	1:42 PM	3	0	2150	0	12700	12700	58.93	116.04	23.20	45.68
	Final	1:45 PM	210	2150		12700						
71	Initial	1:45 PM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	1:48 PM	213	2200		12500						
72	Initial	1:48 PM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	1:51 PM	216	2100		12600						
73	Initial	1:51 PM	3	0	2200	0	12600	12600	60.30	115.13	23.74	45.33
	Final	1:54 PM	219	2200		12600						
74	Initial	1:54 PM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	1:57 PM	222	2100		12500						
75	Initial	1:57 PM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	2:00 PM	225	2150		12300						
76	Initial	2:00 PM	3	0	2000	0	12200	12200	54.82	111.47	21.58	43.89
	Final	2:03 PM	228	2000		12200						
77	Initial	2:03 PM	3	0	2150	0	12400	12400	58.93	113.30	23.20	44.61
	Final	2:06 PM	231	2150		12400						
78	Initial	2:06 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	2:09 PM	234	2200		12300						
79	Initial	2:09 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	2:12 PM	237	2100		12300						
80	Initial	2:12 PM	3	0	2200	0	12000	12000	60.30	109.64	23.74	43.17
	Final	2:15 PM	240	2200		12000						
81	Initial	2:15 PM	3	0	2100	0	12200	12200	57.56	111.47	22.66	43.89
	Final	2:18 PM	243	2100		12200						
82	Initial	2:18 PM	3	0	2150	0	12100	12100	58.93	110.56	23.20	43.53
	Final	2:21 PM	246	2150		12100						
83	Initial	2:21 PM	3	0	2000	0	12000	12000	54.82	109.64	21.58	43.17
	Final	2:24 PM	249	2000		12000						
84	Initial	2:24 PM	3	0	2150	0	11800	11800	58.93	107.82	23.20	42.45
	Final	2:27 PM	252	2150		11800						
85	Initial	2:27 PM	3	0	2200	0	12400	12400	60.30	113.30	23.74	44.61
	Final	2:30 PM	255	2200		12400						
86	Initial	2:30 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	2:33 PM	258	2100		12300						
87	Initial	2:33 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	2:36 PM	261	2200		12300						
88	Initial	2:36 PM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	2:39 PM	264	2100		12000						
89	Initial	2:39 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	2:42 PM	267	2150		12200						
90	Initial	2:42 PM	3	0	2000	0	12100	12100	54.82	110.56	21.58	43.53
	Final	2:45 PM	270	2000		12100						
91	Initial	2:45 PM	3	0	2150	0	12000	12000	58.93	109.64	23.20	43.17
	Final	2:48 PM	273	2150		12000						
92	Initial	2:48 PM	3	0	2200	0	11800	11800	60.30	107.82	23.74	42.45
	Final	2:51 PM	276	2200		11800						
93	Initial	2:51 PM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	2:54 PM	279	2100		12400						
94	Initial	2:54 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	2:57 PM	282	2200		12300						
95	Initial	2:57 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	3:00 PM	285	2100		12300						

96	Initial	3:00 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:03 PM	288	2150		12000					
97	Initial	3:03 PM	3	0	2200	0	12200	60.30	111.47	23.74	43.89
	Final	3:06 PM	291	2200		12200					
98	Initial	3:06 PM	3	0	2200	0	12100	60.30	110.56	23.74	43.53
	Final	3:09 PM	294	2200		12100					
99	Initial	3:09 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	3:12 PM	297	2100		12000					
100	Initial	3:12 PM	3	0	2150	0	11800	58.93	107.82	23.20	42.45
	Final	3:15 PM	300	2150		11800					
101	Initial	3:15 PM	3	0	2200	0	12400	60.30	113.30	23.74	44.61
	Final	3:18 PM	303	2200		12400					
102	Initial	3:18 PM	3	0	2150	0	12300	58.93	112.38	23.20	44.25
	Final	3:21 PM	306	2150		12300					
103	Initial	3:21 PM	3	0	2100	0	12300	57.56	112.38	22.66	44.25
	Final	3:24 PM	309	2100		12300					
104	Initial	3:24 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	3:27 PM	312	2200		12000					
105	Initial	3:27 PM	3	0	2300	0	12200	63.05	111.47	24.82	43.89
	Final	3:30 PM	315	2300		12200					
106	Initial	3:30 PM	3	0	2100	0	12100	57.56	110.56	22.66	43.53
	Final	3:33 PM	318	2100		12100					
107	Initial	3:33 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:36 PM	321	2150		12000					
108	Initial	3:36 PM	3	0	2100	0	11800	57.56	107.82	22.66	42.45
	Final	3:39 PM	324	2100		11800					
109	Initial	3:39 PM	3	0	2050	0	12400	56.19	113.30	22.12	44.61
	Final	3:42 PM	327	2050		12400					
110	Initial	3:42 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	3:45 PM	330	2100		12000					
111	Initial	3:45 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	3:48 PM	333	2200		12000					
112	Initial	3:48 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	3:51 PM	336	2100		12000					
113	Initial	3:51 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	3:54 PM	339	2000		12000					
114	Initial	3:54 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	3:57 PM	342	2000		12000					
115	Initial	3:57 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	4:00 PM	345	2000		12000					
116	Initial	4:00 PM	3	0	2050	0	12000	56.19	109.64	22.12	43.17
	Final	4:03 PM	348	2050		12000					
117	Initial	4:03 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	4:06 PM	351	2000		12000					
118	Initial	4:06 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	4:09 PM	354	2000		12000					
119	Initial	4:09 PM	3	0	2050	0	12000	56.19	109.64	22.12	43.17
	Final	4:12 PM	357	2050		12000					
120	Initial	4:12 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	4:15 PM	360	2000		12000					
121	Initial	4:15 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	4:18 PM	363	2000		12000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Oscar Sandoval

Infiltration Test No I-5

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	9:14 AM	3	0	4400	0	14000	120.61	127.92	47.48	50.36
	Final	9:17 AM	3	4400	4400	14000					
2	Initial	9:17 AM	3	0	4300	0	14300	117.87	130.66	46.40	51.44
	Final	9:20 AM	6	4300	4300	14300					
3	Initial	9:20 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:23 AM	9	4500	4500	14500					
4	Initial	9:23 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:26 AM	12	4650	4650	14500					
5	Initial	9:26 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:29 AM	15	4650	4650	14500					
6	Initial	9:29 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:32 AM	18	4500	4500	14500					
7	Initial	9:32 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:35 AM	21	4750	4750	14500					
8	Initial	9:35 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:38 AM	24	4500	4500	14500					
9	Initial	9:38 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:41 AM	27	4650	4650	14500					
10	Initial	9:41 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:44 AM	30	4650	4650	14500					
11	Initial	9:44 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:47 AM	33	4500	4500	14500					
12	Initial	9:47 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:50 AM	36	4750	4750	14500					
13	Initial	9:50 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:53 AM	39	4500	4500	14500					
14	Initial	9:53 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:56 AM	42	4650	4650	14500					
15	Initial	9:56 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:59 AM	45	4650	4650	14500					
16	Initial	9:59 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:02 AM	48	4500	4500	14500					
17	Initial	10:02 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	10:05 AM	51	4750	4750	14500					

18	Initial	10:05 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:08 AM	54	4500			14500					
19	Initial	10:08 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:11 AM	57	4650			14500					
20	Initial	10:11 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:14 AM	60	4650			14500					
21	Initial	10:14 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:17 AM	63	4500			14500					
22	Initial	10:17 AM	3	0	4750	4750	0	14500	130.20	132.49	51.26	52.16
	Final	10:20 AM	66	4750			14500					
23	Initial	10:20 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:23 AM	69	4500			14500					
24	Initial	10:23 AM	3	0	4200	4200	0	14500	115.13	132.49	45.33	52.16
	Final	10:26 AM	72	4200			14500					
25	Initial	10:26 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	10:29 AM	75	4100			14500					
26	Initial	10:29 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	10:32 AM	78	4000			14500					
27	Initial	10:32 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	10:35 AM	81	4100			14500					
28	Initial	10:35 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	10:38 AM	84	4000			14500					
29	Initial	10:38 AM	3	0	4150	4150	0	14100	113.76	128.83	44.79	50.72
	Final	10:41 AM	87	4150			14100					
30	Initial	10:41 AM	3	0	3900	3900	0	14100	106.90	128.83	42.09	50.72
	Final	10:44 AM	90	3900			14100					
31	Initial	10:44 AM	3	0	3900	3900	0	14000	106.90	127.92	42.09	50.36
	Final	10:47 AM	93	3900			14000					
32	Initial	10:47 AM	3	0	3850	3850	0	14100	105.53	128.83	41.55	50.72
	Final	10:50 AM	96	3850			14100					
33	Initial	10:50 AM	3	0	3750	3750	0	13900	102.79	127.00	40.47	50.00
	Final	10:53 AM	99	3750			13900					
34	Initial	10:53 AM	3	0	3700	3700	0	13800	101.42	126.09	39.93	49.64
	Final	10:56 AM	102	3700			13800					
35	Initial	10:56 AM	3	0	3600	3600	0	13850	98.68	126.55	38.85	49.82
	Final	10:59 AM	105	3600			13850					
36	Initial	10:59 AM	3	0	3550	3550	0	13700	97.31	125.18	38.31	49.28
	Final	11:02 AM	108	3550			13700					
37	Initial	11:02 AM	3	0	3550	3550	0	13500	97.31	123.35	38.31	48.56
	Final	11:05 AM	111	3550			13500					
38	Initial	11:05 AM	3	0	3600	3600	0	13650	98.68	124.72	38.85	49.10
	Final	11:08 AM	114	3600			13650					
39	Initial	11:08 AM	3	0	3400	3400	0	13700	93.20	125.18	36.69	49.28
	Final	11:11 AM	117	3400			13700					
40	Initial	11:11 AM	3	0	3300	3300	0	13600	90.46	124.26	35.61	48.92
	Final	11:14 AM	120	3300			13600					
41	Initial	11:14 AM	3	0	3000	3000	0	13500	82.23	123.35	32.38	48.56
	Final	11:17 AM	123	3000			13500					
42	Initial	11:17 AM	3	0	3100	3100	0	13550	84.97	123.81	33.45	48.74
	Final	11:20 AM	126	3100			13550					
43	Initial	11:20 AM	3	0	3050	3050	0	13400	83.60	122.44	32.91	48.20
	Final	11:23 AM	129	3050			13400					

44	Initial	11:23 AM	3	0	3050	0	13300	13300	83.60	121.52	32.91	47.84
	Final	11:26 AM	132	3050		13300						
45	Initial	11:26 AM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	11:29 AM	135	3000		13300						
46	Initial	11:29 AM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	11:32 AM	138	2900		13400						
47	Initial	11:32 AM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	11:35 AM	141	2950		13400						
48	Initial	11:35 AM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	11:38 AM	144	2800		13500						
49	Initial	11:38 AM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	11:41 AM	147	2750		13300						
50	Initial	11:41 AM	3	0	2600	0	13400	13400	71.27	122.44	28.06	48.20
	Final	11:44 AM	150	2600		13400						
51	Initial	11:44 AM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	11:47 AM	153	2500		13300						
52	Initial	11:47 AM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	11:50 AM	156	2400		13400						
53	Initial	11:50 AM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	11:53 AM	159	2300		13500						
54	Initial	11:53 AM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	11:56 AM	162	2350		13400						
55	Initial	11:56 AM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	11:59 AM	165	2250		13300						
56	Initial	11:59 AM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	12:02 PM	168	2200		13300						
57	Initial	12:02 PM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	12:05 PM	171	2200		13100						
58	Initial	12:05 PM	3	0	2150	0	13000	13000	58.93	118.78	23.20	46.76
	Final	12:08 PM	174	2150		13000						
59	Initial	12:08 PM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	12:11 PM	177	2200		13100						
60	Initial	12:11 PM	3	0	2200	0	13200	13200	60.30	120.61	23.74	47.48
	Final	12:14 PM	180	2200		13200						
61	Initial	12:14 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	12:17 PM	183	2150		13100						
62	Initial	12:17 PM	3	0	2200	0	12900	12900	60.30	117.87	23.74	46.40
	Final	12:20 PM	186	2200		12900						
63	Initial	12:20 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	12:23 PM	189	2150		13100						
64	Initial	12:23 PM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	12:26 PM	192	2200		13000						
65	Initial	12:26 PM	3	0	2200	0	12900	12900	60.30	117.87	23.74	46.40
	Final	12:29 PM	195	2200		12900						
66	Initial	12:29 PM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	12:32 PM	198	2200		13000						
67	Initial	12:32 PM	3	0	2200	0	12900	12900	60.30	117.87	23.74	46.40
	Final	12:35 PM	201	2200		12900						
68	Initial	12:35 PM	3	0	2150	0	12900	12900	58.93	117.87	23.20	46.40
	Final	12:38 PM	204	2150		12900						
69	Initial	12:38 PM	3	0	2200	0	12800	12800	60.30	116.95	23.74	46.04
	Final	12:41 PM	207	2200		12800						

70	Initial	12:41 PM	3	0	2150	0	12700	12700	58.93	116.04	23.20	45.68
	Final	12:44 PM	210	2150		12700						
71	Initial	12:44 PM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	12:47 PM	213	2200		12500						
72	Initial	12:47 PM	3	0	2200	0	12600	12600	60.30	115.13	23.74	45.33
	Final	12:50 PM	216	2200		12600						
73	Initial	12:50 PM	3	0	2200	0	12600	12600	60.30	115.13	23.74	45.33
	Final	12:53 PM	219	2200		12600						
74	Initial	12:53 PM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	12:56 PM	222	2200		12500						
75	Initial	12:56 PM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	12:59 PM	225	2150		12300						
76	Initial	12:59 PM	3	0	2200	0	12200	12200	60.30	111.47	23.74	43.89
	Final	1:02 PM	228	2200		12200						
77	Initial	1:02 PM	3	0	2150	0	12400	12400	58.93	113.30	23.20	44.61
	Final	1:05 PM	231	2150		12400						
78	Initial	1:05 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	1:08 PM	234	2200		12300						
79	Initial	1:08 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	1:11 PM	237	2200		12300						
80	Initial	1:11 PM	3	0	2200	0	12000	12000	60.30	109.64	23.74	43.17
	Final	1:14 PM	240	2200		12000						
81	Initial	1:14 PM	3	0	2200	0	12200	12200	60.30	111.47	23.74	43.89
	Final	1:17 PM	243	2200		12200						
82	Initial	1:17 PM	3	0	2150	0	12100	12100	58.93	110.56	23.20	43.53
	Final	1:20 PM	246	2150		12100						
83	Initial	1:20 PM	3	0	2200	0	12000	12000	60.30	109.64	23.74	43.17
	Final	1:23 PM	249	2200		12000						
84	Initial	1:23 PM	3	0	2150	0	11800	11800	58.93	107.82	23.20	42.45
	Final	1:26 PM	252	2150		11800						
85	Initial	1:26 PM	3	0	2200	0	12400	12400	60.30	113.30	23.74	44.61
	Final	1:29 PM	255	2200		12400						
86	Initial	1:29 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	1:32 PM	258	2200		12300						
87	Initial	1:32 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	1:35 PM	261	2200		12300						
88	Initial	1:35 PM	3	0	2200	0	12000	12000	60.30	109.64	23.74	43.17
	Final	1:38 PM	264	2200		12000						
89	Initial	1:38 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	1:41 PM	267	2150		12200						
90	Initial	1:41 PM	3	0	2200	0	12100	12100	60.30	110.56	23.74	43.53
	Final	1:44 PM	270	2200		12100						
91	Initial	1:44 PM	3	0	2150	0	12000	12000	58.93	109.64	23.20	43.17
	Final	1:47 PM	273	2150		12000						
92	Initial	1:47 PM	3	0	2200	0	11800	11800	60.30	107.82	23.74	42.45
	Final	1:50 PM	276	2200		11800						
93	Initial	1:50 PM	3	0	2200	0	12400	12400	60.30	113.30	23.74	44.61
	Final	1:53 PM	279	2200		12400						
94	Initial	1:53 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	1:56 PM	282	2200		12300						
95	Initial	1:56 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	1:59 PM	285	2200		12300						

96	Initial	1:59 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	2:02 PM	288	2150		12000					
97	Initial	2:02 PM	3	0	2200	0	12200	60.30	111.47	23.74	43.89
	Final	2:05 PM	291	2200		12200					
98	Initial	2:05 PM	3	0	2200	0	12100	60.30	110.56	23.74	43.53
	Final	2:08 PM	294	2200		12100					
99	Initial	2:08 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:11 PM	297	2200		12000					
100	Initial	2:11 PM	3	0	2150	0	11800	58.93	107.82	23.20	42.45
	Final	2:14 PM	300	2150		11800					
101	Initial	2:14 PM	3	0	2200	0	12400	60.30	113.30	23.74	44.61
	Final	2:17 PM	303	2200		12400					
102	Initial	2:17 PM	3	0	2150	0	12300	58.93	112.38	23.20	44.25
	Final	2:20 PM	306	2150		12300					
103	Initial	2:20 PM	3	0	2200	0	12300	60.30	112.38	23.74	44.25
	Final	2:23 PM	309	2200		12300					
104	Initial	2:23 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:26 PM	312	2200		12000					
105	Initial	2:26 PM	3	0	2300	0	12200	63.05	111.47	24.82	43.89
	Final	2:29 PM	315	2300		12200					
106	Initial	2:29 PM	3	0	2150	0	12100	58.93	110.56	23.20	43.53
	Final	2:32 PM	318	2150		12100					
107	Initial	2:32 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	2:35 PM	321	2150		12000					
108	Initial	2:35 PM	3	0	2150	0	11800	58.93	107.82	23.20	42.45
	Final	2:38 PM	324	2150		11800					
109	Initial	2:38 PM	3	0	2150	0	12400	58.93	113.30	23.20	44.61
	Final	2:41 PM	327	2150		12400					
110	Initial	2:41 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:44 PM	330	2200		12000					
111	Initial	2:44 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:47 PM	333	2200		12000					
112	Initial	2:47 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:50 PM	336	2200		12000					
113	Initial	2:50 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	2:53 PM	339	2150		12000					
114	Initial	2:53 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:56 PM	342	2200		12000					
115	Initial	2:56 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	2:59 PM	345	2150		12000					
116	Initial	2:59 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:02 PM	348	2150		12000					
117	Initial	3:02 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	3:05 PM	351	2200		12000					
118	Initial	3:05 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:08 PM	354	2150		12000					
119	Initial	3:08 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:11 PM	357	2150		12000					
120	Initial	3:11 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:14 PM	360	2150		12000					
121	Initial	3:14 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:17 PM	363	2150		12000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Oscar Sandoval

Infiltration Test No I-6

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	8:11 AM	3	0	4500	0	14000	123.35	127.92	48.56	50.36
	Final	8:14 AM	3	4500	4500	14000	14000				
2	Initial	8:14 AM	3	0	4750	0	14300	130.20	130.66	51.26	51.44
	Final	8:17 AM	6	4750	4750	14300	14300				
3	Initial	8:17 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:20 AM	9	4500	4500	14500	14500				
4	Initial	8:20 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:23 AM	12	4650	4650	14500	14500				
5	Initial	8:23 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:26 AM	15	4650	4650	14500	14500				
6	Initial	8:26 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:29 AM	18	4500	4500	14500	14500				
7	Initial	8:29 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:32 AM	21	4750	4750	14500	14500				
8	Initial	8:32 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:35 AM	24	4500	4500	14500	14500				
9	Initial	8:35 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:38 AM	27	4650	4650	14500	14500				
10	Initial	8:38 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:41 AM	30	4650	4650	14500	14500				
11	Initial	8:41 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:44 AM	33	4500	4500	14500	14500				
12	Initial	8:44 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:47 AM	36	4750	4750	14500	14500				
13	Initial	8:47 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:50 AM	39	4500	4500	14500	14500				
14	Initial	8:50 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:53 AM	42	4650	4650	14500	14500				
15	Initial	8:53 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:56 AM	45	4650	4650	14500	14500				
16	Initial	8:56 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:59 AM	48	4500	4500	14500	14500				
17	Initial	8:59 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:02 AM	51	4750	4750	14500	14500				

18	Initial	9:02 AM	3	0	4500	0	14500	14500	123.35	132.49	48.56	52.16
	Final	9:05 AM	54	4500		14500						
19	Initial	9:05 AM	3	0	4650	0	14500	14500	127.46	132.49	50.18	52.16
	Final	9:08 AM	57	4650		14500						
20	Initial	9:08 AM	3	0	4650	0	14500	14500	127.46	132.49	50.18	52.16
	Final	9:11 AM	60	4650		14500						
21	Initial	9:11 AM	3	0	4500	0	14500	14500	123.35	132.49	48.56	52.16
	Final	9:14 AM	63	4500		14500						
22	Initial	9:14 AM	3	0	4750	0	14500	14500	130.20	132.49	51.26	52.16
	Final	9:17 AM	66	4750		14500						
23	Initial	9:17 AM	3	0	4500	0	14500	14500	123.35	132.49	48.56	52.16
	Final	9:20 AM	69	4500		14500						
24	Initial	9:20 AM	3	0	4200	0	14500	14500	115.13	132.49	45.33	52.16
	Final	9:23 AM	72	4200		14500						
25	Initial	9:23 AM	3	0	4100	0	14500	14500	112.38	132.49	44.25	52.16
	Final	9:26 AM	75	4100		14500						
26	Initial	9:26 AM	3	0	4000	0	14500	14500	109.64	132.49	43.17	52.16
	Final	9:29 AM	78	4000		14500						
27	Initial	9:29 AM	3	0	4100	0	14500	14500	112.38	132.49	44.25	52.16
	Final	9:32 AM	81	4100		14500						
28	Initial	9:32 AM	3	0	4000	0	14500	14500	109.64	132.49	43.17	52.16
	Final	9:35 AM	84	4000		14500						
29	Initial	9:35 AM	3	0	4150	0	14100	14100	113.76	128.83	44.79	50.72
	Final	9:38 AM	87	4150		14100						
30	Initial	9:38 AM	3	0	3900	0	14100	14100	106.90	128.83	42.09	50.72
	Final	9:41 AM	90	3900		14100						
31	Initial	9:41 AM	3	0	3900	0	14000	14000	106.90	127.92	42.09	50.36
	Final	9:44 AM	93	3900		14000						
32	Initial	9:44 AM	3	0	3850	0	14100	14100	105.53	128.83	41.55	50.72
	Final	9:47 AM	96	3850		14100						
33	Initial	9:47 AM	3	0	3750	0	13900	13900	102.79	127.00	40.47	50.00
	Final	9:50 AM	99	3750		13900						
34	Initial	9:50 AM	3	0	3700	0	13800	13800	101.42	126.09	39.93	49.64
	Final	9:53 AM	102	3700		13800						
35	Initial	9:53 AM	3	0	3600	0	13850	13850	98.68	126.55	38.85	49.82
	Final	9:56 AM	105	3600		13850						
36	Initial	9:56 AM	3	0	3550	0	13700	13700	97.31	125.18	38.31	49.28
	Final	9:59 AM	108	3550		13700						
37	Initial	9:59 AM	3	0	3550	0	13500	13500	97.31	123.35	38.31	48.56
	Final	10:02 AM	111	3550		13500						
38	Initial	10:02 AM	3	0	3600	0	13650	13650	98.68	124.72	38.85	49.10
	Final	10:05 AM	114	3600		13650						
39	Initial	10:05 AM	3	0	3400	0	13700	13700	93.20	125.18	36.69	49.28
	Final	10:08 AM	117	3400		13700						
40	Initial	10:08 AM	3	0	3300	0	13600	13600	90.46	124.26	35.61	48.92
	Final	10:11 AM	120	3300		13600						
41	Initial	10:11 AM	3	0	3000	0	13500	13500	82.23	123.35	32.38	48.56
	Final	10:14 AM	123	3000		13500						
42	Initial	10:14 AM	3	0	3100	0	13550	13550	84.97	123.81	33.45	48.74
	Final	10:17 AM	126	3100		13550						
43	Initial	10:17 AM	3	0	3050	0	13400	13400	83.60	122.44	32.91	48.20
	Final	10:20 AM	129	3050		13400						

44	Initial	10:20 AM	3	0	3100	0	13300	13300	84.97	121.52	33.45	47.84
	Final	10:23 AM	132	3100								
45	Initial	10:23 AM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	10:26 AM	135	3000								
46	Initial	10:26 AM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	10:29 AM	138	2900								
47	Initial	10:29 AM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	10:32 AM	141	2950								
48	Initial	10:32 AM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	10:35 AM	144	2800								
49	Initial	10:35 AM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	10:38 AM	147	2750								
50	Initial	10:38 AM	3	0	2800	0	13400	13400	76.75	122.44	30.22	48.20
	Final	10:41 AM	150	2800								
51	Initial	10:41 AM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	10:44 AM	153	2500								
52	Initial	10:44 AM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	10:47 AM	156	2400								
53	Initial	10:47 AM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	10:50 AM	159	2300								
54	Initial	10:50 AM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	10:53 AM	162	2350								
55	Initial	10:53 AM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	10:56 AM	165	2250								
56	Initial	10:56 AM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	10:59 AM	168	2200								
57	Initial	10:59 AM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	11:02 AM	171	2100								
58	Initial	11:02 AM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	11:05 AM	174	2200								
59	Initial	11:05 AM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	11:08 AM	177	2200								
60	Initial	11:08 AM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	11:11 AM	180	2100								
61	Initial	11:11 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	11:14 AM	183	2150								
62	Initial	11:14 AM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	11:17 AM	186	2000								
63	Initial	11:17 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	11:20 AM	189	2150								
64	Initial	11:20 AM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	11:23 AM	192	2200								
65	Initial	11:23 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	11:26 AM	195	2100								
66	Initial	11:26 AM	3	0	2050	0	13000	13000	56.19	118.78	22.12	46.76
	Final	11:29 AM	198	2050								
67	Initial	11:29 AM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	11:32 AM	201	2000								
68	Initial	11:32 AM	3	0	2050	0	12900	12900	56.19	117.87	22.12	46.40
	Final	11:35 AM	204	2050								
69	Initial	11:35 AM	3	0	2100	0	12800	12800	57.56	116.95	22.66	46.04
	Final	11:38 AM	207	2100								

70	Initial	11:38 AM	3	0	2100	0	12700	12700	57.56	116.04	22.66	45.68
	Final	11:41 AM	210	2100		12700						
71	Initial	11:41 AM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	11:44 AM	213	2100		12500						
72	Initial	11:44 AM	3	0	2000	0	12600	12600	54.82	115.13	21.58	45.33
	Final	11:47 AM	216	2000		12600						
73	Initial	11:47 AM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	11:50 AM	219	2100		12600						
74	Initial	11:50 AM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	11:53 AM	222	2200		12500						
75	Initial	11:53 AM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	11:56 AM	225	2100		12300						
76	Initial	11:56 AM	3	0	2050	0	12200	12200	56.19	111.47	22.12	43.89
	Final	11:59 AM	228	2050		12200						
77	Initial	11:59 AM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	12:02 PM	231	2100		12400						
78	Initial	12:02 PM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	12:05 PM	234	2150		12300						
79	Initial	12:05 PM	3	0	2250	0	12300	12300	61.67	112.38	24.28	44.25
	Final	12:08 PM	237	2250		12300						
80	Initial	12:08 PM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	12:11 PM	240	2100		12000						
81	Initial	12:11 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	12:14 PM	243	2150		12200						
82	Initial	12:14 PM	3	0	2000	0	12100	12100	54.82	110.56	21.58	43.53
	Final	12:17 PM	246	2000		12100						
83	Initial	12:17 PM	3	0	2050	0	12000	12000	56.19	109.64	22.12	43.17
	Final	12:20 PM	249	2050		12000						
84	Initial	12:20 PM	3	0	2000	0	11800	11800	54.82	107.82	21.58	42.45
	Final	12:23 PM	252	2000		11800						
85	Initial	12:23 PM	3	0	2000	0	12400	12400	54.82	113.30	21.58	44.61
	Final	12:26 PM	255	2000		12400						
86	Initial	12:26 PM	3	0	2050	0	12300	12300	56.19	112.38	22.12	44.25
	Final	12:29 PM	258	2050		12300						
87	Initial	12:29 PM	3	0	2000	0	12300	12300	54.82	112.38	21.58	44.25
	Final	12:32 PM	261	2000		12300						
88	Initial	12:32 PM	3	0	2000	0	12000	12000	54.82	109.64	21.58	43.17
	Final	12:35 PM	264	2000		12000						
89	Initial	12:35 PM	3	0	2000	0	12200	12200	54.82	111.47	21.58	43.89
	Final	12:38 PM	267	2000		12200						
90	Initial	12:38 PM	3	0	2000	0	12100	12100	54.82	110.56	21.58	43.53
	Final	12:41 PM	270	2000		12100						
91	Initial	12:41 PM	3	0	2000	0	12000	12000	54.82	109.64	21.58	43.17
	Final	12:44 PM	273	2000		12000						
92	Initial	12:44 PM	3	0	2000	0	11800	11800	54.82	107.82	21.58	42.45
	Final	12:47 PM	276	2000		11800						
93	Initial	12:47 PM	3	0	2000	0	12400	12400	54.82	113.30	21.58	44.61
	Final	12:50 PM	279	2000		12400						
94	Initial	12:50 PM	3	0	2000	0	12300	12300	54.82	112.38	21.58	44.25
	Final	12:53 PM	282	2000		12300						
95	Initial	12:53 PM	3	0	2000	0	12300	12300	54.82	112.38	21.58	44.25
	Final	12:56 PM	285	2000		12300						

96	Initial	12:56 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	12:59 PM	288	2000		12000					
97	Initial	12:59 PM	3	0	2000	0	12200	54.82	111.47	21.58	43.89
	Final	1:02 PM	291	2000		12200					
98	Initial	1:02 PM	3	0	2000	0	12100	54.82	110.56	21.58	43.53
	Final	1:05 PM	294	2000		12100					
99	Initial	1:05 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	1:08 PM	297	2000		12000					
100	Initial	1:08 PM	3	0	2000	0	11800	54.82	107.82	21.58	42.45
	Final	1:11 PM	300	2000		11800					
101	Initial	1:11 PM	3	0	2000	0	12400	54.82	113.30	21.58	44.61
	Final	1:14 PM	303	2000		12400					
102	Initial	1:14 PM	3	0	2000	0	12300	54.82	112.38	21.58	44.25
	Final	1:17 PM	306	2000		12300					
103	Initial	1:17 PM	3	0	2000	0	12300	54.82	112.38	21.58	44.25
	Final	1:20 PM	309	2000		12300					
104	Initial	1:20 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	1:23 PM	312	2000		12000					
105	Initial	1:23 PM	3	0	2000	0	12200	54.82	111.47	21.58	43.89
	Final	1:26 PM	315	2000		12200					
106	Initial	1:26 PM	3	0	2000	0	12100	54.82	110.56	21.58	43.53
	Final	1:29 PM	318	2000		12100					
107	Initial	1:29 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	1:32 PM	321	2000		12000					
108	Initial	1:32 PM	3	0	2000	0	11800	54.82	107.82	21.58	42.45
	Final	1:35 PM	324	2000		11800					
109	Initial	1:35 PM	3	0	2000	0	12400	54.82	113.30	21.58	44.61
	Final	1:38 PM	327	2000		12400					
110	Initial	1:38 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	1:41 PM	330	2000		12000					
111	Initial	1:41 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	1:44 PM	333	2000		12000					
112	Initial	1:44 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	1:47 PM	336	2000		12000					
113	Initial	1:47 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	1:50 PM	339	2000		12000					
114	Initial	1:50 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	1:53 PM	342	2000		12000					
115	Initial	1:53 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	1:56 PM	345	2000		12000					
116	Initial	1:56 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	1:59 PM	348	2000		12000					
117	Initial	1:59 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	2:02 PM	351	2000		12000					
118	Initial	2:02 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	2:05 PM	354	2000		12000					
119	Initial	2:05 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	2:08 PM	357	2000		12000					
120	Initial	2:08 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	2:11 PM	360	2000		12000					
121	Initial	2:11 PM	3	0	2000	0	12000	54.82	109.64	21.58	43.17
	Final	2:14 PM	363	2000		12000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Caleb Brackett

Infiltration Test No I-7

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	8:15 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:18 AM	3	4500	4500	14500	14500	123.35	132.49	48.56	52.16
2	Initial	8:18 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:21 AM	6	4750	4750	14500	14500	130.20	132.49	51.26	52.16
3	Initial	8:21 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:24 AM	9	4500	4500	14500	14500	123.35	132.49	48.56	52.16
4	Initial	8:24 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:27 AM	12	4650	4650	14500	14500	127.46	132.49	50.18	52.16
5	Initial	8:27 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:30 AM	15	4650	4650	14500	14500	127.46	132.49	50.18	52.16
6	Initial	8:30 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:33 AM	18	4500	4500	14500	14500	123.35	132.49	48.56	52.16
7	Initial	8:33 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:36 AM	21	4750	4750	14500	14500	130.20	132.49	51.26	52.16
8	Initial	8:36 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:39 AM	24	4500	4500	14500	14500	123.35	132.49	48.56	52.16
9	Initial	8:39 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:42 AM	27	4650	4650	14500	14500	127.46	132.49	50.18	52.16
10	Initial	8:42 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:45 AM	30	4650	4650	14500	14500	127.46	132.49	50.18	52.16
11	Initial	8:45 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:48 AM	33	4500	4500	14500	14500	123.35	132.49	48.56	52.16
12	Initial	8:48 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:51 AM	36	4750	4750	14500	14500	130.20	132.49	51.26	52.16
13	Initial	8:51 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:54 AM	39	4500	4500	14500	14500	123.35	132.49	48.56	52.16
14	Initial	8:54 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:57 AM	42	4650	4650	14500	14500	127.46	132.49	50.18	52.16
15	Initial	8:57 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:00 AM	45	4650	4650	14500	14500	127.46	132.49	50.18	52.16
16	Initial	9:00 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:03 AM	48	4500	4500	14500	14500	123.35	132.49	48.56	52.16
17	Initial	9:03 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:06 AM	51	4750	4750	14500	14500	130.20	132.49	51.26	52.16

18	Initial	9:06 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:09 AM	54	4500		14500					
19	Initial	9:09 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:12 AM	57	4650		14500					
20	Initial	9:12 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:15 AM	60	4650		14500					
21	Initial	9:15 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:18 AM	63	4500		14500					
22	Initial	9:18 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:21 AM	66	4750		14500					
23	Initial	9:21 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:24 AM	69	4500		14500					
24	Initial	9:24 AM	3	0	4200	0	14500	115.13	132.49	45.33	52.16
	Final	9:27 AM	72	4200		14500					
25	Initial	9:27 AM	3	0	4100	0	14500	112.38	132.49	44.25	52.16
	Final	9:30 AM	75	4100		14500					
26	Initial	9:30 AM	3	0	4000	0	14500	109.64	132.49	43.17	52.16
	Final	9:33 AM	78	4000		14500					
27	Initial	9:33 AM	3	0	4100	0	14500	112.38	132.49	44.25	52.16
	Final	9:36 AM	81	4100		14500					
28	Initial	9:36 AM	3	0	4000	0	14500	109.64	132.49	43.17	52.16
	Final	9:39 AM	84	4000		14500					
29	Initial	9:39 AM	3	0	4150	0	14100	113.76	128.83	44.79	50.72
	Final	9:42 AM	87	4150		14100					
30	Initial	9:42 AM	3	0	3900	0	14100	106.90	128.83	42.09	50.72
	Final	9:45 AM	90	3900		14100					
31	Initial	9:45 AM	3	0	3900	0	14000	106.90	127.92	42.09	50.36
	Final	9:48 AM	93	3900		14000					
32	Initial	9:48 AM	3	0	3850	0	14100	105.53	128.83	41.55	50.72
	Final	9:51 AM	96	3850		14100					
33	Initial	9:51 AM	3	0	3750	0	13900	102.79	127.00	40.47	50.00
	Final	9:54 AM	99	3750		13900					
34	Initial	9:54 AM	3	0	3700	0	13800	101.42	126.09	39.93	49.64
	Final	9:57 AM	102	3700		13800					
35	Initial	9:57 AM	3	0	3600	0	13850	98.68	126.55	38.85	49.82
	Final	10:00 AM	105	3600		13850					
36	Initial	10:00 AM	3	0	3550	0	13700	97.31	125.18	38.31	49.28
	Final	10:03 AM	108	3550		13700					
37	Initial	10:03 AM	3	0	3550	0	13500	97.31	123.35	38.31	48.56
	Final	10:06 AM	111	3550		13500					
38	Initial	10:06 AM	3	0	3600	0	13650	98.68	124.72	38.85	49.10
	Final	10:09 AM	114	3600		13650					
39	Initial	10:09 AM	3	0	3400	0	13700	93.20	125.18	36.69	49.28
	Final	10:12 AM	117	3400		13700					
40	Initial	10:12 AM	3	0	3300	0	13600	90.46	124.26	35.61	48.92
	Final	10:15 AM	120	3300		13600					
41	Initial	10:15 AM	3	0	3000	0	13500	82.23	123.35	32.38	48.56
	Final	10:18 AM	123	3000		13500					
42	Initial	10:18 AM	3	0	3100	0	13550	84.97	123.81	33.45	48.74
	Final	10:21 AM	126	3100		13550					
43	Initial	10:21 AM	3	0	3050	0	13400	83.60	122.44	32.91	48.20
	Final	10:24 AM	129	3050		13400					

44	Initial	10:24 AM	3	0	3100	0	13300	13300	84.97	121.52	33.45	47.84
	Final	10:27 AM	132	3100		13300						
45	Initial	10:27 AM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	10:30 AM	135	3000		13300						
46	Initial	10:30 AM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	10:33 AM	138	2900		13400						
47	Initial	10:33 AM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	10:36 AM	141	2950		13400						
48	Initial	10:36 AM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	10:39 AM	144	2800		13500						
49	Initial	10:39 AM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	10:42 AM	147	2750		13300						
50	Initial	10:42 AM	3	0	2800	0	13400	13400	76.75	122.44	30.22	48.20
	Final	10:45 AM	150	2800		13400						
51	Initial	10:45 AM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	10:48 AM	153	2500		13300						
52	Initial	10:48 AM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	10:51 AM	156	2400		13400						
53	Initial	10:51 AM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	10:54 AM	159	2300		13500						
54	Initial	10:54 AM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	10:57 AM	162	2350		13400						
55	Initial	10:57 AM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	11:00 AM	165	2250		13300						
56	Initial	11:00 AM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	11:03 AM	168	2200		13300						
57	Initial	11:03 AM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	11:06 AM	171	2100		13100						
58	Initial	11:06 AM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	11:09 AM	174	2200		13000						
59	Initial	11:09 AM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	11:12 AM	177	2200		13100						
60	Initial	11:12 AM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	11:15 AM	180	2100		13200						
61	Initial	11:15 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	11:18 AM	183	2150		13100						
62	Initial	11:18 AM	3	0	1950	0	12900	12900	53.45	117.87	21.04	46.40
	Final	11:21 AM	186	1950		12900						
63	Initial	11:21 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	11:24 AM	189	2150		13100						
64	Initial	11:24 AM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	11:27 AM	192	2200		13000						
65	Initial	11:27 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	11:30 AM	195	2100		12900						
66	Initial	11:30 AM	3	0	2000	0	13000	13000	54.82	118.78	21.58	46.76
	Final	11:33 AM	198	2000		13000						
67	Initial	11:33 AM	3	0	1950	0	13700	13700	53.45	125.18	21.04	49.28
	Final	11:36 AM	201	1950		13700						
68	Initial	11:36 AM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	11:39 AM	204	2000		12900						
69	Initial	11:39 AM	3	0	2100	0	12800	12800	57.56	116.95	22.66	46.04
	Final	11:42 AM	207	2100		12800						

70	Initial	11:42 AM	3	0	2100	0	12700	12700	57.56	116.04	22.66	45.68
	Final	11:45 AM	210	2100		12700						
71	Initial	11:45 AM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	11:48 AM	213	2100		12500						
72	Initial	11:48 AM	3	0	1950	0	12600	12600	53.45	115.13	21.04	45.33
	Final	11:51 AM	216	1950		12600						
73	Initial	11:51 AM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	11:54 AM	219	2100		12600						
74	Initial	11:54 AM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	11:57 AM	222	2200		12500						
75	Initial	11:57 AM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	12:00 PM	225	2100		12300						
76	Initial	12:00 PM	3	0	2000	0	12200	12200	54.82	111.47	21.58	43.89
	Final	12:03 PM	228	2000		12200						
77	Initial	12:03 PM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	12:06 PM	231	2100		12400						
78	Initial	12:06 PM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	12:09 PM	234	2150		12300						
79	Initial	12:09 PM	3	0	2250	0	12300	12300	61.67	112.38	24.28	44.25
	Final	12:12 PM	237	2250		12300						
80	Initial	12:12 PM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	12:15 PM	240	2100		12000						
81	Initial	12:15 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	12:18 PM	243	2150		12200						
82	Initial	12:18 PM	3	0	1950	0	12100	12100	53.45	110.56	21.04	43.53
	Final	12:21 PM	246	1950		12100						
83	Initial	12:21 PM	3	0	2000	0	12000	12000	54.82	109.64	21.58	43.17
	Final	12:24 PM	249	2000		12000						
84	Initial	12:24 PM	3	0	1950	0	11800	11800	53.45	107.82	21.04	42.45
	Final	12:27 PM	252	1950		11800						
85	Initial	12:27 PM	3	0	1950	0	11600	11600	53.45	105.99	21.04	41.73
	Final	12:30 PM	255	1950		11600						
86	Initial	12:30 PM	3	0	2000	0	11400	11400	54.82	104.16	21.58	41.01
	Final	12:33 PM	258	2000		11400						
87	Initial	12:33 PM	3	0	1950	0	11250	11250	53.45	102.79	21.04	40.47
	Final	12:36 PM	261	1950		11250						
88	Initial	12:36 PM	3	0	1950	0	11300	11300	53.45	103.25	21.04	40.65
	Final	12:39 PM	264	1950		11300						
89	Initial	12:39 PM	3	0	1950	0	11200	11200	53.45	102.33	21.04	40.29
	Final	12:42 PM	267	1950		11200						
90	Initial	12:42 PM	3	0	1950	0	11200	11200	53.45	102.33	21.04	40.29
	Final	12:45 PM	270	1950		11200						
91	Initial	12:45 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	12:48 PM	273	1950		11000						
92	Initial	12:48 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	12:51 PM	276	1950		11000						
93	Initial	12:51 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	12:54 PM	279	1950		11000						
94	Initial	12:54 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	12:57 PM	282	1950		11000						
95	Initial	12:57 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	1:00 PM	285	1950		11000						

96	Initial	1:00 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:03 PM	288	1950		11000					
97	Initial	1:03 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:06 PM	291	1950		11000					
98	Initial	1:06 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:09 PM	294	1950		11000					
99	Initial	1:09 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:12 PM	297	1950		11000					
100	Initial	1:12 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:15 PM	300	1950		11000					
101	Initial	1:15 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:18 PM	303	1950		11000					
102	Initial	1:18 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:21 PM	306	1950		11000					
103	Initial	1:21 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:24 PM	309	1950		11000					
104	Initial	1:24 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:27 PM	312	1950		11000					
105	Initial	1:27 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:30 PM	315	1950		11000					
106	Initial	1:30 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:33 PM	318	1950		11000					
107	Initial	1:33 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:36 PM	321	1950		11000					
108	Initial	1:36 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:39 PM	324	1950		11000					
109	Initial	1:39 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:42 PM	327	1950		11000					
110	Initial	1:42 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:45 PM	330	1950		11000					
111	Initial	1:45 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:48 PM	333	1950		11000					
112	Initial	1:48 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:51 PM	336	1950		11000					
113	Initial	1:51 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:54 PM	339	1950		11000					
114	Initial	1:54 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	1:57 PM	342	1950		11000					
115	Initial	1:57 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	2:00 PM	345	1950		11000					
116	Initial	2:00 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	2:03 PM	348	1950		11000					
117	Initial	2:03 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	2:06 PM	351	1950		11000					
118	Initial	2:06 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	2:09 PM	354	1950		11000					
119	Initial	2:09 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	2:12 PM	357	1950		11000					
120	Initial	2:12 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	2:15 PM	360	1950		11000					
121	Initial	2:15 PM	3	0	1950	0	11000	53.45	100.51	21.04	39.57
	Final	2:18 PM	363	1950		11000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Caleb Brackett

Infiltration Test No I-8

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	9:02 AM	3	0	4800	0	14800	131.57	135.23	51.80	53.24
	Final	9:05 AM	3	4800	4800	14800					
2	Initial	9:05 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:08 AM	6	4750	4750	14500					
3	Initial	9:08 AM	3	0	4500	0	14900	123.35	136.14	48.56	53.60
	Final	9:11 AM	9	4500	4500	14900					
4	Initial	9:11 AM	3	0	4650	0	14800	127.46	135.23	50.18	53.24
	Final	9:14 AM	12	4650	4650	14800					
5	Initial	9:14 AM	3	0	4400	0	14500	120.61	132.49	47.48	52.16
	Final	9:17 AM	15	4400	4400	14500					
6	Initial	9:17 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:20 AM	18	4500	4500	14500					
7	Initial	9:20 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:23 AM	21	4750	4750	14500					
8	Initial	9:23 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:26 AM	24	4500	4500	14500					
9	Initial	9:26 AM	3	0	4600	0	14500	126.09	132.49	49.64	52.16
	Final	9:29 AM	27	4600	4600	14500					
10	Initial	9:29 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:32 AM	30	4650	4650	14500					
11	Initial	9:32 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:35 AM	33	4500	4500	14500					
12	Initial	9:35 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:38 AM	36	4750	4750	14500					
13	Initial	9:38 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:41 AM	39	4500	4500	14500					
14	Initial	9:41 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:44 AM	42	4650	4650	14500					
15	Initial	9:44 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:47 AM	45	4650	4650	14500					
16	Initial	9:47 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:50 AM	48	4500	4500	14500					
17	Initial	9:50 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:53 AM	51	4750	4750	14500					

18	Initial	9:53 AM	3	0	4500	0	14500	14500	123.35	132.49	48.56	52.16
	Final	9:56 AM	54	4500		14500						
19	Initial	9:56 AM	3	0	4650	0	14500	14500	127.46	132.49	50.18	52.16
	Final	9:59 AM	57	4650		14500						
20	Initial	9:59 AM	3	0	4650	0	14500	14500	127.46	132.49	50.18	52.16
	Final	10:02 AM	60	4650		14500						
21	Initial	10:02 AM	3	0	4500	0	14500	14500	123.35	132.49	48.56	52.16
	Final	10:05 AM	63	4500		14500						
22	Initial	10:05 AM	3	0	4750	0	14500	14500	130.20	132.49	51.26	52.16
	Final	10:08 AM	66	4750		14500						
23	Initial	10:08 AM	3	0	4500	0	14500	14500	123.35	132.49	48.56	52.16
	Final	10:11 AM	69	4500		14500						
24	Initial	10:11 AM	3	0	4200	0	14500	14500	115.13	132.49	45.33	52.16
	Final	10:14 AM	72	4200		14500						
25	Initial	10:14 AM	3	0	4100	0	14500	14500	112.38	132.49	44.25	52.16
	Final	10:17 AM	75	4100		14500						
26	Initial	10:17 AM	3	0	4000	0	14500	14500	109.64	132.49	43.17	52.16
	Final	10:20 AM	78	4000		14500						
27	Initial	10:20 AM	3	0	4100	0	14500	14500	112.38	132.49	44.25	52.16
	Final	10:23 AM	81	4100		14500						
28	Initial	10:23 AM	3	0	4000	0	14500	14500	109.64	132.49	43.17	52.16
	Final	10:26 AM	84	4000		14500						
29	Initial	10:26 AM	3	0	4150	0	14100	14100	113.76	128.83	44.79	50.72
	Final	10:29 AM	87	4150		14100						
30	Initial	10:29 AM	3	0	3900	0	14100	14100	106.90	128.83	42.09	50.72
	Final	10:32 AM	90	3900		14100						
31	Initial	10:32 AM	3	0	3900	0	14000	14000	106.90	127.92	42.09	50.36
	Final	10:35 AM	93	3900		14000						
32	Initial	10:35 AM	3	0	3850	0	14100	14100	105.53	128.83	41.55	50.72
	Final	10:38 AM	96	3850		14100						
33	Initial	10:38 AM	3	0	3750	0	13900	13900	102.79	127.00	40.47	50.00
	Final	10:41 AM	99	3750		13900						
34	Initial	10:41 AM	3	0	3700	0	13800	13800	101.42	126.09	39.93	49.64
	Final	10:44 AM	102	3700		13800						
35	Initial	10:44 AM	3	0	3600	0	13850	13850	98.68	126.55	38.85	49.82
	Final	10:47 AM	105	3600		13850						
36	Initial	10:47 AM	3	0	3550	0	13700	13700	97.31	125.18	38.31	49.28
	Final	10:50 AM	108	3550		13700						
37	Initial	10:50 AM	3	0	3550	0	13500	13500	97.31	123.35	38.31	48.56
	Final	10:53 AM	111	3550		13500						
38	Initial	10:53 AM	3	0	3600	0	13650	13650	98.68	124.72	38.85	49.10
	Final	10:56 AM	114	3600		13650						
39	Initial	10:56 AM	3	0	3400	0	13700	13700	93.20	125.18	36.69	49.28
	Final	10:59 AM	117	3400		13700						
40	Initial	10:59 AM	3	0	3300	0	13600	13600	90.46	124.26	35.61	48.92
	Final	11:02 AM	120	3300		13600						
41	Initial	11:02 AM	3	0	3000	0	13500	13500	82.23	123.35	32.38	48.56
	Final	11:05 AM	123	3000		13500						
42	Initial	11:05 AM	3	0	3100	0	13550	13550	84.97	123.81	33.45	48.74
	Final	11:08 AM	126	3100		13550						
43	Initial	11:08 AM	3	0	3050	0	13400	13400	83.60	122.44	32.91	48.20
	Final	11:11 AM	129	3050		13400						

44	Initial	11:11 AM	3	0	3050	3050	0	13300	83.60	121.52	32.91	47.84
	Final	11:14 AM	132	3050			13300					
45	Initial	11:14 AM	3	0	3000	3000	0	13300	82.23	121.52	32.38	47.84
	Final	11:17 AM	135	3000			13300					
46	Initial	11:17 AM	3	0	2900	2900	0	13400	79.49	122.44	31.30	48.20
	Final	11:20 AM	138	2900			13400					
47	Initial	11:20 AM	3	0	2950	2950	0	13400	80.86	122.44	31.84	48.20
	Final	11:23 AM	141	2950			13400					
48	Initial	11:23 AM	3	0	2800	2800	0	13500	76.75	123.35	30.22	48.56
	Final	11:26 AM	144	2800			13500					
49	Initial	11:26 AM	3	0	2750	2750	0	13300	75.38	121.52	29.68	47.84
	Final	11:29 AM	147	2750			13300					
50	Initial	11:29 AM	3	0	2600	2600	0	13400	71.27	122.44	28.06	48.20
	Final	11:32 AM	150	2600			13400					
51	Initial	11:32 AM	3	0	2500	2500	0	13300	68.53	121.52	26.98	47.84
	Final	11:35 AM	153	2500			13300					
52	Initial	11:35 AM	3	0	2400	2400	0	13400	65.79	122.44	25.90	48.20
	Final	11:38 AM	156	2400			13400					
53	Initial	11:38 AM	3	0	2300	2300	0	13500	63.05	123.35	24.82	48.56
	Final	11:41 AM	159	2300			13500					
54	Initial	11:41 AM	3	0	2350	2350	0	13400	64.42	122.44	25.36	48.20
	Final	11:44 AM	162	2350			13400					
55	Initial	11:44 AM	3	0	2250	2250	0	13300	61.67	121.52	24.28	47.84
	Final	11:47 AM	165	2250			13300					
56	Initial	11:47 AM	3	0	2200	2200	0	13300	60.30	121.52	23.74	47.84
	Final	11:50 AM	168	2200			13300					
57	Initial	11:50 AM	3	0	2100	2100	0	13100	57.56	119.69	22.66	47.12
	Final	11:53 AM	171	2100			13100					
58	Initial	11:53 AM	3	0	2150	2150	0	13000	58.93	118.78	23.20	46.76
	Final	11:56 AM	174	2150			13000					
59	Initial	11:56 AM	3	0	2200	2200	0	13100	60.30	119.69	23.74	47.12
	Final	11:59 AM	177	2200			13100					
60	Initial	11:59 AM	3	0	2100	2100	0	13200	57.56	120.61	22.66	47.48
	Final	12:02 PM	180	2100			13200					
61	Initial	12:02 PM	3	0	2150	2150	0	13100	58.93	119.69	23.20	47.12
	Final	12:05 PM	183	2150			13100					
62	Initial	12:05 PM	3	0	2000	2000	0	12900	54.82	117.87	21.58	46.40
	Final	12:08 PM	186	2000			12900					
63	Initial	12:08 PM	3	0	2150	2150	0	13100	58.93	119.69	23.20	47.12
	Final	12:11 PM	189	2150			13100					
64	Initial	12:11 PM	3	0	2200	2200	0	13000	60.30	118.78	23.74	46.76
	Final	12:14 PM	192	2200			13000					
65	Initial	12:14 PM	3	0	2100	2100	0	12900	57.56	117.87	22.66	46.40
	Final	12:17 PM	195	2100			12900					
66	Initial	12:17 PM	3	0	2050	2050	0	13000	56.19	118.78	22.12	46.76
	Final	12:20 PM	198	2050			13000					
67	Initial	12:20 PM	3	0	2000	2000	0	13700	54.82	125.18	21.58	49.28
	Final	12:23 PM	201	2000			13700					
68	Initial	12:23 PM	3	0	2100	2100	0	12900	57.56	117.87	22.66	46.40
	Final	12:26 PM	204	2100			12900					
69	Initial	12:26 PM	3	0	2100	2100	0	12800	57.56	116.95	22.66	46.04
	Final	12:29 PM	207	2100			12800					

70	Initial	12:29 PM	3	0	2100	0	12700	12700	57.56	116.04	22.66	45.68
	Final	12:32 PM	210	2100		12700						
71	Initial	12:32 PM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	12:35 PM	213	2100		12500						
72	Initial	12:35 PM	3	0	2000	0	12600	12600	54.82	115.13	21.58	45.33
	Final	12:38 PM	216	2000		12600						
73	Initial	12:38 PM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	12:41 PM	219	2100		12600						
74	Initial	12:41 PM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	12:44 PM	222	2200		12500						
75	Initial	12:44 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	12:47 PM	225	2100		12300						
76	Initial	12:47 PM	3	0	2050	0	12200	12200	56.19	111.47	22.12	43.89
	Final	12:50 PM	228	2050		12200						
77	Initial	12:50 PM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	12:53 PM	231	2100		12400						
78	Initial	12:53 PM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	12:56 PM	234	2150		12300						
79	Initial	12:56 PM	3	0	2250	0	12300	12300	61.67	112.38	24.28	44.25
	Final	12:59 PM	237	2250		12300						
80	Initial	12:59 PM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	1:02 PM	240	2100		12000						
81	Initial	1:02 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	1:05 PM	243	2150		12200						
82	Initial	1:05 PM	3	0	2000	0	12100	12100	54.82	110.56	21.58	43.53
	Final	1:08 PM	246	2000		12100						
83	Initial	1:08 PM	3	0	2050	0	12000	12000	56.19	109.64	22.12	43.17
	Final	1:11 PM	249	2050		12000						
84	Initial	1:11 PM	3	0	2100	0	11800	11800	57.56	107.82	22.66	42.45
	Final	1:14 PM	252	2100		11800						
85	Initial	1:14 PM	3	0	2050	0	11600	11600	56.19	105.99	22.12	41.73
	Final	1:17 PM	255	2050		11600						
86	Initial	1:17 PM	3	0	2100	0	11400	11400	57.56	104.16	22.66	41.01
	Final	1:20 PM	258	2100		11400						
87	Initial	1:20 PM	3	0	2150	0	11250	11250	58.93	102.79	23.20	40.47
	Final	1:23 PM	261	2150		11250						
88	Initial	1:23 PM	3	0	2250	0	11300	11300	61.67	103.25	24.28	40.65
	Final	1:26 PM	264	2250		11300						
89	Initial	1:26 PM	3	0	2100	0	11200	11200	57.56	102.33	22.66	40.29
	Final	1:29 PM	267	2100		11200						
90	Initial	1:29 PM	3	0	2150	0	11200	11200	58.93	102.33	23.20	40.29
	Final	1:32 PM	270	2150		11200						
91	Initial	1:32 PM	3	0	2050	0	11200	11200	56.19	102.33	22.12	40.29
	Final	1:35 PM	273	2050		11200						
92	Initial	1:35 PM	3	0	2050	0	11200	11200	56.19	102.33	22.12	40.29
	Final	1:38 PM	276	2050		11200						
93	Initial	1:38 PM	3	0	2100	0	11200	11200	57.56	102.33	22.66	40.29
	Final	1:41 PM	279	2100		11200						
94	Initial	1:41 PM	3	0	2050	0	11200	11200	56.19	102.33	22.12	40.29
	Final	1:44 PM	282	2050		11200						
95	Initial	1:44 PM	3	0	2100	0	11200	11200	57.56	102.33	22.66	40.29
	Final	1:47 PM	285	2100		11200						

96	Initial	1:47 PM	3	0	2150	0	11200	58.93	102.33	23.20	40.29
	Final	1:50 PM	288	2150		11200					
97	Initial	1:50 PM	3	0	2250	0	11200	61.67	102.33	24.28	40.29
	Final	1:53 PM	291	2250		11200					
98	Initial	1:53 PM	3	0	2100	0	11200	57.56	102.33	22.66	40.29
	Final	1:56 PM	294	2100		11200					
99	Initial	1:56 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	1:59 PM	297	1950		11200					
100	Initial	1:59 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:02 PM	300	1900		11200					
101	Initial	2:02 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:05 PM	303	1900		11200					
102	Initial	2:05 PM	3	0	2000	0	11200	54.82	102.33	21.58	40.29
	Final	2:08 PM	306	2000		11200					
103	Initial	2:08 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	2:11 PM	309	1950		11200					
104	Initial	2:11 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:14 PM	312	1900		11200					
105	Initial	2:14 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:17 PM	315	1900		11200					
106	Initial	2:17 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:20 PM	318	1900		11200					
107	Initial	2:20 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:23 PM	321	1900		11200					
108	Initial	2:23 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	2:26 PM	324	1950		11200					
109	Initial	2:26 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:29 PM	327	1900		11200					
110	Initial	2:29 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:32 PM	330	1900		11200					
111	Initial	2:32 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	2:35 PM	333	1950		11200					
112	Initial	2:35 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:38 PM	336	1900		11200					
113	Initial	2:38 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:41 PM	339	1900		11200					
114	Initial	2:41 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	2:44 PM	342	1950		11200					
115	Initial	2:44 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	2:47 PM	345	1950		11200					
116	Initial	2:47 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	2:50 PM	348	1950		11200					
117	Initial	2:50 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:53 PM	351	1900		11200					
118	Initial	2:53 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	2:56 PM	354	1950		11200					
119	Initial	2:56 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:59 PM	357	1900		11200					
120	Initial	2:59 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:02 PM	360	1900		11200					
121	Initial	3:02 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:05 PM	363	1900		11200					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Caleb Brackett

Infiltration Test No I-9

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	8:25 AM	3	0	4400	0	14000	120.61	127.92	47.48	50.36
	Final	8:28 AM	3	4400	4400	14000					
2	Initial	8:28 AM	3	0	4300	0	14300	117.87	130.66	46.40	51.44
	Final	8:31 AM	6	4300	4300	14300					
3	Initial	8:31 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:34 AM	9	4500	4500	14500					
4	Initial	8:34 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:37 AM	12	4650	4650	14500					
5	Initial	8:37 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:40 AM	15	4650	4650	14500					
6	Initial	8:40 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:43 AM	18	4500	4500	14500					
7	Initial	8:43 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:46 AM	21	4750	4750	14500					
8	Initial	8:46 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:49 AM	24	4500	4500	14500					
9	Initial	8:49 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:52 AM	27	4650	4650	14500					
10	Initial	8:52 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:55 AM	30	4650	4650	14500					
11	Initial	8:55 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:58 AM	33	4500	4500	14500					
12	Initial	8:58 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:01 AM	36	4750	4750	14500					
13	Initial	9:01 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:04 AM	39	4500	4500	14500					
14	Initial	9:04 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:07 AM	42	4650	4650	14500					
15	Initial	9:07 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:10 AM	45	4650	4650	14500					
16	Initial	9:10 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:13 AM	48	4500	4500	14500					
17	Initial	9:13 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:16 AM	51	4750	4750	14500					

18	Initial	9:16 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:19 AM	54	4500			14500					
19	Initial	9:19 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:22 AM	57	4650			14500					
20	Initial	9:22 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:25 AM	60	4650			14500					
21	Initial	9:25 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:28 AM	63	4500			14500					
22	Initial	9:28 AM	3	0	4750	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:31 AM	66	4750			14500					
23	Initial	9:31 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:34 AM	69	4500			14500					
24	Initial	9:34 AM	3	0	4200	4200	0	14500	115.13	132.49	45.33	52.16
	Final	9:37 AM	72	4200			14500					
25	Initial	9:37 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	9:40 AM	75	4100			14500					
26	Initial	9:40 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	9:43 AM	78	4000			14500					
27	Initial	9:43 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	9:46 AM	81	4100			14500					
28	Initial	9:46 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	9:49 AM	84	4000			14500					
29	Initial	9:49 AM	3	0	4150	4150	0	14100	113.76	128.83	44.79	50.72
	Final	9:52 AM	87	4150			14100					
30	Initial	9:52 AM	3	0	3900	3900	0	14100	106.90	128.83	42.09	50.72
	Final	9:55 AM	90	3900			14100					
31	Initial	9:55 AM	3	0	3900	3900	0	14000	106.90	127.92	42.09	50.36
	Final	9:58 AM	93	3900			14000					
32	Initial	9:58 AM	3	0	3850	3850	0	14100	105.53	128.83	41.55	50.72
	Final	10:01 AM	96	3850			14100					
33	Initial	10:01 AM	3	0	3750	3750	0	13900	102.79	127.00	40.47	50.00
	Final	10:04 AM	99	3750			13900					
34	Initial	10:04 AM	3	0	3700	3700	0	13800	101.42	126.09	39.93	49.64
	Final	10:07 AM	102	3700			13800					
35	Initial	10:07 AM	3	0	3600	3600	0	13850	98.68	126.55	38.85	49.82
	Final	10:10 AM	105	3600			13850					
36	Initial	10:10 AM	3	0	3550	3550	0	13700	97.31	125.18	38.31	49.28
	Final	10:13 AM	108	3550			13700					
37	Initial	10:13 AM	3	0	3550	3550	0	13500	97.31	123.35	38.31	48.56
	Final	10:16 AM	111	3550			13500					
38	Initial	10:16 AM	3	0	3600	3600	0	13650	98.68	124.72	38.85	49.10
	Final	10:19 AM	114	3600			13650					
39	Initial	10:19 AM	3	0	3400	3400	0	13700	93.20	125.18	36.69	49.28
	Final	10:22 AM	117	3400			13700					
40	Initial	10:22 AM	3	0	3300	3300	0	13600	90.46	124.26	35.61	48.92
	Final	10:25 AM	120	3300			13600					
41	Initial	10:25 AM	3	0	3000	3000	0	13500	82.23	123.35	32.38	48.56
	Final	10:28 AM	123	3000			13500					
42	Initial	10:28 AM	3	0	3100	3100	0	13550	84.97	123.81	33.45	48.74
	Final	10:31 AM	126	3100			13550					
43	Initial	10:31 AM	3	0	3050	3050	0	13400	83.60	122.44	32.91	48.20
	Final	10:34 AM	129	3050			13400					

44	Initial	10:34 AM	3	0	3050	0	13300	13300	83.60	121.52	32.91	47.84
	Final	10:37 AM	132	3050		13300						
45	Initial	10:37 AM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	10:40 AM	135	3000		13300						
46	Initial	10:40 AM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	10:43 AM	138	2900		13400						
47	Initial	10:43 AM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	10:46 AM	141	2950		13400						
48	Initial	10:46 AM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	10:49 AM	144	2800		13500						
49	Initial	10:49 AM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	10:52 AM	147	2750		13300						
50	Initial	10:52 AM	3	0	2600	0	13400	13400	71.27	122.44	28.06	48.20
	Final	10:55 AM	150	2600		13400						
51	Initial	10:55 AM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	10:58 AM	153	2500		13300						
52	Initial	10:58 AM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	11:01 AM	156	2400		13400						
53	Initial	11:01 AM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	11:04 AM	159	2300		13500						
54	Initial	11:04 AM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	11:07 AM	162	2350		13400						
55	Initial	11:07 AM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	11:10 AM	165	2250		13300						
56	Initial	11:10 AM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	11:13 AM	168	2200		13300						
57	Initial	11:13 AM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	11:16 AM	171	2100		13100						
58	Initial	11:16 AM	3	0	2150	0	13000	13000	58.93	118.78	23.20	46.76
	Final	11:19 AM	174	2150		13000						
59	Initial	11:19 AM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	11:22 AM	177	2200		13100						
60	Initial	11:22 AM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	11:25 AM	180	2100		13200						
61	Initial	11:25 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	11:28 AM	183	2150		13100						
62	Initial	11:28 AM	3	0	2150	0	12900	12900	58.93	117.87	23.20	46.40
	Final	11:31 AM	186	2150		12900						
63	Initial	11:31 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	11:34 AM	189	2150		13100						
64	Initial	11:34 AM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	11:37 AM	192	2200		13000						
65	Initial	11:37 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	11:40 AM	195	2100		12900						
66	Initial	11:40 AM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	11:43 AM	198	2200		13000						
67	Initial	11:43 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	11:46 AM	201	2100		12900						
68	Initial	11:46 AM	3	0	2150	0	12900	12900	58.93	117.87	23.20	46.40
	Final	11:49 AM	204	2150		12900						
69	Initial	11:49 AM	3	0	2200	0	12800	12800	60.30	116.95	23.74	46.04
	Final	11:52 AM	207	2200		12800						

70	Initial	11:52 AM	3	0	2150	0	12700	12700	58.93	116.04	23.20	45.68
	Final	11:55 AM	210	2150		12700						
71	Initial	11:55 AM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	11:58 AM	213	2200		12500						
72	Initial	11:58 AM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	12:01 PM	216	2100		12600						
73	Initial	12:01 PM	3	0	2200	0	12600	12600	60.30	115.13	23.74	45.33
	Final	12:04 PM	219	2200		12600						
74	Initial	12:04 PM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	12:07 PM	222	2100		12500						
75	Initial	12:07 PM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	12:10 PM	225	2150		12300						
76	Initial	12:10 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	12:13 PM	228	2150		12200						
77	Initial	12:13 PM	3	0	2150	0	12400	12400	58.93	113.30	23.20	44.61
	Final	12:16 PM	231	2150		12400						
78	Initial	12:16 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	12:19 PM	234	2200		12300						
79	Initial	12:19 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	12:22 PM	237	2100		12300						
80	Initial	12:22 PM	3	0	2200	0	12000	12000	60.30	109.64	23.74	43.17
	Final	12:25 PM	240	2200		12000						
81	Initial	12:25 PM	3	0	2100	0	12200	12200	57.56	111.47	22.66	43.89
	Final	12:28 PM	243	2100		12200						
82	Initial	12:28 PM	3	0	2150	0	12100	12100	58.93	110.56	23.20	43.53
	Final	12:31 PM	246	2150		12100						
83	Initial	12:31 PM	3	0	2150	0	12000	12000	58.93	109.64	23.20	43.17
	Final	12:34 PM	249	2150		12000						
84	Initial	12:34 PM	3	0	2150	0	11800	11800	58.93	107.82	23.20	42.45
	Final	12:37 PM	252	2150		11800						
85	Initial	12:37 PM	3	0	2200	0	12400	12400	60.30	113.30	23.74	44.61
	Final	12:40 PM	255	2200		12400						
86	Initial	12:40 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	12:43 PM	258	2100		12300						
87	Initial	12:43 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	12:46 PM	261	2200		12300						
88	Initial	12:46 PM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	12:49 PM	264	2100		12000						
89	Initial	12:49 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	12:52 PM	267	2150		12200						
90	Initial	12:52 PM	3	0	2150	0	12100	12100	58.93	110.56	23.20	43.53
	Final	12:55 PM	270	2150		12100						
91	Initial	12:55 PM	3	0	2150	0	12000	12000	58.93	109.64	23.20	43.17
	Final	12:58 PM	273	2150		12000						
92	Initial	12:58 PM	3	0	2200	0	11800	11800	60.30	107.82	23.74	42.45
	Final	1:01 PM	276	2200		11800						
93	Initial	1:01 PM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	1:04 PM	279	2100		12400						
94	Initial	1:04 PM	3	0	2200	0	12300	12300	60.30	112.38	23.74	44.25
	Final	1:07 PM	282	2200		12300						
95	Initial	1:07 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	1:10 PM	285	2100		12300						

96	Initial	1:10 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	1:13 PM	288	2150		12000					
97	Initial	1:13 PM	3	0	2200	0	12200	60.30	111.47	23.74	43.89
	Final	1:16 PM	291	2200		12200					
98	Initial	1:16 PM	3	0	2200	0	12100	60.30	110.56	23.74	43.53
	Final	1:19 PM	294	2200		12100					
99	Initial	1:19 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	1:22 PM	297	2100		12000					
100	Initial	1:22 PM	3	0	2150	0	11800	58.93	107.82	23.20	42.45
	Final	1:25 PM	300	2150		11800					
101	Initial	1:25 PM	3	0	2200	0	12400	60.30	113.30	23.74	44.61
	Final	1:28 PM	303	2200		12400					
102	Initial	1:28 PM	3	0	2150	0	12300	58.93	112.38	23.20	44.25
	Final	1:31 PM	306	2150		12300					
103	Initial	1:31 PM	3	0	2100	0	12300	57.56	112.38	22.66	44.25
	Final	1:34 PM	309	2100		12300					
104	Initial	1:34 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	1:37 PM	312	2200		12000					
105	Initial	1:37 PM	3	0	2300	0	12200	63.05	111.47	24.82	43.89
	Final	1:40 PM	315	2300		12200					
106	Initial	1:40 PM	3	0	2100	0	12100	57.56	110.56	22.66	43.53
	Final	1:43 PM	318	2100		12100					
107	Initial	1:43 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	1:46 PM	321	2150		12000					
108	Initial	1:46 PM	3	0	2100	0	11800	57.56	107.82	22.66	42.45
	Final	1:49 PM	324	2100		11800					
109	Initial	1:49 PM	3	0	2100	0	12400	57.56	113.30	22.66	44.61
	Final	1:52 PM	327	2100		12400					
110	Initial	1:52 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	1:55 PM	330	2100		12000					
111	Initial	1:55 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	1:58 PM	333	2200		12000					
112	Initial	1:58 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:01 PM	336	2100		12000					
113	Initial	2:01 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	2:04 PM	339	2150		12000					
114	Initial	2:04 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:07 PM	342	2100		12000					
115	Initial	2:07 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:10 PM	345	2100		12000					
116	Initial	2:10 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:13 PM	348	2100		12000					
117	Initial	2:13 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:16 PM	351	2100		12000					
118	Initial	2:16 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	2:19 PM	354	2150		12000					
119	Initial	2:19 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:22 PM	357	2100		12000					
120	Initial	2:22 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:25 PM	360	2100		12000					
121	Initial	2:25 PM	3	0	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:28 PM	363	2100		12000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Caleb Brackett

Infiltration Test No I-10

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	9:59 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:02 AM	3	4500	4500	14500	14500	123.35	132.49	48.56	52.16
2	Initial	10:02 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	10:05 AM	6	4750	4750	14500	14500	130.20	132.49	51.26	52.16
3	Initial	10:05 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:08 AM	9	4500	4500	14500	14500	123.35	132.49	48.56	52.16
4	Initial	10:08 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:11 AM	12	4650	4650	14500	14500	127.46	132.49	50.18	52.16
5	Initial	10:11 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:14 AM	15	4650	4650	14500	14500	127.46	132.49	50.18	52.16
6	Initial	10:14 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:17 AM	18	4500	4500	14500	14500	123.35	132.49	48.56	52.16
7	Initial	10:17 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	10:20 AM	21	4750	4750	14500	14500	130.20	132.49	51.26	52.16
8	Initial	10:20 AM	3	0	4600	0	14500	126.09	132.49	49.64	52.16
	Final	10:23 AM	24	4600	4600	14500	14500	126.09	132.49	49.64	52.16
9	Initial	10:23 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:26 AM	27	4650	4650	14500	14500	127.46	132.49	50.18	52.16
10	Initial	10:26 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:29 AM	30	4650	4650	14500	14500	127.46	132.49	50.18	52.16
11	Initial	10:29 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:32 AM	33	4500	4500	14500	14500	123.35	132.49	48.56	52.16
12	Initial	10:32 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	10:35 AM	36	4750	4750	14500	14500	130.20	132.49	51.26	52.16
13	Initial	10:35 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:38 AM	39	4500	4500	14500	14500	123.35	132.49	48.56	52.16
14	Initial	10:38 AM	3	0	4600	0	14500	126.09	132.49	49.64	52.16
	Final	10:41 AM	42	4600	4600	14500	14500	126.09	132.49	49.64	52.16
15	Initial	10:41 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:44 AM	45	4650	4650	14500	14500	127.46	132.49	50.18	52.16
16	Initial	10:44 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:47 AM	48	4500	4500	14500	14500	123.35	132.49	48.56	52.16
17	Initial	10:47 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	10:50 AM	51	4750	4750	14500	14500	130.20	132.49	51.26	52.16

18	Initial	10:50 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:53 AM	54	4500			14500					
19	Initial	10:53 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:56 AM	57	4650			14500					
20	Initial	10:56 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:59 AM	60	4650			14500					
21	Initial	10:59 AM	3	0	4600	4600	0	14500	126.09	132.49	49.64	52.16
	Final	11:02 AM	63	4600			14500					
22	Initial	11:02 AM	3	0	4750	4750	0	14500	130.20	132.49	51.26	52.16
	Final	11:05 AM	66	4750			14500					
23	Initial	11:05 AM	3	0	4600	4600	0	14500	126.09	132.49	49.64	52.16
	Final	11:08 AM	69	4600			14500					
24	Initial	11:08 AM	3	0	4200	4200	0	14500	115.13	132.49	45.33	52.16
	Final	11:11 AM	72	4200			14500					
25	Initial	11:11 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	11:14 AM	75	4100			14500					
26	Initial	11:14 AM	3	0	4200	4200	0	14500	115.13	132.49	45.33	52.16
	Final	11:17 AM	78	4200			14500					
27	Initial	11:17 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	11:20 AM	81	4100			14500					
28	Initial	11:20 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	11:23 AM	84	4000			14500					
29	Initial	11:23 AM	3	0	4150	4150	0	14100	113.76	128.83	44.79	50.72
	Final	11:26 AM	87	4150			14100					
30	Initial	11:26 AM	3	0	3900	3900	0	14100	106.90	128.83	42.09	50.72
	Final	11:29 AM	90	3900			14100					
31	Initial	11:29 AM	3	0	3900	3900	0	14000	106.90	127.92	42.09	50.36
	Final	11:32 AM	93	3900			14000					
32	Initial	11:32 AM	3	0	3850	3850	0	14100	105.53	128.83	41.55	50.72
	Final	11:35 AM	96	3850			14100					
33	Initial	11:35 AM	3	0	3750	3750	0	13900	102.79	127.00	40.47	50.00
	Final	11:38 AM	99	3750			13900					
34	Initial	11:38 AM	3	0	3700	3700	0	13800	101.42	126.09	39.93	49.64
	Final	11:41 AM	102	3700			13800					
35	Initial	11:41 AM	3	0	3600	3600	0	13850	98.68	126.55	38.85	49.82
	Final	11:44 AM	105	3600			13850					
36	Initial	11:44 AM	3	0	3550	3550	0	13700	97.31	125.18	38.31	49.28
	Final	11:47 AM	108	3550			13700					
37	Initial	11:47 AM	3	0	3550	3550	0	13500	97.31	123.35	38.31	48.56
	Final	11:50 AM	111	3550			13500					
38	Initial	11:50 AM	3	0	3600	3600	0	13650	98.68	124.72	38.85	49.10
	Final	11:53 AM	114	3600			13650					
39	Initial	11:53 AM	3	0	3400	3400	0	13700	93.20	125.18	36.69	49.28
	Final	11:56 AM	117	3400			13700					
40	Initial	11:56 AM	3	0	3300	3300	0	13600	90.46	124.26	35.61	48.92
	Final	11:59 AM	120	3300			13600					
41	Initial	11:59 AM	3	0	3000	3000	0	13500	82.23	123.35	32.38	48.56
	Final	12:02 PM	123	3000			13500					
42	Initial	12:02 PM	3	0	3100	3100	0	13550	84.97	123.81	33.45	48.74
	Final	12:05 PM	126	3100			13550					
43	Initial	12:05 PM	3	0	3050	3050	0	13400	83.60	122.44	32.91	48.20
	Final	12:08 PM	129	3050			13400					

44	Initial	12:08 PM	3	0	3100	0	13300	13300	84.97	121.52	33.45	47.84
	Final	12:11 PM	132	3100		13300						
45	Initial	12:11 PM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	12:14 PM	135	3000		13300						
46	Initial	12:14 PM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	12:17 PM	138	2900		13400						
47	Initial	12:17 PM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	12:20 PM	141	2950		13400						
48	Initial	12:20 PM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	12:23 PM	144	2800		13500						
49	Initial	12:23 PM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	12:26 PM	147	2750		13300						
50	Initial	12:26 PM	3	0	2800	0	13400	13400	76.75	122.44	30.22	48.20
	Final	12:29 PM	150	2800		13400						
51	Initial	12:29 PM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	12:32 PM	153	2500		13300						
52	Initial	12:32 PM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	12:35 PM	156	2400		13400						
53	Initial	12:35 PM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	12:38 PM	159	2300		13500						
54	Initial	12:38 PM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	12:41 PM	162	2350		13400						
55	Initial	12:41 PM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	12:44 PM	165	2250		13300						
56	Initial	12:44 PM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	12:47 PM	168	2200		13300						
57	Initial	12:47 PM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	12:50 PM	171	2100		13100						
58	Initial	12:50 PM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	12:53 PM	174	2200		13000						
59	Initial	12:53 PM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	12:56 PM	177	2200		13100						
60	Initial	12:56 PM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	12:59 PM	180	2100		13200						
61	Initial	12:59 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	1:02 PM	183	2150		13100						
62	Initial	1:02 PM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	1:05 PM	186	2000		12900						
63	Initial	1:05 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	1:08 PM	189	2150		13100						
64	Initial	1:08 PM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	1:11 PM	192	2200		13000						
65	Initial	1:11 PM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	1:14 PM	195	2100		12900						
66	Initial	1:14 PM	3	0	2000	0	13000	13000	54.82	118.78	21.58	46.76
	Final	1:17 PM	198	2000		13000						
67	Initial	1:17 PM	3	0	2000	0	13700	13700	54.82	125.18	21.58	49.28
	Final	1:20 PM	201	2000		13700						
68	Initial	1:20 PM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	1:23 PM	204	2000		12900						
69	Initial	1:23 PM	3	0	2100	0	12800	12800	57.56	116.95	22.66	46.04
	Final	1:26 PM	207	2100		12800						

70	Initial	1:26 PM	3	0	2100	0	12700	12700	57.56	116.04	22.66	45.68
	Final	1:29 PM	210	2100		12700						
71	Initial	1:29 PM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	1:32 PM	213	2100		12500						
72	Initial	1:32 PM	3	0	2000	0	12600	12600	54.82	115.13	21.58	45.33
	Final	1:35 PM	216	2000		12600						
73	Initial	1:35 PM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	1:38 PM	219	2100		12600						
74	Initial	1:38 PM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	1:41 PM	222	2200		12500						
75	Initial	1:41 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	1:44 PM	225	2100		12300						
76	Initial	1:44 PM	3	0	2000	0	12200	12200	54.82	111.47	21.58	43.89
	Final	1:47 PM	228	2000		12200						
77	Initial	1:47 PM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	1:50 PM	231	2100		12400						
78	Initial	1:50 PM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	1:53 PM	234	2150		12300						
79	Initial	1:53 PM	3	0	2250	0	12300	12300	61.67	112.38	24.28	44.25
	Final	1:56 PM	237	2250		12300						
80	Initial	1:56 PM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	1:59 PM	240	2100		12000						
81	Initial	1:59 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	2:02 PM	243	2150		12200						
82	Initial	2:02 PM	3	0	2000	0	12100	12100	54.82	110.56	21.58	43.53
	Final	2:05 PM	246	2000		12100						
83	Initial	2:05 PM	3	0	2000	0	12000	12000	54.82	109.64	21.58	43.17
	Final	2:08 PM	249	2000		12000						
84	Initial	2:08 PM	3	0	2100	0	11800	11800	57.56	107.82	22.66	42.45
	Final	2:11 PM	252	2100		11800						
85	Initial	2:11 PM	3	0	2000	0	11600	11600	54.82	105.99	21.58	41.73
	Final	2:14 PM	255	2000		11600						
86	Initial	2:14 PM	3	0	2000	0	11400	11400	54.82	104.16	21.58	41.01
	Final	2:17 PM	258	2000		11400						
87	Initial	2:17 PM	3	0	2050	0	11250	11250	56.19	102.79	22.12	40.47
	Final	2:20 PM	261	2050		11250						
88	Initial	2:20 PM	3	0	2050	0	11300	11300	56.19	103.25	22.12	40.65
	Final	2:23 PM	264	2050		11300						
89	Initial	2:23 PM	3	0	2000	0	11200	11200	54.82	102.33	21.58	40.29
	Final	2:26 PM	267	2000		11200						
90	Initial	2:26 PM	3	0	2000	0	11200	11200	54.82	102.33	21.58	40.29
	Final	2:29 PM	270	2000		11200						
91	Initial	2:29 PM	3	0	2100	0	11000	11000	57.56	100.51	22.66	39.57
	Final	2:32 PM	273	2100		11000						
92	Initial	2:32 PM	3	0	2000	0	11000	11000	54.82	100.51	21.58	39.57
	Final	2:35 PM	276	2000		11000						
93	Initial	2:35 PM	3	0	2000	0	11000	11000	54.82	100.51	21.58	39.57
	Final	2:38 PM	279	2000		11000						
94	Initial	2:38 PM	3	0	2050	0	11000	11000	56.19	100.51	22.12	39.57
	Final	2:41 PM	282	2050		11000						
95	Initial	2:41 PM	3	0	2000	0	11000	11000	54.82	100.51	21.58	39.57
	Final	2:44 PM	285	2000		11000						

96	Initial	2:44 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	2:47 PM	288	2000		11000					
97	Initial	2:47 PM	3	0	2050	0	11000	56.19	100.51	22.12	39.57
	Final	2:50 PM	291	2050		11000					
98	Initial	2:50 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	2:53 PM	294	2000		11000					
99	Initial	2:53 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	2:56 PM	297	2000		11000					
100	Initial	2:56 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	2:59 PM	300	2000		11000					
101	Initial	2:59 PM	3	0	2050	0	11000	56.19	100.51	22.12	39.57
	Final	3:02 PM	303	2050		11000					
102	Initial	3:02 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:05 PM	306	2000		11000					
103	Initial	3:05 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:08 PM	309	2000		11000					
104	Initial	3:08 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:11 PM	312	2000		11000					
105	Initial	3:11 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:14 PM	315	2000		11000					
106	Initial	3:14 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:17 PM	318	2000		11000					
107	Initial	3:17 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:20 PM	321	2000		11000					
108	Initial	3:20 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:23 PM	324	2000		11000					
109	Initial	3:23 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:26 PM	327	2000		11000					
110	Initial	3:26 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:29 PM	330	2000		11000					
111	Initial	3:29 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:32 PM	333	2000		11000					
112	Initial	3:32 PM	3	0	2050	0	11000	56.19	100.51	22.12	39.57
	Final	3:35 PM	336	2050		11000					
113	Initial	3:35 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:38 PM	339	2000		11000					
114	Initial	3:38 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:41 PM	342	2000		11000					
115	Initial	3:41 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:44 PM	345	2000		11000					
116	Initial	3:44 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:47 PM	348	2000		11000					
117	Initial	3:47 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:50 PM	351	2000		11000					
118	Initial	3:50 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:53 PM	354	2000		11000					
119	Initial	3:53 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:56 PM	357	2000		11000					
120	Initial	3:56 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	3:59 PM	360	2000		11000					
121	Initial	3:59 PM	3	0	2000	0	11000	54.82	100.51	21.58	39.57
	Final	4:02 PM	363	2000		11000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Sam Bergeland

Infiltration Test No I-11

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	10:30 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:33 AM	3	4500	4500	14500	14500	123.35	132.49	48.56	52.16
2	Initial	10:33 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	10:36 AM	6	4750	4750	14500	14500	130.20	132.49	51.26	52.16
3	Initial	10:36 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:39 AM	9	4500	4500	14500	14500	123.35	132.49	48.56	52.16
4	Initial	10:39 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:42 AM	12	4650	4650	14500	14500	127.46	132.49	50.18	52.16
5	Initial	10:42 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:45 AM	15	4650	4650	14500	14500	127.46	132.49	50.18	52.16
6	Initial	10:45 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:48 AM	18	4500	4500	14500	14500	123.35	132.49	48.56	52.16
7	Initial	10:48 AM	3	0	4700	0	14500	128.83	132.49	50.72	52.16
	Final	10:51 AM	21	4700	4700	14500	14500	128.83	132.49	50.72	52.16
8	Initial	10:51 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:54 AM	24	4500	4500	14500	14500	123.35	132.49	48.56	52.16
9	Initial	10:54 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:57 AM	27	4650	4650	14500	14500	127.46	132.49	50.18	52.16
10	Initial	10:57 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:00 AM	30	4650	4650	14500	14500	127.46	132.49	50.18	52.16
11	Initial	11:00 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:03 AM	33	4500	4500	14500	14500	123.35	132.49	48.56	52.16
12	Initial	11:03 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	11:06 AM	36	4750	4750	14500	14500	130.20	132.49	51.26	52.16
13	Initial	11:06 AM	3	0	4550	0	14500	124.72	132.49	49.10	52.16
	Final	11:09 AM	39	4550	4550	14500	14500	124.72	132.49	49.10	52.16
14	Initial	11:09 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:12 AM	42	4650	4650	14500	14500	127.46	132.49	50.18	52.16
15	Initial	11:12 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:15 AM	45	4650	4650	14500	14500	127.46	132.49	50.18	52.16
16	Initial	11:15 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:18 AM	48	4500	4500	14500	14500	123.35	132.49	48.56	52.16
17	Initial	11:18 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	11:21 AM	51	4750	4750	14500	14500	130.20	132.49	51.26	52.16

18	Initial	11:21 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:24 AM	54	4500			14500					
19	Initial	11:24 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:27 AM	57	4650			14500					
20	Initial	11:27 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:30 AM	60	4650			14500					
21	Initial	11:30 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:33 AM	63	4500			14500					
22	Initial	11:33 AM	3	0	4750	4750	0	14500	130.20	132.49	51.26	52.16
	Final	11:36 AM	66	4750			14500					
23	Initial	11:36 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:39 AM	69	4500			14500					
24	Initial	11:39 AM	3	0	4200	4200	0	14500	115.13	132.49	45.33	52.16
	Final	11:42 AM	72	4200			14500					
25	Initial	11:42 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	11:45 AM	75	4100			14500					
26	Initial	11:45 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	11:48 AM	78	4000			14500					
27	Initial	11:48 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	11:51 AM	81	4100			14500					
28	Initial	11:51 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	11:54 AM	84	4000			14500					
29	Initial	11:54 AM	3	0	4150	4150	0	14100	113.76	128.83	44.79	50.72
	Final	11:57 AM	87	4150			14100					
30	Initial	11:57 AM	3	0	3900	3900	0	14100	106.90	128.83	42.09	50.72
	Final	12:00 PM	90	3900			14100					
31	Initial	12:00 PM	3	0	3950	3950	0	14000	108.27	127.92	42.63	50.36
	Final	12:03 PM	93	3950			14000					
32	Initial	12:03 PM	3	0	3850	3850	0	14100	105.53	128.83	41.55	50.72
	Final	12:06 PM	96	3850			14100					
33	Initial	12:06 PM	3	0	3750	3750	0	13900	102.79	127.00	40.47	50.00
	Final	12:09 PM	99	3750			13900					
34	Initial	12:09 PM	3	0	3700	3700	0	13800	101.42	126.09	39.93	49.64
	Final	12:12 PM	102	3700			13800					
35	Initial	12:12 PM	3	0	3600	3600	0	13850	98.68	126.55	38.85	49.82
	Final	12:15 PM	105	3600			13850					
36	Initial	12:15 PM	3	0	3550	3550	0	13700	97.31	125.18	38.31	49.28
	Final	12:18 PM	108	3550			13700					
37	Initial	12:18 PM	3	0	3550	3550	0	13500	97.31	123.35	38.31	48.56
	Final	12:21 PM	111	3550			13500					
38	Initial	12:21 PM	3	0	3600	3600	0	13650	98.68	124.72	38.85	49.10
	Final	12:24 PM	114	3600			13650					
39	Initial	12:24 PM	3	0	3400	3400	0	13700	93.20	125.18	36.69	49.28
	Final	12:27 PM	117	3400			13700					
40	Initial	12:27 PM	3	0	3300	3300	0	13600	90.46	124.26	35.61	48.92
	Final	12:30 PM	120	3300			13600					
41	Initial	12:30 PM	3	0	3000	3000	0	13500	82.23	123.35	32.38	48.56
	Final	12:33 PM	123	3000			13500					
42	Initial	12:33 PM	3	0	3100	3100	0	13550	84.97	123.81	33.45	48.74
	Final	12:36 PM	126	3100			13550					
43	Initial	12:36 PM	3	0	3050	3050	0	13400	83.60	122.44	32.91	48.20
	Final	12:39 PM	129	3050			13400					

44	Initial	12:39 PM	3	0	3100	0	13300	13300	84.97	121.52	33.45	47.84
	Final	12:42 PM	132	3100		13300						
45	Initial	12:42 PM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	12:45 PM	135	3000		13300						
46	Initial	12:45 PM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	12:48 PM	138	2900		13400						
47	Initial	12:48 PM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	12:51 PM	141	2950		13400						
48	Initial	12:51 PM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	12:54 PM	144	2800		13500						
49	Initial	12:54 PM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	12:57 PM	147	2750		13300						
50	Initial	12:57 PM	3	0	2800	0	13400	13400	76.75	122.44	30.22	48.20
	Final	1:00 PM	150	2800		13400						
51	Initial	1:00 PM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	1:03 PM	153	2500		13300						
52	Initial	1:03 PM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	1:06 PM	156	2400		13400						
53	Initial	1:06 PM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	1:09 PM	159	2300		13500						
54	Initial	1:09 PM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	1:12 PM	162	2350		13400						
55	Initial	1:12 PM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	1:15 PM	165	2250		13300						
56	Initial	1:15 PM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	1:18 PM	168	2200		13300						
57	Initial	1:18 PM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	1:21 PM	171	2100		13100						
58	Initial	1:21 PM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	1:24 PM	174	2200		13000						
59	Initial	1:24 PM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	1:27 PM	177	2200		13100						
60	Initial	1:27 PM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	1:30 PM	180	2100		13200						
61	Initial	1:30 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	1:33 PM	183	2150		13100						
62	Initial	1:33 PM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	1:36 PM	186	2000		12900						
63	Initial	1:36 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	1:39 PM	189	2150		13100						
64	Initial	1:39 PM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	1:42 PM	192	2200		13000						
65	Initial	1:42 PM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	1:45 PM	195	2100		12900						
66	Initial	1:45 PM	3	0	2050	0	13000	13000	56.19	118.78	22.12	46.76
	Final	1:48 PM	198	2050		13000						
67	Initial	1:48 PM	3	0	2000	0	13700	13700	54.82	125.18	21.58	49.28
	Final	1:51 PM	201	2000		13700						
68	Initial	1:51 PM	3	0	2050	0	12900	12900	56.19	117.87	22.12	46.40
	Final	1:54 PM	204	2050		12900						
69	Initial	1:54 PM	3	0	2100	0	12800	12800	57.56	116.95	22.66	46.04
	Final	1:57 PM	207	2100		12800						

70	Initial	1:57 PM	3	0	2100	0	12700	12700	57.56	116.04	22.66	45.68
	Final	2:00 PM	210	2100		12700						
71	Initial	2:00 PM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	2:03 PM	213	2100		12500						
72	Initial	2:03 PM	3	0	2000	0	12600	12600	54.82	115.13	21.58	45.33
	Final	2:06 PM	216	2000		12600						
73	Initial	2:06 PM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	2:09 PM	219	2100		12600						
74	Initial	2:09 PM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	2:12 PM	222	2200		12500						
75	Initial	2:12 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	2:15 PM	225	2100		12300						
76	Initial	2:15 PM	3	0	2050	0	12200	12200	56.19	111.47	22.12	43.89
	Final	2:18 PM	228	2050		12200						
77	Initial	2:18 PM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	2:21 PM	231	2100		12400						
78	Initial	2:21 PM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	2:24 PM	234	2150		12300						
79	Initial	2:24 PM	3	0	2250	0	12300	12300	61.67	112.38	24.28	44.25
	Final	2:27 PM	237	2250		12300						
80	Initial	2:27 PM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	2:30 PM	240	2100		12000						
81	Initial	2:30 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	2:33 PM	243	2150		12200						
82	Initial	2:33 PM	3	0	2000	0	12100	12100	54.82	110.56	21.58	43.53
	Final	2:36 PM	246	2000		12100						
83	Initial	2:36 PM	3	0	2050	0	12000	12000	56.19	109.64	22.12	43.17
	Final	2:39 PM	249	2050		12000						
84	Initial	2:39 PM	3	0	2000	0	11800	11800	54.82	107.82	21.58	42.45
	Final	2:42 PM	252	2000		11800						
85	Initial	2:42 PM	3	0	2000	0	11600	11600	54.82	105.99	21.58	41.73
	Final	2:45 PM	255	2000		11600						
86	Initial	2:45 PM	3	0	2050	0	11400	11400	56.19	104.16	22.12	41.01
	Final	2:48 PM	258	2050		11400						
87	Initial	2:48 PM	3	0	1900	0	11250	11250	52.08	102.79	20.50	40.47
	Final	2:51 PM	261	1900		11250						
88	Initial	2:51 PM	3	0	1950	0	11300	11300	53.45	103.25	21.04	40.65
	Final	2:54 PM	264	1950		11300						
89	Initial	2:54 PM	3	0	1900	0	11200	11200	52.08	102.33	20.50	40.29
	Final	2:57 PM	267	1900		11200						
90	Initial	2:57 PM	3	0	1900	0	11200	11200	52.08	102.33	20.50	40.29
	Final	3:00 PM	270	1900		11200						
91	Initial	3:00 PM	3	0	1900	0	11000	11000	52.08	100.51	20.50	39.57
	Final	3:03 PM	273	1900		11000						
92	Initial	3:03 PM	3	0	1900	0	11000	11000	52.08	100.51	20.50	39.57
	Final	3:06 PM	276	1900		11000						
93	Initial	3:06 PM	3	0	1900	0	11000	11000	52.08	100.51	20.50	39.57
	Final	3:09 PM	279	1900		11000						
94	Initial	3:09 PM	3	0	1900	0	11000	11000	52.08	100.51	20.50	39.57
	Final	3:12 PM	282	1900		11000						
95	Initial	3:12 PM	3	0	1900	0	11000	11000	52.08	100.51	20.50	39.57
	Final	3:15 PM	285	1900		11000						

96	Initial	3:15 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	3:18 PM	288	1950			11000					
97	Initial	3:18 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:21 PM	291	1900			11000					
98	Initial	3:21 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:24 PM	294	1900			11000					
99	Initial	3:24 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:27 PM	297	1900			11000					
100	Initial	3:27 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:30 PM	300	1900			11000					
101	Initial	3:30 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:33 PM	303	1900			11000					
102	Initial	3:33 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:36 PM	306	1900			11000					
103	Initial	3:36 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:39 PM	309	1900			11000					
104	Initial	3:39 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:42 PM	312	1900			11000					
105	Initial	3:42 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:45 PM	315	1900			11000					
106	Initial	3:45 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:48 PM	318	1900			11000					
107	Initial	3:48 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:51 PM	321	1900			11000					
108	Initial	3:51 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:54 PM	324	1900			11000					
109	Initial	3:54 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	3:57 PM	327	1900			11000					
110	Initial	3:57 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	4:00 PM	330	1900			11000					
111	Initial	4:00 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	4:03 PM	333	1900			11000					
112	Initial	4:03 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:06 PM	336	1950			11000					
113	Initial	4:06 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	4:09 PM	339	1900			11000					
114	Initial	4:09 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	4:12 PM	342	1900			11000					
115	Initial	4:12 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	4:15 PM	345	1900			11000					
116	Initial	4:15 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	4:18 PM	348	1900			11000					
117	Initial	4:18 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	4:21 PM	351	1900			11000					
118	Initial	4:21 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	4:24 PM	354	1900			11000					
119	Initial	4:24 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	4:27 PM	357	1900			11000					
120	Initial	4:27 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	4:30 PM	360	1900			11000					
121	Initial	4:30 PM	3	0	1900	1900	0	11000	52.08	100.51	20.50	39.57
	Final	4:33 PM	363	1900			11000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Sam Bergeland

Infiltration Test No I-12

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	8:00 AM	3	0	4400	0	14800	120.61	135.23	47.48	53.24
	Final	8:03 AM	3	4400	4400	14800	14800				
2	Initial	8:03 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:06 AM	6	4650	4650	14500	14500				
3	Initial	8:06 AM	3	0	4300	0	14900	117.87	136.14	46.40	53.60
	Final	8:09 AM	9	4300	4300	14900	14900				
4	Initial	8:09 AM	3	0	4550	0	14800	124.72	135.23	49.10	53.24
	Final	8:12 AM	12	4550	4550	14800	14800				
5	Initial	8:12 AM	3	0	4300	0	14500	117.87	132.49	46.40	52.16
	Final	8:15 AM	15	4300	4300	14500	14500				
6	Initial	8:15 AM	3	0	4300	0	14500	117.87	132.49	46.40	52.16
	Final	8:18 AM	18	4300	4300	14500	14500				
7	Initial	8:18 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:21 AM	21	4750	4750	14500	14500				
8	Initial	8:21 AM	3	0	4300	0	14500	117.87	132.49	46.40	52.16
	Final	8:24 AM	24	4300	4300	14500	14500				
9	Initial	8:24 AM	3	0	4400	0	14500	120.61	132.49	47.48	52.16
	Final	8:27 AM	27	4400	4400	14500	14500				
10	Initial	8:27 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:30 AM	30	4650	4650	14500	14500				
11	Initial	8:30 AM	3	0	4300	0	14500	117.87	132.49	46.40	52.16
	Final	8:33 AM	33	4300	4300	14500	14500				
12	Initial	8:33 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:36 AM	36	4750	4750	14500	14500				
13	Initial	8:36 AM	3	0	4300	0	14500	117.87	132.49	46.40	52.16
	Final	8:39 AM	39	4300	4300	14500	14500				
14	Initial	8:39 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:42 AM	42	4650	4650	14500	14500				
15	Initial	8:42 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:45 AM	45	4650	4650	14500	14500				
16	Initial	8:45 AM	3	0	4300	0	14500	117.87	132.49	46.40	52.16
	Final	8:48 AM	48	4300	4300	14500	14500				
17	Initial	8:48 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:51 AM	51	4750	4750	14500	14500				

18	Initial	8:51 AM	3	0	4300	4300	0	14500	117.87	132.49	46.40	52.16
	Final	8:54 AM	54	4300			14500					
19	Initial	8:54 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:57 AM	57	4650			14500					
20	Initial	8:57 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:00 AM	60	4650			14500					
21	Initial	9:00 AM	3	0	4300	4300	0	14500	117.87	132.49	46.40	52.16
	Final	9:03 AM	63	4300			14500					
22	Initial	9:03 AM	3	0	4750	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:06 AM	66	4750			14500					
23	Initial	9:06 AM	3	0	4300	4300	0	14500	117.87	132.49	46.40	52.16
	Final	9:09 AM	69	4300			14500					
24	Initial	9:09 AM	3	0	4200	4200	0	14500	115.13	132.49	45.33	52.16
	Final	9:12 AM	72	4200			14500					
25	Initial	9:12 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	9:15 AM	75	4100			14500					
26	Initial	9:15 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	9:18 AM	78	4000			14500					
27	Initial	9:18 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	9:21 AM	81	4100			14500					
28	Initial	9:21 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	9:24 AM	84	4000			14500					
29	Initial	9:24 AM	3	0	4150	4150	0	14100	113.76	128.83	44.79	50.72
	Final	9:27 AM	87	4150			14100					
30	Initial	9:27 AM	3	0	3900	3900	0	14100	106.90	128.83	42.09	50.72
	Final	9:30 AM	90	3900			14100					
31	Initial	9:30 AM	3	0	3900	3900	0	14000	106.90	127.92	42.09	50.36
	Final	9:33 AM	93	3900			14000					
32	Initial	9:33 AM	3	0	3850	3850	0	14100	105.53	128.83	41.55	50.72
	Final	9:36 AM	96	3850			14100					
33	Initial	9:36 AM	3	0	3750	3750	0	13900	102.79	127.00	40.47	50.00
	Final	9:39 AM	99	3750			13900					
34	Initial	9:39 AM	3	0	3700	3700	0	13800	101.42	126.09	39.93	49.64
	Final	9:42 AM	102	3700			13800					
35	Initial	9:42 AM	3	0	3600	3600	0	13850	98.68	126.55	38.85	49.82
	Final	9:45 AM	105	3600			13850					
36	Initial	9:45 AM	3	0	3550	3550	0	13700	97.31	125.18	38.31	49.28
	Final	9:48 AM	108	3550			13700					
37	Initial	9:48 AM	3	0	3550	3550	0	13500	97.31	123.35	38.31	48.56
	Final	9:51 AM	111	3550			13500					
38	Initial	9:51 AM	3	0	3600	3600	0	13650	98.68	124.72	38.85	49.10
	Final	9:54 AM	114	3600			13650					
39	Initial	9:54 AM	3	0	3400	3400	0	13700	93.20	125.18	36.69	49.28
	Final	9:57 AM	117	3400			13700					
40	Initial	9:57 AM	3	0	3300	3300	0	13600	90.46	124.26	35.61	48.92
	Final	10:00 AM	120	3300			13600					
41	Initial	10:00 AM	3	0	3000	3000	0	13500	82.23	123.35	32.38	48.56
	Final	10:03 AM	123	3000			13500					
42	Initial	10:03 AM	3	0	3100	3100	0	13550	84.97	123.81	33.45	48.74
	Final	10:06 AM	126	3100			13550					
43	Initial	10:06 AM	3	0	3050	3050	0	13400	83.60	122.44	32.91	48.20
	Final	10:09 AM	129	3050			13400					

44	Initial	10:09 AM	3	0	3050	0	13300	13300	83.60	121.52	32.91	47.84
	Final	10:12 AM	132	3050		13300						
45	Initial	10:12 AM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	10:15 AM	135	3000		13300						
46	Initial	10:15 AM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	10:18 AM	138	2900		13400						
47	Initial	10:18 AM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	10:21 AM	141	2950		13400						
48	Initial	10:21 AM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	10:24 AM	144	2800		13500						
49	Initial	10:24 AM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	10:27 AM	147	2750		13300						
50	Initial	10:27 AM	3	0	2600	0	13400	13400	71.27	122.44	28.06	48.20
	Final	10:30 AM	150	2600		13400						
51	Initial	10:30 AM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	10:33 AM	153	2500		13300						
52	Initial	10:33 AM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	10:36 AM	156	2400		13400						
53	Initial	10:36 AM	3	0	2250	0	13500	13500	61.67	123.35	24.28	48.56
	Final	10:39 AM	159	2250		13500						
54	Initial	10:39 AM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	10:42 AM	162	2350		13400						
55	Initial	10:42 AM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	10:45 AM	165	2250		13300						
56	Initial	10:45 AM	3	0	2100	0	13300	13300	57.56	121.52	22.66	47.84
	Final	10:48 AM	168	2100		13300						
57	Initial	10:48 AM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	10:51 AM	171	2100		13100						
58	Initial	10:51 AM	3	0	2150	0	13000	13000	58.93	118.78	23.20	46.76
	Final	10:54 AM	174	2150		13000						
59	Initial	10:54 AM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	10:57 AM	177	2100		13100						
60	Initial	10:57 AM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	11:00 AM	180	2100		13200						
61	Initial	11:00 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	11:03 AM	183	2150		13100						
62	Initial	11:03 AM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	11:06 AM	186	2000		12900						
63	Initial	11:06 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	11:09 AM	189	2150		13100						
64	Initial	11:09 AM	3	0	2100	0	13000	13000	57.56	118.78	22.66	46.76
	Final	11:12 AM	192	2100		13000						
65	Initial	11:12 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	11:15 AM	195	2100		12900						
66	Initial	11:15 AM	3	0	2050	0	13000	13000	56.19	118.78	22.12	46.76
	Final	11:18 AM	198	2050		13000						
67	Initial	11:18 AM	3	0	2000	0	13700	13700	54.82	125.18	21.58	49.28
	Final	11:21 AM	201	2000		13700						
68	Initial	11:21 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	11:24 AM	204	2100		12900						
69	Initial	11:24 AM	3	0	2100	0	12800	12800	57.56	116.95	22.66	46.04
	Final	11:27 AM	207	2100		12800						

70	Initial	11:27 AM	3	0	2100	0	12700	12700	57.56	116.04	22.66	45.68
	Final	11:30 AM	210	2100		12700						
71	Initial	11:30 AM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	11:33 AM	213	2100		12500						
72	Initial	11:33 AM	3	0	2000	0	12600	12600	54.82	115.13	21.58	45.33
	Final	11:36 AM	216	2000		12600						
73	Initial	11:36 AM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	11:39 AM	219	2100		12600						
74	Initial	11:39 AM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	11:42 AM	222	2100		12500						
75	Initial	11:42 AM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	11:45 AM	225	2100		12300						
76	Initial	11:45 AM	3	0	2050	0	12200	12200	56.19	111.47	22.12	43.89
	Final	11:48 AM	228	2050		12200						
77	Initial	11:48 AM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	11:51 AM	231	2100		12400						
78	Initial	11:51 AM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	11:54 AM	234	2150		12300						
79	Initial	11:54 AM	3	0	2250	0	12300	12300	61.67	112.38	24.28	44.25
	Final	11:57 AM	237	2250		12300						
80	Initial	11:57 AM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	12:00 PM	240	2100		12000						
81	Initial	12:00 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	12:03 PM	243	2150		12200						
82	Initial	12:03 PM	3	0	2000	0	12100	12100	54.82	110.56	21.58	43.53
	Final	12:06 PM	246	2000		12100						
83	Initial	12:06 PM	3	0	2050	0	12000	12000	56.19	109.64	22.12	43.17
	Final	12:09 PM	249	2050		12000						
84	Initial	12:09 PM	3	0	2100	0	11800	11800	57.56	107.82	22.66	42.45
	Final	12:12 PM	252	2100		11800						
85	Initial	12:12 PM	3	0	2050	0	11600	11600	56.19	105.99	22.12	41.73
	Final	12:15 PM	255	2050		11600						
86	Initial	12:15 PM	3	0	2100	0	11400	11400	57.56	104.16	22.66	41.01
	Final	12:18 PM	258	2100		11400						
87	Initial	12:18 PM	3	0	2150	0	11250	11250	58.93	102.79	23.20	40.47
	Final	12:21 PM	261	2150		11250						
88	Initial	12:21 PM	3	0	2250	0	11300	11300	61.67	103.25	24.28	40.65
	Final	12:24 PM	264	2250		11300						
89	Initial	12:24 PM	3	0	2100	0	11200	11200	57.56	102.33	22.66	40.29
	Final	12:27 PM	267	2100		11200						
90	Initial	12:27 PM	3	0	2150	0	11200	11200	58.93	102.33	23.20	40.29
	Final	12:30 PM	270	2150		11200						
91	Initial	12:30 PM	3	0	2050	0	11200	11200	56.19	102.33	22.12	40.29
	Final	12:33 PM	273	2050		11200						
92	Initial	12:33 PM	3	0	2050	0	11200	11200	56.19	102.33	22.12	40.29
	Final	12:36 PM	276	2050		11200						
93	Initial	12:36 PM	3	0	2100	0	11200	11200	57.56	102.33	22.66	40.29
	Final	12:39 PM	279	2100		11200						
94	Initial	12:39 PM	3	0	2050	0	11200	11200	56.19	102.33	22.12	40.29
	Final	12:42 PM	282	2050		11200						
95	Initial	12:42 PM	3	0	2100	0	11200	11200	57.56	102.33	22.66	40.29
	Final	12:45 PM	285	2100		11200						

96	Initial	12:45 PM	3	0	2150	0	11200	58.93	102.33	23.20	40.29
	Final	12:48 PM	288	2150		11200					
97	Initial	12:48 PM	3	0	2250	0	11200	61.67	102.33	24.28	40.29
	Final	12:51 PM	291	2250		11200					
98	Initial	12:51 PM	3	0	2100	0	11200	57.56	102.33	22.66	40.29
	Final	12:54 PM	294	2100		11200					
99	Initial	12:54 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	12:57 PM	297	1950		11200					
100	Initial	12:57 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:00 PM	300	1900		11200					
101	Initial	1:00 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:03 PM	303	1900		11200					
102	Initial	1:03 PM	3	0	2000	0	11200	54.82	102.33	21.58	40.29
	Final	1:06 PM	306	2000		11200					
103	Initial	1:06 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	1:09 PM	309	1950		11200					
104	Initial	1:09 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:12 PM	312	1900		11200					
105	Initial	1:12 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:15 PM	315	1900		11200					
106	Initial	1:15 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:18 PM	318	1900		11200					
107	Initial	1:18 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:21 PM	321	1900		11200					
108	Initial	1:21 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	1:24 PM	324	1950		11200					
109	Initial	1:24 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:27 PM	327	1900		11200					
110	Initial	1:27 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:30 PM	330	1900		11200					
111	Initial	1:30 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	1:33 PM	333	1950		11200					
112	Initial	1:33 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:36 PM	336	1900		11200					
113	Initial	1:36 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:39 PM	339	1900		11200					
114	Initial	1:39 PM	3	0	1850	0	11200	50.71	102.33	19.96	40.29
	Final	1:42 PM	342	1850		11200					
115	Initial	1:42 PM	3	0	1850	0	11200	50.71	102.33	19.96	40.29
	Final	1:45 PM	345	1850		11200					
116	Initial	1:45 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:48 PM	348	1900		11200					
117	Initial	1:48 PM	3	0	1850	0	11200	50.71	102.33	19.96	40.29
	Final	1:51 PM	351	1850		11200					
118	Initial	1:51 PM	3	0	1850	0	11200	50.71	102.33	19.96	40.29
	Final	1:54 PM	354	1850		11200					
119	Initial	1:54 PM	3	0	1850	0	11200	50.71	102.33	19.96	40.29
	Final	1:57 PM	357	1850		11200					
120	Initial	1:57 PM	3	0	1850	0	11200	50.71	102.33	19.96	40.29
	Final	2:00 PM	360	1850		11200					
121	Initial	2:00 PM	3	0	1850	0	11200	50.71	102.33	19.96	40.29
	Final	2:03 PM	363	1850		11200					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Sam Bergeland

Infiltration Test No I-13

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	11:06 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:09 AM	3	4500	4500	14500	14500	123.35	132.49	48.56	52.16
2	Initial	11:09 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:12 AM	6	4650	4650	14500	14500	127.46	132.49	50.18	52.16
3	Initial	11:12 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:15 AM	9	4500	4500	14500	14500	123.35	132.49	48.56	52.16
4	Initial	11:15 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:18 AM	12	4650	4650	14500	14500	127.46	132.49	50.18	52.16
5	Initial	11:18 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:21 AM	15	4650	4650	14500	14500	127.46	132.49	50.18	52.16
6	Initial	11:21 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:24 AM	18	4500	4500	14500	14500	123.35	132.49	48.56	52.16
7	Initial	11:24 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:27 AM	21	4650	4650	14500	14500	127.46	132.49	50.18	52.16
8	Initial	11:27 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:30 AM	24	4500	4500	14500	14500	123.35	132.49	48.56	52.16
9	Initial	11:30 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:33 AM	27	4650	4650	14500	14500	127.46	132.49	50.18	52.16
10	Initial	11:33 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:36 AM	30	4650	4650	14500	14500	127.46	132.49	50.18	52.16
11	Initial	11:36 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:39 AM	33	4500	4500	14500	14500	123.35	132.49	48.56	52.16
12	Initial	11:39 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:42 AM	36	4650	4650	14500	14500	127.46	132.49	50.18	52.16
13	Initial	11:42 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:45 AM	39	4500	4500	14500	14500	123.35	132.49	48.56	52.16
14	Initial	11:45 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:48 AM	42	4650	4650	14500	14500	127.46	132.49	50.18	52.16
15	Initial	11:48 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:51 AM	45	4650	4650	14500	14500	127.46	132.49	50.18	52.16
16	Initial	11:51 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:54 AM	48	4500	4500	14500	14500	123.35	132.49	48.56	52.16
17	Initial	11:54 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:57 AM	51	4650	4650	14500	14500	127.46	132.49	50.18	52.16

18	Initial	11:57 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	12:00 PM	54	4500			14500					
19	Initial	12:00 PM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	12:03 PM	57	4650			14500					
20	Initial	12:03 PM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	12:06 PM	60	4650			14500					
21	Initial	12:06 PM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	12:09 PM	63	4500			14500					
22	Initial	12:09 PM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	12:12 PM	66	4650			14500					
23	Initial	12:12 PM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	12:15 PM	69	4500			14500					
24	Initial	12:15 PM	3	0	4200	4200	0	14500	115.13	132.49	45.33	52.16
	Final	12:18 PM	72	4200			14500					
25	Initial	12:18 PM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	12:21 PM	75	4100			14500					
26	Initial	12:21 PM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	12:24 PM	78	4000			14500					
27	Initial	12:24 PM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	12:27 PM	81	4100			14500					
28	Initial	12:27 PM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	12:30 PM	84	4000			14500					
29	Initial	12:30 PM	3	0	4150	4150	0	14100	113.76	128.83	44.79	50.72
	Final	12:33 PM	87	4150			14100					
30	Initial	12:33 PM	3	0	3900	3900	0	14100	106.90	128.83	42.09	50.72
	Final	12:36 PM	90	3900			14100					
31	Initial	12:36 PM	3	0	3900	3900	0	14000	106.90	127.92	42.09	50.36
	Final	12:39 PM	93	3900			14000					
32	Initial	12:39 PM	3	0	3850	3850	0	14100	105.53	128.83	41.55	50.72
	Final	12:42 PM	96	3850			14100					
33	Initial	12:42 PM	3	0	3750	3750	0	13900	102.79	127.00	40.47	50.00
	Final	12:45 PM	99	3750			13900					
34	Initial	12:45 PM	3	0	3700	3700	0	13800	101.42	126.09	39.93	49.64
	Final	12:48 PM	102	3700			13800					
35	Initial	12:48 PM	3	0	3600	3600	0	13850	98.68	126.55	38.85	49.82
	Final	12:51 PM	105	3600			13850					
36	Initial	12:51 PM	3	0	3550	3550	0	13700	97.31	125.18	38.31	49.28
	Final	12:54 PM	108	3550			13700					
37	Initial	12:54 PM	3	0	3550	3550	0	13500	97.31	123.35	38.31	48.56
	Final	12:57 PM	111	3550			13500					
38	Initial	12:57 PM	3	0	3600	3600	0	13650	98.68	124.72	38.85	49.10
	Final	1:00 PM	114	3600			13650					
39	Initial	1:00 PM	3	0	3400	3400	0	13700	93.20	125.18	36.69	49.28
	Final	1:03 PM	117	3400			13700					
40	Initial	1:03 PM	3	0	3300	3300	0	13600	90.46	124.26	35.61	48.92
	Final	1:06 PM	120	3300			13600					
41	Initial	1:06 PM	3	0	3000	3000	0	13500	82.23	123.35	32.38	48.56
	Final	1:09 PM	123	3000			13500					
42	Initial	1:09 PM	3	0	3100	3100	0	13550	84.97	123.81	33.45	48.74
	Final	1:12 PM	126	3100			13550					
43	Initial	1:12 PM	3	0	3050	3050	0	13400	83.60	122.44	32.91	48.20
	Final	1:15 PM	129	3050			13400					

44	Initial	1:15 PM	3	0	3100	0	13300	13300	84.97	121.52	33.45	47.84
	Final	1:18 PM	132	3100		13300						
45	Initial	1:18 PM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	1:21 PM	135	3000		13300						
46	Initial	1:21 PM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	1:24 PM	138	2900		13400						
47	Initial	1:24 PM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	1:27 PM	141	2950		13400						
48	Initial	1:27 PM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	1:30 PM	144	2800		13500						
49	Initial	1:30 PM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	1:33 PM	147	2750		13300						
50	Initial	1:33 PM	3	0	2800	0	13400	13400	76.75	122.44	30.22	48.20
	Final	1:36 PM	150	2800		13400						
51	Initial	1:36 PM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	1:39 PM	153	2500		13300						
52	Initial	1:39 PM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	1:42 PM	156	2400		13400						
53	Initial	1:42 PM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	1:45 PM	159	2300		13500						
54	Initial	1:45 PM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	1:48 PM	162	2350		13400						
55	Initial	1:48 PM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	1:51 PM	165	2250		13300						
56	Initial	1:51 PM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	1:54 PM	168	2200		13300						
57	Initial	1:54 PM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	1:57 PM	171	2100		13100						
58	Initial	1:57 PM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	2:00 PM	174	2200		13000						
59	Initial	2:00 PM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	2:03 PM	177	2200		13100						
60	Initial	2:03 PM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	2:06 PM	180	2100		13200						
61	Initial	2:06 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	2:09 PM	183	2150		13100						
62	Initial	2:09 PM	3	0	1950	0	12900	12900	53.45	117.87	21.04	46.40
	Final	2:12 PM	186	1950		12900						
63	Initial	2:12 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	2:15 PM	189	2150		13100						
64	Initial	2:15 PM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	2:18 PM	192	2200		13000						
65	Initial	2:18 PM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	2:21 PM	195	2100		12900						
66	Initial	2:21 PM	3	0	2000	0	13000	13000	54.82	118.78	21.58	46.76
	Final	2:24 PM	198	2000		13000						
67	Initial	2:24 PM	3	0	1950	0	13700	13700	53.45	125.18	21.04	49.28
	Final	2:27 PM	201	1950		13700						
68	Initial	2:27 PM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	2:30 PM	204	2000		12900						
69	Initial	2:30 PM	3	0	2100	0	12800	12800	57.56	116.95	22.66	46.04
	Final	2:33 PM	207	2100		12800						

70	Initial	2:33 PM	3	0	2100	0	12700	12700	57.56	116.04	22.66	45.68
	Final	2:36 PM	210	2100		12700						
71	Initial	2:36 PM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	2:39 PM	213	2100		12500						
72	Initial	2:39 PM	3	0	1950	0	12600	12600	53.45	115.13	21.04	45.33
	Final	2:42 PM	216	1950		12600						
73	Initial	2:42 PM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	2:45 PM	219	2100		12600						
74	Initial	2:45 PM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	2:48 PM	222	2200		12500						
75	Initial	2:48 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	2:51 PM	225	2100		12300						
76	Initial	2:51 PM	3	0	2000	0	12200	12200	54.82	111.47	21.58	43.89
	Final	2:54 PM	228	2000		12200						
77	Initial	2:54 PM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	2:57 PM	231	2100		12400						
78	Initial	2:57 PM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	3:00 PM	234	2150		12300						
79	Initial	3:00 PM	3	0	2250	0	12300	12300	61.67	112.38	24.28	44.25
	Final	3:03 PM	237	2250		12300						
80	Initial	3:03 PM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	3:06 PM	240	2100		12000						
81	Initial	3:06 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	3:09 PM	243	2150		12200						
82	Initial	3:09 PM	3	0	1950	0	12100	12100	53.45	110.56	21.04	43.53
	Final	3:12 PM	246	1950		12100						
83	Initial	3:12 PM	3	0	2000	0	12000	12000	54.82	109.64	21.58	43.17
	Final	3:15 PM	249	2000		12000						
84	Initial	3:15 PM	3	0	1950	0	11800	11800	53.45	107.82	21.04	42.45
	Final	3:18 PM	252	1950		11800						
85	Initial	3:18 PM	3	0	1950	0	11600	11600	53.45	105.99	21.04	41.73
	Final	3:21 PM	255	1950		11600						
86	Initial	3:21 PM	3	0	2000	0	11400	11400	54.82	104.16	21.58	41.01
	Final	3:24 PM	258	2000		11400						
87	Initial	3:24 PM	3	0	1950	0	11250	11250	53.45	102.79	21.04	40.47
	Final	3:27 PM	261	1950		11250						
88	Initial	3:27 PM	3	0	1950	0	11300	11300	53.45	103.25	21.04	40.65
	Final	3:30 PM	264	1950		11300						
89	Initial	3:30 PM	3	0	1950	0	11200	11200	53.45	102.33	21.04	40.29
	Final	3:33 PM	267	1950		11200						
90	Initial	3:33 PM	3	0	2000	0	11200	11200	54.82	102.33	21.58	40.29
	Final	3:36 PM	270	2000		11200						
91	Initial	3:36 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	3:39 PM	273	1950		11000						
92	Initial	3:39 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	3:42 PM	276	1950		11000						
93	Initial	3:42 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	3:45 PM	279	1950		11000						
94	Initial	3:45 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	3:48 PM	282	1950		11000						
95	Initial	3:48 PM	3	0	1950	0	11000	11000	53.45	100.51	21.04	39.57
	Final	3:51 PM	285	1950		11000						

96	Initial	3:51 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	3:54 PM	288	1950			11000					
97	Initial	3:54 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	3:57 PM	291	1950			11000					
98	Initial	3:57 PM	3	0	2000	2000	0	11000	54.82	100.51	21.58	39.57
	Final	4:00 PM	294	2000			11000					
99	Initial	4:00 PM	3	0	2000	2000	0	11000	54.82	100.51	21.58	39.57
	Final	4:03 PM	297	2000			11000					
100	Initial	4:03 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:06 PM	300	1950			11000					
101	Initial	4:06 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:09 PM	303	1950			11000					
102	Initial	4:09 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:12 PM	306	1950			11000					
103	Initial	4:12 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:15 PM	309	1950			11000					
104	Initial	4:15 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:18 PM	312	1950			11000					
105	Initial	4:18 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:21 PM	315	1950			11000					
106	Initial	4:21 PM	3	0	2000	2000	0	11000	54.82	100.51	21.58	39.57
	Final	4:24 PM	318	2000			11000					
107	Initial	4:24 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:27 PM	321	1950			11000					
108	Initial	4:27 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:30 PM	324	1950			11000					
109	Initial	4:30 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:33 PM	327	1950			11000					
110	Initial	4:33 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:36 PM	330	1950			11000					
111	Initial	4:36 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:39 PM	333	1950			11000					
112	Initial	4:39 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:42 PM	336	1950			11000					
113	Initial	4:42 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:45 PM	339	1950			11000					
114	Initial	4:45 PM	3	0	2000	2000	0	11000	54.82	100.51	21.58	39.57
	Final	4:48 PM	342	2000			11000					
115	Initial	4:48 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:51 PM	345	1950			11000					
116	Initial	4:51 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:54 PM	348	1950			11000					
117	Initial	4:54 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	4:57 PM	351	1950			11000					
118	Initial	4:57 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	5:00 PM	354	1950			11000					
119	Initial	5:00 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	5:03 PM	357	1950			11000					
120	Initial	5:03 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	5:06 PM	360	1950			11000					
121	Initial	5:06 PM	3	0	1950	1950	0	11000	53.45	100.51	21.04	39.57
	Final	5:09 PM	363	1950			11000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Sam Bergeland

Infiltration Test No I-14

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	8:30 AM	3	0	4600	0	14000	126.09	127.92	49.64	50.36
	Final	8:33 AM	3	4600	4600	14000					
2	Initial	8:33 AM	3	0	4300	0	14300	117.87	130.66	46.40	51.44
	Final	8:36 AM	6	4300	4300	14300					
3	Initial	8:36 AM	3	0	4600	0	14500	126.09	132.49	49.64	52.16
	Final	8:39 AM	9	4600	4600	14500					
4	Initial	8:39 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	8:42 AM	12	4650	4650	14500					
5	Initial	8:42 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:45 AM	15	4500	4500	14500					
6	Initial	8:45 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:48 AM	18	4500	4500	14500					
7	Initial	8:48 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:51 AM	21	4750	4750	14500					
8	Initial	8:51 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:54 AM	24	4500	4500	14500					
9	Initial	8:54 AM	3	0	4550	0	14500	124.72	132.49	49.10	52.16
	Final	8:57 AM	27	4550	4550	14500					
10	Initial	8:57 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:00 AM	30	4650	4650	14500					
11	Initial	9:00 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:03 AM	33	4500	4500	14500					
12	Initial	9:03 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:06 AM	36	4650	4650	14500					
13	Initial	9:06 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:09 AM	39	4500	4500	14500					
14	Initial	9:09 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:12 AM	42	4650	4650	14500					
15	Initial	9:12 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:15 AM	45	4650	4650	14500					
16	Initial	9:15 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:18 AM	48	4500	4500	14500					
17	Initial	9:18 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:21 AM	51	4750	4750	14500					

18	Initial	9:21 AM	3	0	4600	4600	0	14500	126.09	132.49	49.64	52.16
	Final	9:24 AM	54	4600			14500					
19	Initial	9:24 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:27 AM	57	4650			14500					
20	Initial	9:27 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:30 AM	60	4650			14500					
21	Initial	9:30 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:33 AM	63	4500			14500					
22	Initial	9:33 AM	3	0	4750	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:36 AM	66	4750			14500					
23	Initial	9:36 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:39 AM	69	4500			14500					
24	Initial	9:39 AM	3	0	4200	4200	0	14500	115.13	132.49	45.33	52.16
	Final	9:42 AM	72	4200			14500					
25	Initial	9:42 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	9:45 AM	75	4100			14500					
26	Initial	9:45 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	9:48 AM	78	4000			14500					
27	Initial	9:48 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	9:51 AM	81	4100			14500					
28	Initial	9:51 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	9:54 AM	84	4000			14500					
29	Initial	9:54 AM	3	0	4150	4150	0	14100	113.76	128.83	44.79	50.72
	Final	9:57 AM	87	4150			14100					
30	Initial	9:57 AM	3	0	3900	3900	0	14100	106.90	128.83	42.09	50.72
	Final	10:00 AM	90	3900			14100					
31	Initial	10:00 AM	3	0	3900	3900	0	14000	106.90	127.92	42.09	50.36
	Final	10:03 AM	93	3900			14000					
32	Initial	10:03 AM	3	0	3850	3850	0	14100	105.53	128.83	41.55	50.72
	Final	10:06 AM	96	3850			14100					
33	Initial	10:06 AM	3	0	3750	3750	0	13900	102.79	127.00	40.47	50.00
	Final	10:09 AM	99	3750			13900					
34	Initial	10:09 AM	3	0	3700	3700	0	13800	101.42	126.09	39.93	49.64
	Final	10:12 AM	102	3700			13800					
35	Initial	10:12 AM	3	0	3600	3600	0	13850	98.68	126.55	38.85	49.82
	Final	10:15 AM	105	3600			13850					
36	Initial	10:15 AM	3	0	3550	3550	0	13700	97.31	125.18	38.31	49.28
	Final	10:18 AM	108	3550			13700					
37	Initial	10:18 AM	3	0	3550	3550	0	13500	97.31	123.35	38.31	48.56
	Final	10:21 AM	111	3550			13500					
38	Initial	10:21 AM	3	0	3600	3600	0	13650	98.68	124.72	38.85	49.10
	Final	10:24 AM	114	3600			13650					
39	Initial	10:24 AM	3	0	3400	3400	0	13700	93.20	125.18	36.69	49.28
	Final	10:27 AM	117	3400			13700					
40	Initial	10:27 AM	3	0	3300	3300	0	13600	90.46	124.26	35.61	48.92
	Final	10:30 AM	120	3300			13600					
41	Initial	10:30 AM	3	0	3000	3000	0	13500	82.23	123.35	32.38	48.56
	Final	10:33 AM	123	3000			13500					
42	Initial	10:33 AM	3	0	3100	3100	0	13550	84.97	123.81	33.45	48.74
	Final	10:36 AM	126	3100			13550					
43	Initial	10:36 AM	3	0	3050	3050	0	13400	83.60	122.44	32.91	48.20
	Final	10:39 AM	129	3050			13400					

44	Initial	10:39 AM	3	0	3050	3050	0	13300	83.60	121.52	32.91	47.84
	Final	10:42 AM	132	3050			13300					
45	Initial	10:42 AM	3	0	3000	3000	0	13300	82.23	121.52	32.38	47.84
	Final	10:45 AM	135	3000			13300					
46	Initial	10:45 AM	3	0	2900	2900	0	13400	79.49	122.44	31.30	48.20
	Final	10:48 AM	138	2900			13400					
47	Initial	10:48 AM	3	0	2950	2950	0	13400	80.86	122.44	31.84	48.20
	Final	10:51 AM	141	2950			13400					
48	Initial	10:51 AM	3	0	2800	2800	0	13500	76.75	123.35	30.22	48.56
	Final	10:54 AM	144	2800			13500					
49	Initial	10:54 AM	3	0	2750	2750	0	13300	75.38	121.52	29.68	47.84
	Final	10:57 AM	147	2750			13300					
50	Initial	10:57 AM	3	0	2600	2600	0	13400	71.27	122.44	28.06	48.20
	Final	11:00 AM	150	2600			13400					
51	Initial	11:00 AM	3	0	2500	2500	0	13300	68.53	121.52	26.98	47.84
	Final	11:03 AM	153	2500			13300					
52	Initial	11:03 AM	3	0	2400	2400	0	13400	65.79	122.44	25.90	48.20
	Final	11:06 AM	156	2400			13400					
53	Initial	11:06 AM	3	0	2300	2300	0	13500	63.05	123.35	24.82	48.56
	Final	11:09 AM	159	2300			13500					
54	Initial	11:09 AM	3	0	2350	2350	0	13400	64.42	122.44	25.36	48.20
	Final	11:12 AM	162	2350			13400					
55	Initial	11:12 AM	3	0	2250	2250	0	13300	61.67	121.52	24.28	47.84
	Final	11:15 AM	165	2250			13300					
56	Initial	11:15 AM	3	0	2200	2200	0	13300	60.30	121.52	23.74	47.84
	Final	11:18 AM	168	2200			13300					
57	Initial	11:18 AM	3	0	2200	2200	0	13100	60.30	119.69	23.74	47.12
	Final	11:21 AM	171	2200			13100					
58	Initial	11:21 AM	3	0	2250	2250	0	13000	61.67	118.78	24.28	46.76
	Final	11:24 AM	174	2250			13000					
59	Initial	11:24 AM	3	0	2200	2200	0	13100	60.30	119.69	23.74	47.12
	Final	11:27 AM	177	2200			13100					
60	Initial	11:27 AM	3	0	2200	2200	0	13200	60.30	120.61	23.74	47.48
	Final	11:30 AM	180	2200			13200					
61	Initial	11:30 AM	3	0	2250	2250	0	13100	61.67	119.69	24.28	47.12
	Final	11:33 AM	183	2250			13100					
62	Initial	11:33 AM	3	0	2400	2400	0	12900	65.79	117.87	25.90	46.40
	Final	11:36 AM	186	2400			12900					
63	Initial	11:36 AM	3	0	2250	2250	0	13100	61.67	119.69	24.28	47.12
	Final	11:39 AM	189	2250			13100					
64	Initial	11:39 AM	3	0	2200	2200	0	13000	60.30	118.78	23.74	46.76
	Final	11:42 AM	192	2200			13000					
65	Initial	11:42 AM	3	0	2200	2200	0	12900	60.30	117.87	23.74	46.40
	Final	11:45 AM	195	2200			12900					
66	Initial	11:45 AM	3	0	2200	2200	0	13000	60.30	118.78	23.74	46.76
	Final	11:48 AM	198	2200			13000					
67	Initial	11:48 AM	3	0	2200	2200	0	12900	60.30	117.87	23.74	46.40
	Final	11:51 AM	201	2200			12900					
68	Initial	11:51 AM	3	0	2250	2250	0	12900	61.67	117.87	24.28	46.40
	Final	11:54 AM	204	2250			12900					
69	Initial	11:54 AM	3	0	2400	2400	0	12800	65.79	116.95	25.90	46.04
	Final	11:57 AM	207	2400			12800					

70	Initial	11:57 AM	3	0	2250	0	12700	61.67	116.04	24.28	45.68
	Final	12:00 PM	210	2250		12700					
71	Initial	12:00 PM	3	0	2200	0	12500	60.30	114.21	23.74	44.97
	Final	12:03 PM	213	2200		12500					
72	Initial	12:03 PM	3	0	2200	0	12600	60.30	115.13	23.74	45.33
	Final	12:06 PM	216	2200		12600					
73	Initial	12:06 PM	3	0	2200	0	12600	60.30	115.13	23.74	45.33
	Final	12:09 PM	219	2200		12600					
74	Initial	12:09 PM	3	0	2200	0	12500	60.30	114.21	23.74	44.97
	Final	12:12 PM	222	2200		12500					
75	Initial	12:12 PM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	12:15 PM	225	2250		12300					
76	Initial	12:15 PM	3	0	2400	0	12200	65.79	111.47	25.90	43.89
	Final	12:18 PM	228	2400		12200					
77	Initial	12:18 PM	3	0	2250	0	12400	61.67	113.30	24.28	44.61
	Final	12:21 PM	231	2250		12400					
78	Initial	12:21 PM	3	0	2200	0	12300	60.30	112.38	23.74	44.25
	Final	12:24 PM	234	2200		12300					
79	Initial	12:24 PM	3	0	2200	0	12300	60.30	112.38	23.74	44.25
	Final	12:27 PM	237	2200		12300					
80	Initial	12:27 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	12:30 PM	240	2200		12000					
81	Initial	12:30 PM	3	0	2200	0	12200	60.30	111.47	23.74	43.89
	Final	12:33 PM	243	2200		12200					
82	Initial	12:33 PM	3	0	2250	0	12100	61.67	110.56	24.28	43.53
	Final	12:36 PM	246	2250		12100					
83	Initial	12:36 PM	3	0	2400	0	12000	65.79	109.64	25.90	43.17
	Final	12:39 PM	249	2400		12000					
84	Initial	12:39 PM	3	0	2250	0	11800	61.67	107.82	24.28	42.45
	Final	12:42 PM	252	2250		11800					
85	Initial	12:42 PM	3	0	2200	0	12400	60.30	113.30	23.74	44.61
	Final	12:45 PM	255	2200		12400					
86	Initial	12:45 PM	3	0	2200	0	12300	60.30	112.38	23.74	44.25
	Final	12:48 PM	258	2200		12300					
87	Initial	12:48 PM	3	0	2200	0	12300	60.30	112.38	23.74	44.25
	Final	12:51 PM	261	2200		12300					
88	Initial	12:51 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	12:54 PM	264	2200		12000					
89	Initial	12:54 PM	3	0	2250	0	12200	61.67	111.47	24.28	43.89
	Final	12:57 PM	267	2250		12200					
90	Initial	12:57 PM	3	0	2400	0	12100	65.79	110.56	25.90	43.53
	Final	1:00 PM	270	2400		12100					
91	Initial	1:00 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	1:03 PM	273	2250		12000					
92	Initial	1:03 PM	3	0	2200	0	11800	60.30	107.82	23.74	42.45
	Final	1:06 PM	276	2200		11800					
93	Initial	1:06 PM	3	0	2200	0	12400	60.30	113.30	23.74	44.61
	Final	1:09 PM	279	2200		12400					
94	Initial	1:09 PM	3	0	2200	0	12300	60.30	112.38	23.74	44.25
	Final	1:12 PM	282	2200		12300					
95	Initial	1:12 PM	3	0	2200	0	12300	60.30	112.38	23.74	44.25
	Final	1:15 PM	285	2200		12300					

96	Initial	1:15 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	1:18 PM	288	2250		12000					
97	Initial	1:18 PM	3	0	2200	0	12200	60.30	111.47	23.74	43.89
	Final	1:21 PM	291	2200		12200					
98	Initial	1:21 PM	3	0	2200	0	12100	60.30	110.56	23.74	43.53
	Final	1:24 PM	294	2200		12100					
99	Initial	1:24 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	1:27 PM	297	2200		12000					
100	Initial	1:27 PM	3	0	2250	0	11800	61.67	107.82	24.28	42.45
	Final	1:30 PM	300	2250		11800					
101	Initial	1:30 PM	3	0	2200	0	12400	60.30	113.30	23.74	44.61
	Final	1:33 PM	303	2200		12400					
102	Initial	1:33 PM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	1:36 PM	306	2250		12300					
103	Initial	1:36 PM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	1:39 PM	309	2250		12300					
104	Initial	1:39 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	1:42 PM	312	2200		12000					
105	Initial	1:42 PM	3	0	2300	0	12200	63.05	111.47	24.82	43.89
	Final	1:45 PM	315	2300		12200					
106	Initial	1:45 PM	3	0	2250	0	12100	61.67	110.56	24.28	43.53
	Final	1:48 PM	318	2250		12100					
107	Initial	1:48 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	1:51 PM	321	2250		12000					
108	Initial	1:51 PM	3	0	2250	0	11800	61.67	107.82	24.28	42.45
	Final	1:54 PM	324	2250		11800					
109	Initial	1:54 PM	3	0	2250	0	12400	61.67	113.30	24.28	44.61
	Final	1:57 PM	327	2250		12400					
110	Initial	1:57 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:00 PM	330	2200		12000					
111	Initial	2:00 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:03 PM	333	2200		12000					
112	Initial	2:03 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:06 PM	336	2200		12000					
113	Initial	2:06 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	2:09 PM	339	2250		12000					
114	Initial	2:09 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:12 PM	342	2200		12000					
115	Initial	2:12 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:15 PM	345	2200		12000					
116	Initial	2:15 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:18 PM	348	2200		12000					
117	Initial	2:18 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:21 PM	351	2200		12000					
118	Initial	2:21 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:24 PM	354	2200		12000					
119	Initial	2:24 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:27 PM	357	2200		12000					
120	Initial	2:27 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:30 PM	360	2200		12000					
121	Initial	2:30 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:33 PM	363	2200		12000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Sam Bergeland

Infiltration Test No I-15

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	9:46 AM	3	0	4800	0	14800	131.57	135.23	51.80	53.24
	Final	9:49 AM	3	4800	4800	14800					
2	Initial	9:49 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:52 AM	6	4750	4750	14500					
3	Initial	9:52 AM	3	0	4500	0	14900	123.35	136.14	48.56	53.60
	Final	9:55 AM	9	4500	4500	14900					
4	Initial	9:55 AM	3	0	4650	0	14800	127.46	135.23	50.18	53.24
	Final	9:58 AM	12	4650	4650	14800					
5	Initial	9:58 AM	3	0	4400	0	14500	120.61	132.49	47.48	52.16
	Final	10:01 AM	15	4400	4400	14500					
6	Initial	10:01 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:04 AM	18	4500	4500	14500					
7	Initial	10:04 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	10:07 AM	21	4750	4750	14500					
8	Initial	10:07 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:10 AM	24	4500	4500	14500					
9	Initial	10:10 AM	3	0	4600	0	14500	126.09	132.49	49.64	52.16
	Final	10:13 AM	27	4600	4600	14500					
10	Initial	10:13 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:16 AM	30	4650	4650	14500					
11	Initial	10:16 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:19 AM	33	4500	4500	14500					
12	Initial	10:19 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	10:22 AM	36	4750	4750	14500					
13	Initial	10:22 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:25 AM	39	4500	4500	14500					
14	Initial	10:25 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:28 AM	42	4650	4650	14500					
15	Initial	10:28 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:31 AM	45	4650	4650	14500					
16	Initial	10:31 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:34 AM	48	4500	4500	14500					
17	Initial	10:34 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	10:37 AM	51	4750	4750	14500					

18	Initial	10:37 AM	3	0	4500	0	14500	14500	123.35	132.49	48.56	52.16
	Final	10:40 AM	54	4500		14500						
19	Initial	10:40 AM	3	0	4650	0	14500	14500	127.46	132.49	50.18	52.16
	Final	10:43 AM	57	4650		14500						
20	Initial	10:43 AM	3	0	4650	0	14500	14500	127.46	132.49	50.18	52.16
	Final	10:46 AM	60	4650		14500						
21	Initial	10:46 AM	3	0	4500	0	14500	14500	123.35	132.49	48.56	52.16
	Final	10:49 AM	63	4500		14500						
22	Initial	10:49 AM	3	0	4750	0	14500	14500	130.20	132.49	51.26	52.16
	Final	10:52 AM	66	4750		14500						
23	Initial	10:52 AM	3	0	4500	0	14500	14500	123.35	132.49	48.56	52.16
	Final	10:55 AM	69	4500		14500						
24	Initial	10:55 AM	3	0	4200	0	14500	14500	115.13	132.49	45.33	52.16
	Final	10:58 AM	72	4200		14500						
25	Initial	10:58 AM	3	0	4100	0	14500	14500	112.38	132.49	44.25	52.16
	Final	11:01 AM	75	4100		14500						
26	Initial	11:01 AM	3	0	4000	0	14500	14500	109.64	132.49	43.17	52.16
	Final	11:04 AM	78	4000		14500						
27	Initial	11:04 AM	3	0	4100	0	14500	14500	112.38	132.49	44.25	52.16
	Final	11:07 AM	81	4100		14500						
28	Initial	11:07 AM	3	0	4000	0	14500	14500	109.64	132.49	43.17	52.16
	Final	11:10 AM	84	4000		14500						
29	Initial	11:10 AM	3	0	4150	0	14100	14100	113.76	128.83	44.79	50.72
	Final	11:13 AM	87	4150		14100						
30	Initial	11:13 AM	3	0	3900	0	14100	14100	106.90	128.83	42.09	50.72
	Final	11:16 AM	90	3900		14100						
31	Initial	11:16 AM	3	0	3900	0	14000	14000	106.90	127.92	42.09	50.36
	Final	11:19 AM	93	3900		14000						
32	Initial	11:19 AM	3	0	3850	0	14100	14100	105.53	128.83	41.55	50.72
	Final	11:22 AM	96	3850		14100						
33	Initial	11:22 AM	3	0	3750	0	13900	13900	102.79	127.00	40.47	50.00
	Final	11:25 AM	99	3750		13900						
34	Initial	11:25 AM	3	0	3700	0	13800	13800	101.42	126.09	39.93	49.64
	Final	11:28 AM	102	3700		13800						
35	Initial	11:28 AM	3	0	3600	0	13850	13850	98.68	126.55	38.85	49.82
	Final	11:31 AM	105	3600		13850						
36	Initial	11:31 AM	3	0	3550	0	13700	13700	97.31	125.18	38.31	49.28
	Final	11:34 AM	108	3550		13700						
37	Initial	11:34 AM	3	0	3550	0	13500	13500	97.31	123.35	38.31	48.56
	Final	11:37 AM	111	3550		13500						
38	Initial	11:37 AM	3	0	3600	0	13650	13650	98.68	124.72	38.85	49.10
	Final	11:40 AM	114	3600		13650						
39	Initial	11:40 AM	3	0	3400	0	13700	13700	93.20	125.18	36.69	49.28
	Final	11:43 AM	117	3400		13700						
40	Initial	11:43 AM	3	0	3300	0	13600	13600	90.46	124.26	35.61	48.92
	Final	11:46 AM	120	3300		13600						
41	Initial	11:46 AM	3	0	3000	0	13500	13500	82.23	123.35	32.38	48.56
	Final	11:49 AM	123	3000		13500						
42	Initial	11:49 AM	3	0	3100	0	13550	13550	84.97	123.81	33.45	48.74
	Final	11:52 AM	126	3100		13550						
43	Initial	11:52 AM	3	0	3050	0	13400	13400	83.60	122.44	32.91	48.20
	Final	11:55 AM	129	3050		13400						

44	Initial	11:55 AM	3	0	3050	0	13300	13300	83.60	121.52	32.91	47.84
	Final	11:58 AM	132	3050		13300						
45	Initial	11:58 AM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	12:01 PM	135	3000		13300						
46	Initial	12:01 PM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	12:04 PM	138	2900		13400						
47	Initial	12:04 PM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	12:07 PM	141	2950		13400						
48	Initial	12:07 PM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	12:10 PM	144	2800		13500						
49	Initial	12:10 PM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	12:13 PM	147	2750		13300						
50	Initial	12:13 PM	3	0	2600	0	13400	13400	71.27	122.44	28.06	48.20
	Final	12:16 PM	150	2600		13400						
51	Initial	12:16 PM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	12:19 PM	153	2500		13300						
52	Initial	12:19 PM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	12:22 PM	156	2400		13400						
53	Initial	12:22 PM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	12:25 PM	159	2300		13500						
54	Initial	12:25 PM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	12:28 PM	162	2350		13400						
55	Initial	12:28 PM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	12:31 PM	165	2250		13300						
56	Initial	12:31 PM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	12:34 PM	168	2200		13300						
57	Initial	12:34 PM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	12:37 PM	171	2100		13100						
58	Initial	12:37 PM	3	0	2150	0	13000	13000	58.93	118.78	23.20	46.76
	Final	12:40 PM	174	2150		13000						
59	Initial	12:40 PM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	12:43 PM	177	2200		13100						
60	Initial	12:43 PM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	12:46 PM	180	2100		13200						
61	Initial	12:46 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	12:49 PM	183	2150		13100						
62	Initial	12:49 PM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	12:52 PM	186	2000		12900						
63	Initial	12:52 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	12:55 PM	189	2150		13100						
64	Initial	12:55 PM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	12:58 PM	192	2200		13000						
65	Initial	12:58 PM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	1:01 PM	195	2100		12900						
66	Initial	1:01 PM	3	0	2050	0	13000	13000	56.19	118.78	22.12	46.76
	Final	1:04 PM	198	2050		13000						
67	Initial	1:04 PM	3	0	2000	0	13700	13700	54.82	125.18	21.58	49.28
	Final	1:07 PM	201	2000		13700						
68	Initial	1:07 PM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	1:10 PM	204	2100		12900						
69	Initial	1:10 PM	3	0	2100	0	12800	12800	57.56	116.95	22.66	46.04
	Final	1:13 PM	207	2100		12800						

70	Initial	1:13 PM	3	0	2100	0	12700	12700	57.56	116.04	22.66	45.68
	Final	1:16 PM	210	2100		12700						
71	Initial	1:16 PM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	1:19 PM	213	2100		12500						
72	Initial	1:19 PM	3	0	2000	0	12600	12600	54.82	115.13	21.58	45.33
	Final	1:22 PM	216	2000		12600						
73	Initial	1:22 PM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	1:25 PM	219	2100		12600						
74	Initial	1:25 PM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	1:28 PM	222	2200		12500						
75	Initial	1:28 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	1:31 PM	225	2100		12300						
76	Initial	1:31 PM	3	0	2100	0	12200	12200	57.56	111.47	22.66	43.89
	Final	1:34 PM	228	2100		12200						
77	Initial	1:34 PM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	1:37 PM	231	2100		12400						
78	Initial	1:37 PM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	1:40 PM	234	2150		12300						
79	Initial	1:40 PM	3	0	2250	0	12300	12300	61.67	112.38	24.28	44.25
	Final	1:43 PM	237	2250		12300						
80	Initial	1:43 PM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	1:46 PM	240	2100		12000						
81	Initial	1:46 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	1:49 PM	243	2150		12200						
82	Initial	1:49 PM	3	0	2100	0	12100	12100	57.56	110.56	22.66	43.53
	Final	1:52 PM	246	2100		12100						
83	Initial	1:52 PM	3	0	2050	0	12000	12000	56.19	109.64	22.12	43.17
	Final	1:55 PM	249	2050		12000						
84	Initial	1:55 PM	3	0	2100	0	11800	11800	57.56	107.82	22.66	42.45
	Final	1:58 PM	252	2100		11800						
85	Initial	1:58 PM	3	0	2050	0	11600	11600	56.19	105.99	22.12	41.73
	Final	2:01 PM	255	2050		11600						
86	Initial	2:01 PM	3	0	2100	0	11400	11400	57.56	104.16	22.66	41.01
	Final	2:04 PM	258	2100		11400						
87	Initial	2:04 PM	3	0	2150	0	11250	11250	58.93	102.79	23.20	40.47
	Final	2:07 PM	261	2150		11250						
88	Initial	2:07 PM	3	0	2250	0	11300	11300	61.67	103.25	24.28	40.65
	Final	2:10 PM	264	2250		11300						
89	Initial	2:10 PM	3	0	2100	0	11200	11200	57.56	102.33	22.66	40.29
	Final	2:13 PM	267	2100		11200						
90	Initial	2:13 PM	3	0	2150	0	11200	11200	58.93	102.33	23.20	40.29
	Final	2:16 PM	270	2150		11200						
91	Initial	2:16 PM	3	0	2050	0	11200	11200	56.19	102.33	22.12	40.29
	Final	2:19 PM	273	2050		11200						
92	Initial	2:19 PM	3	0	2050	0	11200	11200	56.19	102.33	22.12	40.29
	Final	2:22 PM	276	2050		11200						
93	Initial	2:22 PM	3	0	2100	0	11200	11200	57.56	102.33	22.66	40.29
	Final	2:25 PM	279	2100		11200						
94	Initial	2:25 PM	3	0	2050	0	11200	11200	56.19	102.33	22.12	40.29
	Final	2:28 PM	282	2050		11200						
95	Initial	2:28 PM	3	0	2100	0	11200	11200	57.56	102.33	22.66	40.29
	Final	2:31 PM	285	2100		11200						

96	Initial	2:31 PM	3	0	2150	2150	0	11200	58.93	102.33	23.20	40.29
	Final	2:34 PM	288	2150			11200					
97	Initial	2:34 PM	3	0	2250	2250	0	11200	61.67	102.33	24.28	40.29
	Final	2:37 PM	291	2250			11200					
98	Initial	2:37 PM	3	0	2100	2100	0	11200	57.56	102.33	22.66	40.29
	Final	2:40 PM	294	2100			11200					
99	Initial	2:40 PM	3	0	1950	1950	0	11200	53.45	102.33	21.04	40.29
	Final	2:43 PM	297	1950			11200					
100	Initial	2:43 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:46 PM	300	1900			11200					
101	Initial	2:46 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:49 PM	303	1900			11200					
102	Initial	2:49 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:52 PM	306	1900			11200					
103	Initial	2:52 PM	3	0	1950	1950	0	11200	53.45	102.33	21.04	40.29
	Final	2:55 PM	309	1950			11200					
104	Initial	2:55 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:58 PM	312	1900			11200					
105	Initial	2:58 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:01 PM	315	1900			11200					
106	Initial	3:01 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:04 PM	318	1900			11200					
107	Initial	3:04 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:07 PM	321	1900			11200					
108	Initial	3:07 PM	3	0	1950	1950	0	11200	53.45	102.33	21.04	40.29
	Final	3:10 PM	324	1950			11200					
109	Initial	3:10 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:13 PM	327	1900			11200					
110	Initial	3:13 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:16 PM	330	1900			11200					
111	Initial	3:16 PM	3	0	1950	1950	0	11200	53.45	102.33	21.04	40.29
	Final	3:19 PM	333	1950			11200					
112	Initial	3:19 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:22 PM	336	1900			11200					
113	Initial	3:22 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:25 PM	339	1900			11200					
114	Initial	3:25 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:28 PM	342	1900			11200					
115	Initial	3:28 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:31 PM	345	1900			11200					
116	Initial	3:31 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:34 PM	348	1900			11200					
117	Initial	3:34 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:37 PM	351	1900			11200					
118	Initial	3:37 PM	3	0	1950	1950	0	11200	53.45	102.33	21.04	40.29
	Final	3:40 PM	354	1950			11200					
119	Initial	3:40 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:43 PM	357	1900			11200					
120	Initial	3:43 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:46 PM	360	1900			11200					
121	Initial	3:46 PM	3	0	1900	1900	0	11200	52.08	102.33	20.50	40.29
	Final	3:49 PM	363	1900			11200					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Sam Bergeland

Infiltration Test No I-16

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	10:18 AM	3	0	4600	0	14000	126.09	127.92	49.64	50.36
	Final	10:21 AM	3	4600	4600	14000					
2	Initial	10:21 AM	3	0	4500	0	14300	123.35	130.66	48.56	51.44
	Final	10:24 AM	6	4500	4500	14300					
3	Initial	10:24 AM	3	0	4600	0	14500	126.09	132.49	49.64	52.16
	Final	10:27 AM	9	4600	4600	14500					
4	Initial	10:27 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:30 AM	12	4650	4650	14500					
5	Initial	10:30 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:33 AM	15	4500	4500	14500					
6	Initial	10:33 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:36 AM	18	4500	4500	14500					
7	Initial	10:36 AM	3	0	4600	0	14500	126.09	132.49	49.64	52.16
	Final	10:39 AM	21	4600	4600	14500					
8	Initial	10:39 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:42 AM	24	4500	4500	14500					
9	Initial	10:42 AM	3	0	4550	0	14500	124.72	132.49	49.10	52.16
	Final	10:45 AM	27	4550	4550	14500					
10	Initial	10:45 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:48 AM	30	4650	4650	14500					
11	Initial	10:48 AM	3	0	4550	0	14500	124.72	132.49	49.10	52.16
	Final	10:51 AM	33	4550	4550	14500					
12	Initial	10:51 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:54 AM	36	4650	4650	14500					
13	Initial	10:54 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:57 AM	39	4500	4500	14500					
14	Initial	10:57 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:00 AM	42	4650	4650	14500					
15	Initial	11:00 AM	3	0	4600	0	14500	126.09	132.49	49.64	52.16
	Final	11:03 AM	45	4600	4600	14500					
16	Initial	11:03 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:06 AM	48	4500	4500	14500					
17	Initial	11:06 AM	3	0	4600	0	14500	126.09	132.49	49.64	52.16
	Final	11:09 AM	51	4600	4600	14500					

18	Initial	11:09 AM	3	0	4600	4600	0	14500	126.09	132.49	49.64	52.16
	Final	11:12 AM	54	4600			14500					
19	Initial	11:12 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:15 AM	57	4650			14500					
20	Initial	11:15 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:18 AM	60	4650			14500					
21	Initial	11:18 AM	3	0	4550	4550	0	14500	124.72	132.49	49.10	52.16
	Final	11:21 AM	63	4550			14500					
22	Initial	11:21 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	11:24 AM	66	4650			14500					
23	Initial	11:24 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	11:27 AM	69	4500			14500					
24	Initial	11:27 AM	3	0	4200	4200	0	14500	115.13	132.49	45.33	52.16
	Final	11:30 AM	72	4200			14500					
25	Initial	11:30 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	11:33 AM	75	4100			14500					
26	Initial	11:33 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	11:36 AM	78	4000			14500					
27	Initial	11:36 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	11:39 AM	81	4100			14500					
28	Initial	11:39 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	11:42 AM	84	4000			14500					
29	Initial	11:42 AM	3	0	4150	4150	0	14100	113.76	128.83	44.79	50.72
	Final	11:45 AM	87	4150			14100					
30	Initial	11:45 AM	3	0	3900	3900	0	14100	106.90	128.83	42.09	50.72
	Final	11:48 AM	90	3900			14100					
31	Initial	11:48 AM	3	0	3900	3900	0	14000	106.90	127.92	42.09	50.36
	Final	11:51 AM	93	3900			14000					
32	Initial	11:51 AM	3	0	3850	3850	0	14100	105.53	128.83	41.55	50.72
	Final	11:54 AM	96	3850			14100					
33	Initial	11:54 AM	3	0	3750	3750	0	13900	102.79	127.00	40.47	50.00
	Final	11:57 AM	99	3750			13900					
34	Initial	11:57 AM	3	0	3700	3700	0	13800	101.42	126.09	39.93	49.64
	Final	12:00 PM	102	3700			13800					
35	Initial	12:00 PM	3	0	3600	3600	0	13850	98.68	126.55	38.85	49.82
	Final	12:03 PM	105	3600			13850					
36	Initial	12:03 PM	3	0	3550	3550	0	13700	97.31	125.18	38.31	49.28
	Final	12:06 PM	108	3550			13700					
37	Initial	12:06 PM	3	0	3550	3550	0	13500	97.31	123.35	38.31	48.56
	Final	12:09 PM	111	3550			13500					
38	Initial	12:09 PM	3	0	3600	3600	0	13650	98.68	124.72	38.85	49.10
	Final	12:12 PM	114	3600			13650					
39	Initial	12:12 PM	3	0	3400	3400	0	13700	93.20	125.18	36.69	49.28
	Final	12:15 PM	117	3400			13700					
40	Initial	12:15 PM	3	0	3300	3300	0	13600	90.46	124.26	35.61	48.92
	Final	12:18 PM	120	3300			13600					
41	Initial	12:18 PM	3	0	3000	3000	0	13500	82.23	123.35	32.38	48.56
	Final	12:21 PM	123	3000			13500					
42	Initial	12:21 PM	3	0	3100	3100	0	13550	84.97	123.81	33.45	48.74
	Final	12:24 PM	126	3100			13550					
43	Initial	12:24 PM	3	0	3050	3050	0	13400	83.60	122.44	32.91	48.20
	Final	12:27 PM	129	3050			13400					

44	Initial	12:27 PM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	12:30 PM	132	3000		13300						
45	Initial	12:30 PM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	12:33 PM	135	3000		13300						
46	Initial	12:33 PM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	12:36 PM	138	2900		13400						
47	Initial	12:36 PM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	12:39 PM	141	2950		13400						
48	Initial	12:39 PM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	12:42 PM	144	2800		13500						
49	Initial	12:42 PM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	12:45 PM	147	2750		13300						
50	Initial	12:45 PM	3	0	2600	0	13400	13400	71.27	122.44	28.06	48.20
	Final	12:48 PM	150	2600		13400						
51	Initial	12:48 PM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	12:51 PM	153	2500		13300						
52	Initial	12:51 PM	3	0	2550	0	13400	13400	69.90	122.44	27.52	48.20
	Final	12:54 PM	156	2550		13400						
53	Initial	12:54 PM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	12:57 PM	159	2300		13500						
54	Initial	12:57 PM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	1:00 PM	162	2350		13400						
55	Initial	1:00 PM	3	0	2400	0	13300	13300	65.79	121.52	25.90	47.84
	Final	1:03 PM	165	2400		13300						
56	Initial	1:03 PM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	1:06 PM	168	2250		13300						
57	Initial	1:06 PM	3	0	2250	0	13100	13100	61.67	119.69	24.28	47.12
	Final	1:09 PM	171	2250		13100						
58	Initial	1:09 PM	3	0	2300	0	13000	13000	63.05	118.78	24.82	46.76
	Final	1:12 PM	174	2300		13000						
59	Initial	1:12 PM	3	0	2250	0	13100	13100	61.67	119.69	24.28	47.12
	Final	1:15 PM	177	2250		13100						
60	Initial	1:15 PM	3	0	2250	0	13200	13200	61.67	120.61	24.28	47.48
	Final	1:18 PM	180	2250		13200						
61	Initial	1:18 PM	3	0	2300	0	13100	13100	63.05	119.69	24.82	47.12
	Final	1:21 PM	183	2300		13100						
62	Initial	1:21 PM	3	0	2500	0	12900	12900	68.53	117.87	26.98	46.40
	Final	1:24 PM	186	2500		12900						
63	Initial	1:24 PM	3	0	2300	0	13100	13100	63.05	119.69	24.82	47.12
	Final	1:27 PM	189	2300		13100						
64	Initial	1:27 PM	3	0	2250	0	13000	13000	61.67	118.78	24.28	46.76
	Final	1:30 PM	192	2250		13000						
65	Initial	1:30 PM	3	0	2250	0	12900	12900	61.67	117.87	24.28	46.40
	Final	1:33 PM	195	2250		12900						
66	Initial	1:33 PM	3	0	2250	0	13000	13000	61.67	118.78	24.28	46.76
	Final	1:36 PM	198	2250		13000						
67	Initial	1:36 PM	3	0	2250	0	12900	12900	61.67	117.87	24.28	46.40
	Final	1:39 PM	201	2250		12900						
68	Initial	1:39 PM	3	0	2300	0	12900	12900	63.05	117.87	24.82	46.40
	Final	1:42 PM	204	2300		12900						
69	Initial	1:42 PM	3	0	2400	0	12800	12800	65.79	116.95	25.90	46.04
	Final	1:45 PM	207	2400		12800						

70	Initial	1:45 PM	3	0	2300	0	12700	63.05	116.04	24.82	45.68
	Final	1:48 PM	210	2300		12700					
71	Initial	1:48 PM	3	0	2250	0	12500	61.67	114.21	24.28	44.97
	Final	1:51 PM	213	2250		12500					
72	Initial	1:51 PM	3	0	2250	0	12600	61.67	115.13	24.28	45.33
	Final	1:54 PM	216	2250		12600					
73	Initial	1:54 PM	3	0	2250	0	12600	61.67	115.13	24.28	45.33
	Final	1:57 PM	219	2250		12600					
74	Initial	1:57 PM	3	0	2250	0	12500	61.67	114.21	24.28	44.97
	Final	2:00 PM	222	2250		12500					
75	Initial	2:00 PM	3	0	2300	0	12300	63.05	112.38	24.82	44.25
	Final	2:03 PM	225	2300		12300					
76	Initial	2:03 PM	3	0	2400	0	12200	65.79	111.47	25.90	43.89
	Final	2:06 PM	228	2400		12200					
77	Initial	2:06 PM	3	0	2300	0	12400	63.05	113.30	24.82	44.61
	Final	2:09 PM	231	2300		12400					
78	Initial	2:09 PM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	2:12 PM	234	2250		12300					
79	Initial	2:12 PM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	2:15 PM	237	2250		12300					
80	Initial	2:15 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	2:18 PM	240	2250		12000					
81	Initial	2:18 PM	3	0	2250	0	12200	61.67	111.47	24.28	43.89
	Final	2:21 PM	243	2250		12200					
82	Initial	2:21 PM	3	0	2300	0	12100	63.05	110.56	24.82	43.53
	Final	2:24 PM	246	2300		12100					
83	Initial	2:24 PM	3	0	2400	0	12000	65.79	109.64	25.90	43.17
	Final	2:27 PM	249	2400		12000					
84	Initial	2:27 PM	3	0	2300	0	11800	63.05	107.82	24.82	42.45
	Final	2:30 PM	252	2300		11800					
85	Initial	2:30 PM	3	0	2250	0	12400	61.67	113.30	24.28	44.61
	Final	2:33 PM	255	2250		12400					
86	Initial	2:33 PM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	2:36 PM	258	2250		12300					
87	Initial	2:36 PM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	2:39 PM	261	2250		12300					
88	Initial	2:39 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	2:42 PM	264	2250		12000					
89	Initial	2:42 PM	3	0	2300	0	12200	63.05	111.47	24.82	43.89
	Final	2:45 PM	267	2300		12200					
90	Initial	2:45 PM	3	0	2400	0	12100	65.79	110.56	25.90	43.53
	Final	2:48 PM	270	2400		12100					
91	Initial	2:48 PM	3	0	2300	0	12000	63.05	109.64	24.82	43.17
	Final	2:51 PM	273	2300		12000					
92	Initial	2:51 PM	3	0	2250	0	11800	61.67	107.82	24.28	42.45
	Final	2:54 PM	276	2250		11800					
93	Initial	2:54 PM	3	0	2250	0	12400	61.67	113.30	24.28	44.61
	Final	2:57 PM	279	2250		12400					
94	Initial	2:57 PM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	3:00 PM	282	2250		12300					
95	Initial	3:00 PM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	3:03 PM	285	2250		12300					

96	Initial	3:03 PM	3	0	2300	0	12000	63.05	109.64	24.82	43.17
	Final	3:06 PM	288	2300		12000					
97	Initial	3:06 PM	3	0	2250	0	12200	61.67	111.47	24.28	43.89
	Final	3:09 PM	291	2250		12200					
98	Initial	3:09 PM	3	0	2250	0	12100	61.67	110.56	24.28	43.53
	Final	3:12 PM	294	2250		12100					
99	Initial	3:12 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	3:15 PM	297	2250		12000					
100	Initial	3:15 PM	3	0	2300	0	11800	63.05	107.82	24.82	42.45
	Final	3:18 PM	300	2300		11800					
101	Initial	3:18 PM	3	0	2250	0	12400	61.67	113.30	24.28	44.61
	Final	3:21 PM	303	2250		12400					
102	Initial	3:21 PM	3	0	2300	0	12300	63.05	112.38	24.82	44.25
	Final	3:24 PM	306	2300		12300					
103	Initial	3:24 PM	3	0	2300	0	12300	63.05	112.38	24.82	44.25
	Final	3:27 PM	309	2300		12300					
104	Initial	3:27 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	3:30 PM	312	2250		12000					
105	Initial	3:30 PM	3	0	2300	0	12200	63.05	111.47	24.82	43.89
	Final	3:33 PM	315	2300		12200					
106	Initial	3:33 PM	3	0	2300	0	12100	63.05	110.56	24.82	43.53
	Final	3:36 PM	318	2300		12100					
107	Initial	3:36 PM	3	0	2300	0	12000	63.05	109.64	24.82	43.17
	Final	3:39 PM	321	2300		12000					
108	Initial	3:39 PM	3	0	2300	0	11800	63.05	107.82	24.82	42.45
	Final	3:42 PM	324	2300		11800					
109	Initial	3:42 PM	3	0	2300	0	12400	63.05	113.30	24.82	44.61
	Final	3:45 PM	327	2300		12400					
110	Initial	3:45 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	3:48 PM	330	2250		12000					
111	Initial	3:48 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	3:51 PM	333	2250		12000					
112	Initial	3:51 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	3:54 PM	336	2250		12000					
113	Initial	3:54 PM	3	0	2300	0	12000	63.05	109.64	24.82	43.17
	Final	3:57 PM	339	2300		12000					
114	Initial	3:57 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	4:00 PM	342	2250		12000					
115	Initial	4:00 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	4:03 PM	345	2250		12000					
116	Initial	4:03 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	4:06 PM	348	2250		12000					
117	Initial	4:06 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	4:09 PM	351	2250		12000					
118	Initial	4:09 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	4:12 PM	354	2250		12000					
119	Initial	4:12 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	4:15 PM	357	2250		12000					
120	Initial	4:15 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	4:18 PM	360	2250		12000					
121	Initial	4:18 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	4:21 PM	363	2250		12000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Sam Bergeland

Infiltration Test No I-17

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	8:30 AM	3	0	4800	0	14800	131.57	135.23	51.80	53.24
	Final	8:33 AM	3	4800	4800	14800					
2	Initial	8:33 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:36 AM	6	4750	4750	14500					
3	Initial	8:36 AM	3	0	4500	0	14900	123.35	136.14	48.56	53.60
	Final	8:39 AM	9	4500	4500	14900					
4	Initial	8:39 AM	3	0	4650	0	14800	127.46	135.23	50.18	53.24
	Final	8:42 AM	12	4650	4650	14800					
5	Initial	8:42 AM	3	0	4400	0	14500	120.61	132.49	47.48	52.16
	Final	8:45 AM	15	4400	4400	14500					
6	Initial	8:45 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:48 AM	18	4500	4500	14500					
7	Initial	8:48 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	8:51 AM	21	4750	4750	14500					
8	Initial	8:51 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	8:54 AM	24	4500	4500	14500					
9	Initial	8:54 AM	3	0	4600	0	14500	126.09	132.49	49.64	52.16
	Final	8:57 AM	27	4600	4600	14500					
10	Initial	8:57 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:00 AM	30	4650	4650	14500					
11	Initial	9:00 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:03 AM	33	4500	4500	14500					
12	Initial	9:03 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:06 AM	36	4750	4750	14500					
13	Initial	9:06 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:09 AM	39	4500	4500	14500					
14	Initial	9:09 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:12 AM	42	4650	4650	14500					
15	Initial	9:12 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:15 AM	45	4650	4650	14500					
16	Initial	9:15 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:18 AM	48	4500	4500	14500					
17	Initial	9:18 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:21 AM	51	4750	4750	14500					

18	Initial	9:21 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:24 AM	54	4500		14500					
19	Initial	9:24 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:27 AM	57	4650		14500					
20	Initial	9:27 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:30 AM	60	4650		14500					
21	Initial	9:30 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:33 AM	63	4500		14500					
22	Initial	9:33 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:36 AM	66	4750		14500					
23	Initial	9:36 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:39 AM	69	4500		14500					
24	Initial	9:39 AM	3	0	4200	0	14500	115.13	132.49	45.33	52.16
	Final	9:42 AM	72	4200		14500					
25	Initial	9:42 AM	3	0	4100	0	14500	112.38	132.49	44.25	52.16
	Final	9:45 AM	75	4100		14500					
26	Initial	9:45 AM	3	0	4000	0	14500	109.64	132.49	43.17	52.16
	Final	9:48 AM	78	4000		14500					
27	Initial	9:48 AM	3	0	4100	0	14500	112.38	132.49	44.25	52.16
	Final	9:51 AM	81	4100		14500					
28	Initial	9:51 AM	3	0	4000	0	14500	109.64	132.49	43.17	52.16
	Final	9:54 AM	84	4000		14500					
29	Initial	9:54 AM	3	0	4150	0	14100	113.76	128.83	44.79	50.72
	Final	9:57 AM	87	4150		14100					
30	Initial	9:57 AM	3	0	3900	0	14100	106.90	128.83	42.09	50.72
	Final	10:00 AM	90	3900		14100					
31	Initial	10:00 AM	3	0	3900	0	14000	106.90	127.92	42.09	50.36
	Final	10:03 AM	93	3900		14000					
32	Initial	10:03 AM	3	0	3850	0	14100	105.53	128.83	41.55	50.72
	Final	10:06 AM	96	3850		14100					
33	Initial	10:06 AM	3	0	3750	0	13900	102.79	127.00	40.47	50.00
	Final	10:09 AM	99	3750		13900					
34	Initial	10:09 AM	3	0	3700	0	13800	101.42	126.09	39.93	49.64
	Final	10:12 AM	102	3700		13800					
35	Initial	10:12 AM	3	0	3600	0	13850	98.68	126.55	38.85	49.82
	Final	10:15 AM	105	3600		13850					
36	Initial	10:15 AM	3	0	3550	0	13700	97.31	125.18	38.31	49.28
	Final	10:18 AM	108	3550		13700					
37	Initial	10:18 AM	3	0	3550	0	13500	97.31	123.35	38.31	48.56
	Final	10:21 AM	111	3550		13500					
38	Initial	10:21 AM	3	0	3600	0	13650	98.68	124.72	38.85	49.10
	Final	10:24 AM	114	3600		13650					
39	Initial	10:24 AM	3	0	3400	0	13700	93.20	125.18	36.69	49.28
	Final	10:27 AM	117	3400		13700					
40	Initial	10:27 AM	3	0	3300	0	13600	90.46	124.26	35.61	48.92
	Final	10:30 AM	120	3300		13600					
41	Initial	10:30 AM	3	0	3000	0	13500	82.23	123.35	32.38	48.56
	Final	10:33 AM	123	3000		13500					
42	Initial	10:33 AM	3	0	3100	0	13550	84.97	123.81	33.45	48.74
	Final	10:36 AM	126	3100		13550					
43	Initial	10:36 AM	3	0	3050	0	13400	83.60	122.44	32.91	48.20
	Final	10:39 AM	129	3050		13400					

44	Initial	10:39 AM	3	0	3050	0	13300	13300	83.60	121.52	32.91	47.84
	Final	10:42 AM	132	3050		13300						
45	Initial	10:42 AM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	10:45 AM	135	3000		13300						
46	Initial	10:45 AM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	10:48 AM	138	2900		13400						
47	Initial	10:48 AM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	10:51 AM	141	2950		13400						
48	Initial	10:51 AM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	10:54 AM	144	2800		13500						
49	Initial	10:54 AM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	10:57 AM	147	2750		13300						
50	Initial	10:57 AM	3	0	2600	0	13400	13400	71.27	122.44	28.06	48.20
	Final	11:00 AM	150	2600		13400						
51	Initial	11:00 AM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	11:03 AM	153	2500		13300						
52	Initial	11:03 AM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	11:06 AM	156	2400		13400						
53	Initial	11:06 AM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	11:09 AM	159	2300		13500						
54	Initial	11:09 AM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	11:12 AM	162	2350		13400						
55	Initial	11:12 AM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	11:15 AM	165	2250		13300						
56	Initial	11:15 AM	3	0	2200	0	13300	13300	60.30	121.52	23.74	47.84
	Final	11:18 AM	168	2200		13300						
57	Initial	11:18 AM	3	0	2100	0	13100	13100	57.56	119.69	22.66	47.12
	Final	11:21 AM	171	2100		13100						
58	Initial	11:21 AM	3	0	2150	0	13000	13000	58.93	118.78	23.20	46.76
	Final	11:24 AM	174	2150		13000						
59	Initial	11:24 AM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	11:27 AM	177	2200		13100						
60	Initial	11:27 AM	3	0	2100	0	13200	13200	57.56	120.61	22.66	47.48
	Final	11:30 AM	180	2100		13200						
61	Initial	11:30 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	11:33 AM	183	2150		13100						
62	Initial	11:33 AM	3	0	2000	0	12900	12900	54.82	117.87	21.58	46.40
	Final	11:36 AM	186	2000		12900						
63	Initial	11:36 AM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	11:39 AM	189	2150		13100						
64	Initial	11:39 AM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	11:42 AM	192	2200		13000						
65	Initial	11:42 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	11:45 AM	195	2100		12900						
66	Initial	11:45 AM	3	0	2050	0	13000	13000	56.19	118.78	22.12	46.76
	Final	11:48 AM	198	2050		13000						
67	Initial	11:48 AM	3	0	2000	0	13700	13700	54.82	125.18	21.58	49.28
	Final	11:51 AM	201	2000		13700						
68	Initial	11:51 AM	3	0	2100	0	12900	12900	57.56	117.87	22.66	46.40
	Final	11:54 AM	204	2100		12900						
69	Initial	11:54 AM	3	0	2100	0	12800	12800	57.56	116.95	22.66	46.04
	Final	11:57 AM	207	2100		12800						

70	Initial	11:57 AM	3	0	2100	0	12700	12700	57.56	116.04	22.66	45.68
	Final	12:00 PM	210	2100		12700						
71	Initial	12:00 PM	3	0	2100	0	12500	12500	57.56	114.21	22.66	44.97
	Final	12:03 PM	213	2100		12500						
72	Initial	12:03 PM	3	0	2000	0	12600	12600	54.82	115.13	21.58	45.33
	Final	12:06 PM	216	2000		12600						
73	Initial	12:06 PM	3	0	2100	0	12600	12600	57.56	115.13	22.66	45.33
	Final	12:09 PM	219	2100		12600						
74	Initial	12:09 PM	3	0	2200	0	12500	12500	60.30	114.21	23.74	44.97
	Final	12:12 PM	222	2200		12500						
75	Initial	12:12 PM	3	0	2100	0	12300	12300	57.56	112.38	22.66	44.25
	Final	12:15 PM	225	2100		12300						
76	Initial	12:15 PM	3	0	2050	0	12200	12200	56.19	111.47	22.12	43.89
	Final	12:18 PM	228	2050		12200						
77	Initial	12:18 PM	3	0	2100	0	12400	12400	57.56	113.30	22.66	44.61
	Final	12:21 PM	231	2100		12400						
78	Initial	12:21 PM	3	0	2150	0	12300	12300	58.93	112.38	23.20	44.25
	Final	12:24 PM	234	2150		12300						
79	Initial	12:24 PM	3	0	2250	0	12300	12300	61.67	112.38	24.28	44.25
	Final	12:27 PM	237	2250		12300						
80	Initial	12:27 PM	3	0	2100	0	12000	12000	57.56	109.64	22.66	43.17
	Final	12:30 PM	240	2100		12000						
81	Initial	12:30 PM	3	0	2150	0	12200	12200	58.93	111.47	23.20	43.89
	Final	12:33 PM	243	2150		12200						
82	Initial	12:33 PM	3	0	2000	0	12100	12100	54.82	110.56	21.58	43.53
	Final	12:36 PM	246	2000		12100						
83	Initial	12:36 PM	3	0	2050	0	12000	12000	56.19	109.64	22.12	43.17
	Final	12:39 PM	249	2050		12000						
84	Initial	12:39 PM	3	0	2100	0	11800	11800	57.56	107.82	22.66	42.45
	Final	12:42 PM	252	2100		11800						
85	Initial	12:42 PM	3	0	2050	0	11600	11600	56.19	105.99	22.12	41.73
	Final	12:45 PM	255	2050		11600						
86	Initial	12:45 PM	3	0	2100	0	11400	11400	57.56	104.16	22.66	41.01
	Final	12:48 PM	258	2100		11400						
87	Initial	12:48 PM	3	0	2150	0	11250	11250	58.93	102.79	23.20	40.47
	Final	12:51 PM	261	2150		11250						
88	Initial	12:51 PM	3	0	2250	0	11300	11300	61.67	103.25	24.28	40.65
	Final	12:54 PM	264	2250		11300						
89	Initial	12:54 PM	3	0	2100	0	11200	11200	57.56	102.33	22.66	40.29
	Final	12:57 PM	267	2100		11200						
90	Initial	12:57 PM	3	0	2150	0	11200	11200	58.93	102.33	23.20	40.29
	Final	1:00 PM	270	2150		11200						
91	Initial	1:00 PM	3	0	2050	0	11200	11200	56.19	102.33	22.12	40.29
	Final	1:03 PM	273	2050		11200						
92	Initial	1:03 PM	3	0	2050	0	11200	11200	56.19	102.33	22.12	40.29
	Final	1:06 PM	276	2050		11200						
93	Initial	1:06 PM	3	0	2100	0	11200	11200	57.56	102.33	22.66	40.29
	Final	1:09 PM	279	2100		11200						
94	Initial	1:09 PM	3	0	2050	0	11200	11200	56.19	102.33	22.12	40.29
	Final	1:12 PM	282	2050		11200						
95	Initial	1:12 PM	3	0	2100	0	11200	11200	57.56	102.33	22.66	40.29
	Final	1:15 PM	285	2100		11200						

96	Initial	1:15 PM	3	0	2150	0	11200	58.93	102.33	23.20	40.29
	Final	1:18 PM	288	2150		11200					
97	Initial	1:18 PM	3	0	2250	0	11200	61.67	102.33	24.28	40.29
	Final	1:21 PM	291	2250		11200					
98	Initial	1:21 PM	3	0	2100	0	11200	57.56	102.33	22.66	40.29
	Final	1:24 PM	294	2100		11200					
99	Initial	1:24 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	1:27 PM	297	1950		11200					
100	Initial	1:27 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:30 PM	300	1900		11200					
101	Initial	1:30 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:33 PM	303	1900		11200					
102	Initial	1:33 PM	3	0	2000	0	11200	54.82	102.33	21.58	40.29
	Final	1:36 PM	306	2000		11200					
103	Initial	1:36 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	1:39 PM	309	1950		11200					
104	Initial	1:39 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:42 PM	312	1900		11200					
105	Initial	1:42 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	1:45 PM	315	1875		11200					
106	Initial	1:45 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	1:48 PM	318	1950		11200					
107	Initial	1:48 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:51 PM	321	1900		11200					
108	Initial	1:51 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	1:54 PM	324	1950		11200					
109	Initial	1:54 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	1:57 PM	327	1900		11200					
110	Initial	1:57 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	2:00 PM	330	1875		11200					
111	Initial	2:00 PM	3	0	1950	0	11200	53.45	102.33	21.04	40.29
	Final	2:03 PM	333	1950		11200					
112	Initial	2:03 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:06 PM	336	1900		11200					
113	Initial	2:06 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:09 PM	339	1900		11200					
114	Initial	2:09 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	2:12 PM	342	1875		11200					
115	Initial	2:12 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	2:15 PM	345	1875		11200					
116	Initial	2:15 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	2:18 PM	348	1875		11200					
117	Initial	2:18 PM	3	0	1900	0	11200	52.08	102.33	20.50	40.29
	Final	2:21 PM	351	1900		11200					
118	Initial	2:21 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	2:24 PM	354	1875		11200					
119	Initial	2:24 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	2:27 PM	357	1875		11200					
120	Initial	2:27 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	2:30 PM	360	1875		11200					
121	Initial	2:30 PM	3	0	1875	0	11200	51.40	102.33	20.23	40.29
	Final	2:33 PM	363	1875		11200					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Sam Bergeland

Infiltration Test No I-18

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	9:15 AM	3	0	4400	0	14000	120.61	127.92	47.48	50.36
	Final	9:18 AM	3	4400	4400	14000					
2	Initial	9:18 AM	3	0	4300	0	14300	117.87	130.66	46.40	51.44
	Final	9:21 AM	6	4300	4300	14300					
3	Initial	9:21 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:24 AM	9	4500	4500	14500					
4	Initial	9:24 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:27 AM	12	4650	4650	14500					
5	Initial	9:27 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:30 AM	15	4650	4650	14500					
6	Initial	9:30 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:33 AM	18	4500	4500	14500					
7	Initial	9:33 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:36 AM	21	4750	4750	14500					
8	Initial	9:36 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:39 AM	24	4500	4500	14500					
9	Initial	9:39 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:42 AM	27	4650	4650	14500					
10	Initial	9:42 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:45 AM	30	4650	4650	14500					
11	Initial	9:45 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:48 AM	33	4500	4500	14500					
12	Initial	9:48 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	9:51 AM	36	4750	4750	14500					
13	Initial	9:51 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	9:54 AM	39	4500	4500	14500					
14	Initial	9:54 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	9:57 AM	42	4650	4650	14500					
15	Initial	9:57 AM	3	0	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:00 AM	45	4650	4650	14500					
16	Initial	10:00 AM	3	0	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:03 AM	48	4500	4500	14500					
17	Initial	10:03 AM	3	0	4750	0	14500	130.20	132.49	51.26	52.16
	Final	10:06 AM	51	4750	4750	14500					

18	Initial	10:06 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:09 AM	54	4500			14500					
19	Initial	10:09 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:12 AM	57	4650			14500					
20	Initial	10:12 AM	3	0	4650	4650	0	14500	127.46	132.49	50.18	52.16
	Final	10:15 AM	60	4650			14500					
21	Initial	10:15 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:18 AM	63	4500			14500					
22	Initial	10:18 AM	3	0	4750	4750	0	14500	130.20	132.49	51.26	52.16
	Final	10:21 AM	66	4750			14500					
23	Initial	10:21 AM	3	0	4500	4500	0	14500	123.35	132.49	48.56	52.16
	Final	10:24 AM	69	4500			14500					
24	Initial	10:24 AM	3	0	4200	4200	0	14500	115.13	132.49	45.33	52.16
	Final	10:27 AM	72	4200			14500					
25	Initial	10:27 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	10:30 AM	75	4100			14500					
26	Initial	10:30 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	10:33 AM	78	4000			14500					
27	Initial	10:33 AM	3	0	4100	4100	0	14500	112.38	132.49	44.25	52.16
	Final	10:36 AM	81	4100			14500					
28	Initial	10:36 AM	3	0	4000	4000	0	14500	109.64	132.49	43.17	52.16
	Final	10:39 AM	84	4000			14500					
29	Initial	10:39 AM	3	0	4150	4150	0	14100	113.76	128.83	44.79	50.72
	Final	10:42 AM	87	4150			14100					
30	Initial	10:42 AM	3	0	3900	3900	0	14100	106.90	128.83	42.09	50.72
	Final	10:45 AM	90	3900			14100					
31	Initial	10:45 AM	3	0	3900	3900	0	14000	106.90	127.92	42.09	50.36
	Final	10:48 AM	93	3900			14000					
32	Initial	10:48 AM	3	0	3850	3850	0	14100	105.53	128.83	41.55	50.72
	Final	10:51 AM	96	3850			14100					
33	Initial	10:51 AM	3	0	3750	3750	0	13900	102.79	127.00	40.47	50.00
	Final	10:54 AM	99	3750			13900					
34	Initial	10:54 AM	3	0	3700	3700	0	13800	101.42	126.09	39.93	49.64
	Final	10:57 AM	102	3700			13800					
35	Initial	10:57 AM	3	0	3600	3600	0	13850	98.68	126.55	38.85	49.82
	Final	11:00 AM	105	3600			13850					
36	Initial	11:00 AM	3	0	3550	3550	0	13700	97.31	125.18	38.31	49.28
	Final	11:03 AM	108	3550			13700					
37	Initial	11:03 AM	3	0	3550	3550	0	13500	97.31	123.35	38.31	48.56
	Final	11:06 AM	111	3550			13500					
38	Initial	11:06 AM	3	0	3600	3600	0	13650	98.68	124.72	38.85	49.10
	Final	11:09 AM	114	3600			13650					
39	Initial	11:09 AM	3	0	3400	3400	0	13700	93.20	125.18	36.69	49.28
	Final	11:12 AM	117	3400			13700					
40	Initial	11:12 AM	3	0	3300	3300	0	13600	90.46	124.26	35.61	48.92
	Final	11:15 AM	120	3300			13600					
41	Initial	11:15 AM	3	0	3000	3000	0	13500	82.23	123.35	32.38	48.56
	Final	11:18 AM	123	3000			13500					
42	Initial	11:18 AM	3	0	3100	3100	0	13550	84.97	123.81	33.45	48.74
	Final	11:21 AM	126	3100			13550					
43	Initial	11:21 AM	3	0	3050	3050	0	13400	83.60	122.44	32.91	48.20
	Final	11:24 AM	129	3050			13400					

44	Initial	11:24 AM	3	0	3050	0	13300	13300	83.60	121.52	32.91	47.84
	Final	11:27 AM	132	3050		13300						
45	Initial	11:27 AM	3	0	3000	0	13300	13300	82.23	121.52	32.38	47.84
	Final	11:30 AM	135	3000		13300						
46	Initial	11:30 AM	3	0	2900	0	13400	13400	79.49	122.44	31.30	48.20
	Final	11:33 AM	138	2900		13400						
47	Initial	11:33 AM	3	0	2950	0	13400	13400	80.86	122.44	31.84	48.20
	Final	11:36 AM	141	2950		13400						
48	Initial	11:36 AM	3	0	2800	0	13500	13500	76.75	123.35	30.22	48.56
	Final	11:39 AM	144	2800		13500						
49	Initial	11:39 AM	3	0	2750	0	13300	13300	75.38	121.52	29.68	47.84
	Final	11:42 AM	147	2750		13300						
50	Initial	11:42 AM	3	0	2600	0	13400	13400	71.27	122.44	28.06	48.20
	Final	11:45 AM	150	2600		13400						
51	Initial	11:45 AM	3	0	2500	0	13300	13300	68.53	121.52	26.98	47.84
	Final	11:48 AM	153	2500		13300						
52	Initial	11:48 AM	3	0	2400	0	13400	13400	65.79	122.44	25.90	48.20
	Final	11:51 AM	156	2400		13400						
53	Initial	11:51 AM	3	0	2300	0	13500	13500	63.05	123.35	24.82	48.56
	Final	11:54 AM	159	2300		13500						
54	Initial	11:54 AM	3	0	2350	0	13400	13400	64.42	122.44	25.36	48.20
	Final	11:57 AM	162	2350		13400						
55	Initial	11:57 AM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	12:00 PM	165	2250		13300						
56	Initial	12:00 PM	3	0	2250	0	13300	13300	61.67	121.52	24.28	47.84
	Final	12:03 PM	168	2250		13300						
57	Initial	12:03 PM	3	0	2150	0	13100	13100	58.93	119.69	23.20	47.12
	Final	12:06 PM	171	2150		13100						
58	Initial	12:06 PM	3	0	2200	0	13000	13000	60.30	118.78	23.74	46.76
	Final	12:09 PM	174	2200		13000						
59	Initial	12:09 PM	3	0	2250	0	13100	13100	61.67	119.69	24.28	47.12
	Final	12:12 PM	177	2250		13100						
60	Initial	12:12 PM	3	0	2150	0	13200	13200	58.93	120.61	23.20	47.48
	Final	12:15 PM	180	2150		13200						
61	Initial	12:15 PM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	12:18 PM	183	2200		13100						
62	Initial	12:18 PM	3	0	2200	0	12900	12900	60.30	117.87	23.74	46.40
	Final	12:21 PM	186	2200		12900						
63	Initial	12:21 PM	3	0	2200	0	13100	13100	60.30	119.69	23.74	47.12
	Final	12:24 PM	189	2200		13100						
64	Initial	12:24 PM	3	0	2250	0	13000	13000	61.67	118.78	24.28	46.76
	Final	12:27 PM	192	2250		13000						
65	Initial	12:27 PM	3	0	2150	0	12900	12900	58.93	117.87	23.20	46.40
	Final	12:30 PM	195	2150		12900						
66	Initial	12:30 PM	3	0	2250	0	13000	13000	61.67	118.78	24.28	46.76
	Final	12:33 PM	198	2250		13000						
67	Initial	12:33 PM	3	0	2150	0	12900	12900	58.93	117.87	23.20	46.40
	Final	12:36 PM	201	2150		12900						
68	Initial	12:36 PM	3	0	2200	0	12900	12900	60.30	117.87	23.74	46.40
	Final	12:39 PM	204	2200		12900						
69	Initial	12:39 PM	3	0	2250	0	12800	12800	61.67	116.95	24.28	46.04
	Final	12:42 PM	207	2250		12800						

70	Initial	12:42 PM	3	0	2200	0	12700	60.30	116.04	23.74	45.68
	Final	12:45 PM	210	2200		12700					
71	Initial	12:45 PM	3	0	2250	0	12500	61.67	114.21	24.28	44.97
	Final	12:48 PM	213	2250		12500					
72	Initial	12:48 PM	3	0	2150	0	12600	58.93	115.13	23.20	45.33
	Final	12:51 PM	216	2150		12600					
73	Initial	12:51 PM	3	0	2250	0	12600	61.67	115.13	24.28	45.33
	Final	12:54 PM	219	2250		12600					
74	Initial	12:54 PM	3	0	2150	0	12500	58.93	114.21	23.20	44.97
	Final	12:57 PM	222	2150		12500					
75	Initial	12:57 PM	3	0	2200	0	12300	60.30	112.38	23.74	44.25
	Final	1:00 PM	225	2200		12300					
76	Initial	1:00 PM	3	0	2200	0	12200	60.30	111.47	23.74	43.89
	Final	1:03 PM	228	2200		12200					
77	Initial	1:03 PM	3	0	2200	0	12400	60.30	113.30	23.74	44.61
	Final	1:06 PM	231	2200		12400					
78	Initial	1:06 PM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	1:09 PM	234	2250		12300					
79	Initial	1:09 PM	3	0	2150	0	12300	58.93	112.38	23.20	44.25
	Final	1:12 PM	237	2150		12300					
80	Initial	1:12 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	1:15 PM	240	2250		12000					
81	Initial	1:15 PM	3	0	2150	0	12200	58.93	111.47	23.20	43.89
	Final	1:18 PM	243	2150		12200					
82	Initial	1:18 PM	3	0	2200	0	12100	60.30	110.56	23.74	43.53
	Final	1:21 PM	246	2200		12100					
83	Initial	1:21 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	1:24 PM	249	2200		12000					
84	Initial	1:24 PM	3	0	2200	0	11800	60.30	107.82	23.74	42.45
	Final	1:27 PM	252	2200		11800					
85	Initial	1:27 PM	3	0	2250	0	12400	61.67	113.30	24.28	44.61
	Final	1:30 PM	255	2250		12400					
86	Initial	1:30 PM	3	0	2150	0	12300	58.93	112.38	23.20	44.25
	Final	1:33 PM	258	2150		12300					
87	Initial	1:33 PM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	1:36 PM	261	2250		12300					
88	Initial	1:36 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	1:39 PM	264	2150		12000					
89	Initial	1:39 PM	3	0	2200	0	12200	60.30	111.47	23.74	43.89
	Final	1:42 PM	267	2200		12200					
90	Initial	1:42 PM	3	0	2200	0	12100	60.30	110.56	23.74	43.53
	Final	1:45 PM	270	2200		12100					
91	Initial	1:45 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	1:48 PM	273	2200		12000					
92	Initial	1:48 PM	3	0	2250	0	11800	61.67	107.82	24.28	42.45
	Final	1:51 PM	276	2250		11800					
93	Initial	1:51 PM	3	0	2150	0	12400	58.93	113.30	23.20	44.61
	Final	1:54 PM	279	2150		12400					
94	Initial	1:54 PM	3	0	2250	0	12300	61.67	112.38	24.28	44.25
	Final	1:57 PM	282	2250		12300					
95	Initial	1:57 PM	3	0	2150	0	12300	58.93	112.38	23.20	44.25
	Final	2:00 PM	285	2150		12300					

96	Initial	2:00 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:03 PM	288	2200		12000					
97	Initial	2:03 PM	3	0	2250	0	12200	61.67	111.47	24.28	43.89
	Final	2:06 PM	291	2250		12200					
98	Initial	2:06 PM	3	0	2250	0	12100	61.67	110.56	24.28	43.53
	Final	2:09 PM	294	2250		12100					
99	Initial	2:09 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	2:12 PM	297	2150		12000					
100	Initial	2:12 PM	3	0	2200	0	11800	60.30	107.82	23.74	42.45
	Final	2:15 PM	300	2200		11800					
101	Initial	2:15 PM	3	0	2250	0	12400	61.67	113.30	24.28	44.61
	Final	2:18 PM	303	2250		12400					
102	Initial	2:18 PM	3	0	2200	0	12300	60.30	112.38	23.74	44.25
	Final	2:21 PM	306	2200		12300					
103	Initial	2:21 PM	3	0	2150	0	12300	58.93	112.38	23.20	44.25
	Final	2:24 PM	309	2150		12300					
104	Initial	2:24 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	2:27 PM	312	2250		12000					
105	Initial	2:27 PM	3	0	2300	0	12200	63.05	111.47	24.82	43.89
	Final	2:30 PM	315	2300		12200					
106	Initial	2:30 PM	3	0	2150	0	12100	58.93	110.56	23.20	43.53
	Final	2:33 PM	318	2150		12100					
107	Initial	2:33 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:36 PM	321	2200		12000					
108	Initial	2:36 PM	3	0	2150	0	11800	58.93	107.82	23.20	42.45
	Final	2:39 PM	324	2150		11800					
109	Initial	2:39 PM	3	0	2150	0	12400	58.93	113.30	23.20	44.61
	Final	2:42 PM	327	2150		12400					
110	Initial	2:42 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	2:45 PM	330	2150		12000					
111	Initial	2:45 PM	3	0	2250	0	12000	61.67	109.64	24.28	43.17
	Final	2:48 PM	333	2250		12000					
112	Initial	2:48 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	2:51 PM	336	2150		12000					
113	Initial	2:51 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	2:54 PM	339	2200		12000					
114	Initial	2:54 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	2:57 PM	342	2150		12000					
115	Initial	2:57 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:00 PM	345	2150		12000					
116	Initial	3:00 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:03 PM	348	2150		12000					
117	Initial	3:03 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:06 PM	351	2150		12000					
118	Initial	3:06 PM	3	0	2200	0	12000	60.30	109.64	23.74	43.17
	Final	3:09 PM	354	2200		12000					
119	Initial	3:09 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:12 PM	357	2150		12000					
120	Initial	3:12 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:15 PM	360	2150		12000					
121	Initial	3:15 PM	3	0	2150	0	12000	58.93	109.64	23.20	43.17
	Final	3:18 PM	363	2150		12000					

INFILTRATION CALCULATIONS

Project Name	Two Proposed Warehouses
Project Location	Highland, CA
Project Number	21G193-3
Engineer	Sam Bergeland

Infiltration Test No I-19

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	8:00 AM	3			0		121.98	127.92	48.02	50.36
	Final	8:03 AM	3	4450	4450	14000	14000				
2	Initial	8:03 AM	3		4350	0	14300	119.24	130.66	46.94	51.44
	Final	8:06 AM	6	4350	4350	14300	14300				
3	Initial	8:06 AM	3		4550	0	14500	124.72	132.49	49.10	52.16
	Final	8:09 AM	9	4550	4550	14500	14500				
4	Initial	8:09 AM	3		4700	0	14500	128.83	132.49	50.72	52.16
	Final	8:12 AM	12	4700	4700	14500	14500				
5	Initial	8:12 AM	3		4700	0	14500	128.83	132.49	50.72	52.16
	Final	8:15 AM	15	4700	4700	14500	14500				
6	Initial	8:15 AM	3		4550	0	14500	124.72	132.49	49.10	52.16
	Final	8:18 AM	18	4550	4550	14500	14500				
7	Initial	8:18 AM	3		4800	0	14500	131.57	132.49	51.80	52.16
	Final	8:21 AM	21	4800	4800	14500	14500				
8	Initial	8:21 AM	3		4550	0	14500	124.72	132.49	49.10	52.16
	Final	8:24 AM	24	4550	4550	14500	14500				
9	Initial	8:24 AM	3		4700	0	14500	128.83	132.49	50.72	52.16
	Final	8:27 AM	27	4700	4700	14500	14500				
10	Initial	8:27 AM	3		4700	0	14500	128.83	132.49	50.72	52.16
	Final	8:30 AM	30	4700	4700	14500	14500				
11	Initial	8:30 AM	3		4550	0	14500	124.72	132.49	49.10	52.16
	Final	8:33 AM	33	4550	4550	14500	14500				
12	Initial	8:33 AM	3		4800	0	14500	131.57	132.49	51.80	52.16
	Final	8:36 AM	36	4800	4800	14500	14500				
13	Initial	8:36 AM	3		4550	0	14500	124.72	132.49	49.10	52.16
	Final	8:39 AM	39	4550	4550	14500	14500				
14	Initial	8:39 AM	3		4700	0	14500	128.83	132.49	50.72	52.16
	Final	8:42 AM	42	4700	4700	14500	14500				
15	Initial	8:42 AM	3		4700	0	14500	128.83	132.49	50.72	52.16
	Final	8:45 AM	45	4700	4700	14500	14500				
16	Initial	8:45 AM	3		4550	0	14500	124.72	132.49	49.10	52.16
	Final	8:48 AM	48	4550	4550	14500	14500				
17	Initial	8:48 AM	3		4800	0	14500	131.57	132.49	51.80	52.16
	Final	8:51 AM	51	4800	4800	14500	14500				

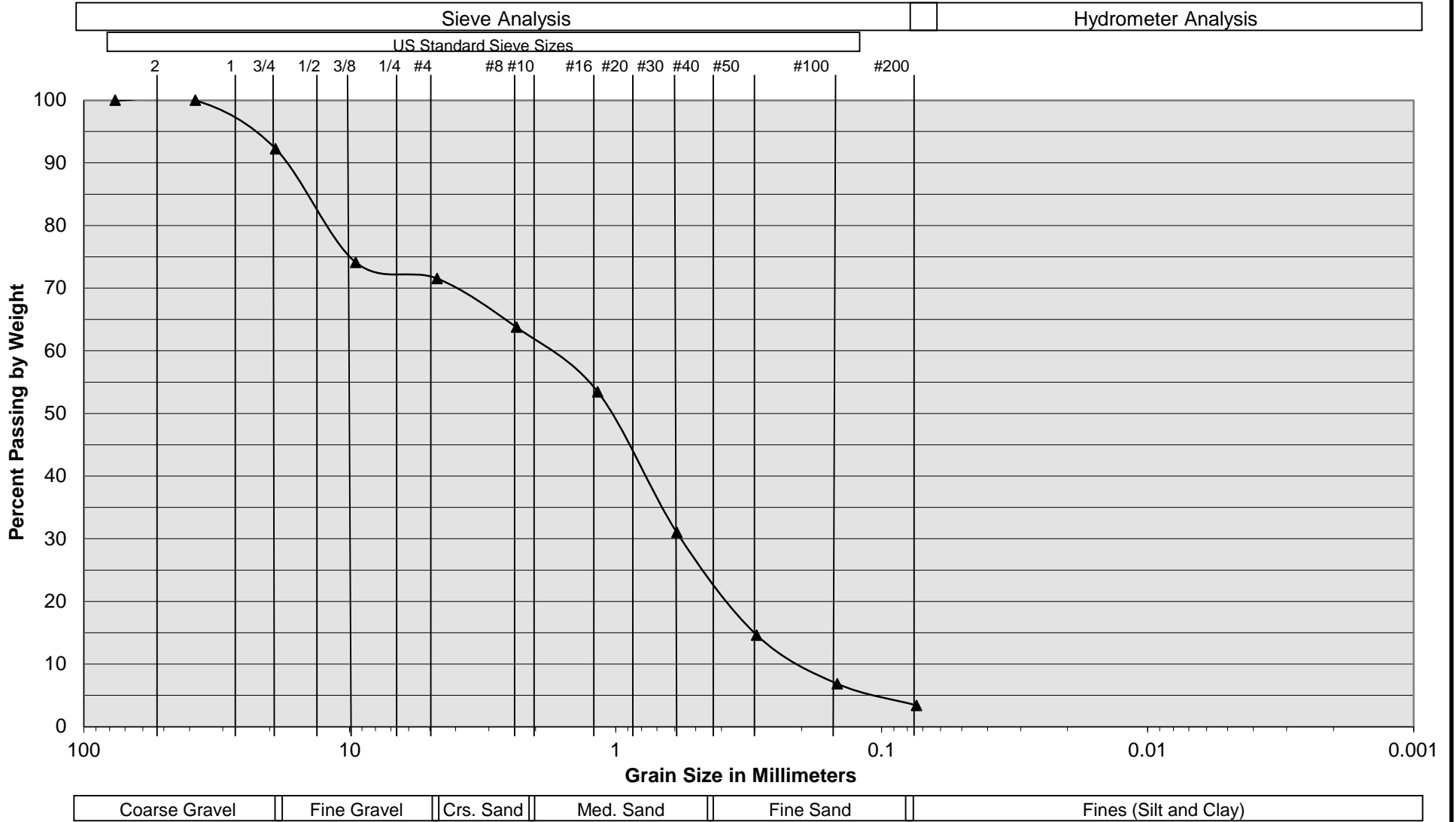
18	Initial	8:51 AM	3		4550	4550	0	14500	124.72	132.49	49.10	52.16
	Final	8:54 AM	54	4550			14500					
19	Initial	8:54 AM	3		4700	4700	0	14500	128.83	132.49	50.72	52.16
	Final	8:57 AM	57	4700			14500					
20	Initial	8:57 AM	3		4700	4700	0	14500	128.83	132.49	50.72	52.16
	Final	9:00 AM	60	4700			14500					
21	Initial	9:00 AM	3		4550	4550	0	14500	124.72	132.49	49.10	52.16
	Final	9:03 AM	63	4550			14500					
22	Initial	9:03 AM	3		4800	4800	0	14500	131.57	132.49	51.80	52.16
	Final	9:06 AM	66	4800			14500					
23	Initial	9:06 AM	3		4550	4550	0	14500	124.72	132.49	49.10	52.16
	Final	9:09 AM	69	4550			14500					
24	Initial	9:09 AM	3		4250	4250	0	14500	116.50	132.49	45.86	52.16
	Final	9:12 AM	72	4250			14500					
25	Initial	9:12 AM	3		4150	4150	0	14500	113.76	132.49	44.79	52.16
	Final	9:15 AM	75	4150			14500					
26	Initial	9:15 AM	3		4050	4050	0	14500	111.01	132.49	43.71	52.16
	Final	9:18 AM	78	4050			14500					
27	Initial	9:18 AM	3		4150	4150	0	14500	113.76	132.49	44.79	52.16
	Final	9:21 AM	81	4150			14500					
28	Initial	9:21 AM	3		4050	4050	0	14500	111.01	132.49	43.71	52.16
	Final	9:24 AM	84	4050			14500					
29	Initial	9:24 AM	3		4200	4200	0	14100	115.13	128.83	45.33	50.72
	Final	9:27 AM	87	4200			14100					
30	Initial	9:27 AM	3		3950	3950	0	14100	108.27	128.83	42.63	50.72
	Final	9:30 AM	90	3950			14100					
31	Initial	9:30 AM	3		3950	3950	0	14000	108.27	127.92	42.63	50.36
	Final	9:33 AM	93	3950			14000					
32	Initial	9:33 AM	3		3900	3900	0	14100	106.90	128.83	42.09	50.72
	Final	9:36 AM	96	3900			14100					
33	Initial	9:36 AM	3		3800	3800	0	13900	104.16	127.00	41.01	50.00
	Final	9:39 AM	99	3800			13900					
34	Initial	9:39 AM	3		3750	3750	0	13800	102.79	126.09	40.47	49.64
	Final	9:42 AM	102	3750			13800					
35	Initial	9:42 AM	3		3650	3650	0	13850	100.05	126.55	39.39	49.82
	Final	9:45 AM	105	3650			13850					
36	Initial	9:45 AM	3		3600	3600	0	13700	98.68	125.18	38.85	49.28
	Final	9:48 AM	108	3600			13700					
37	Initial	9:48 AM	3		3600	3600	0	13500	98.68	123.35	38.85	48.56
	Final	9:51 AM	111	3600			13500					
38	Initial	9:51 AM	3		3650	3650	0	13650	100.05	124.72	39.39	49.10
	Final	9:54 AM	114	3650			13650					
39	Initial	9:54 AM	3		3450	3450	0	13700	94.57	125.18	37.23	49.28
	Final	9:57 AM	117	3450			13700					
40	Initial	9:57 AM	3		3350	3350	0	13600	91.83	124.26	36.15	48.92
	Final	10:00 AM	120	3350			13600					
41	Initial	10:00 AM	3		3050	3050	0	13500	83.60	123.35	32.91	48.56
	Final	10:03 AM	123	3050			13500					
42	Initial	10:03 AM	3		3150	3150	0	13550	86.34	123.81	33.99	48.74
	Final	10:06 AM	126	3150			13550					
43	Initial	10:06 AM	3		3100	3100	0	13400	84.97	122.44	33.45	48.20
	Final	10:09 AM	129	3100			13400					

44	Initial	10:09 AM	3		3100	0	13300	84.97	121.52	33.45	47.84
	Final	10:12 AM	132	3100	3100	13300					
45	Initial	10:12 AM	3		3050	0	13300	83.60	121.52	32.91	47.84
	Final	10:15 AM	135	3050	3050	13300					
46	Initial	10:15 AM	3		2950	0	13400	80.86	122.44	31.84	48.20
	Final	10:18 AM	138	2950	2950	13400					
47	Initial	10:18 AM	3		3000	0	13400	82.23	122.44	32.38	48.20
	Final	10:21 AM	141	3000	3000	13400					
48	Initial	10:21 AM	3		2850	0	13500	78.12	123.35	30.76	48.56
	Final	10:24 AM	144	2850	2850	13500					
49	Initial	10:24 AM	3		2800	0	13300	76.75	121.52	30.22	47.84
	Final	10:27 AM	147	2800	2800	13300					
50	Initial	10:27 AM	3		2650	0	13400	72.64	122.44	28.60	48.20
	Final	10:30 AM	150	2650	2650	13400					
51	Initial	10:30 AM	3		2550	0	13300	69.90	121.52	27.52	47.84
	Final	10:33 AM	153	2550	2550	13300					
52	Initial	10:33 AM	3		2450	0	13400	67.16	122.44	26.44	48.20
	Final	10:36 AM	156	2450	2450	13400					
53	Initial	10:36 AM	3		2350	0	13500	64.42	123.35	25.36	48.56
	Final	10:39 AM	159	2350	2350	13500					
54	Initial	10:39 AM	3		2400	0	13400	65.79	122.44	25.90	48.20
	Final	10:42 AM	162	2400	2400	13400					
55	Initial	10:42 AM	3		2300	0	13300	63.05	121.52	24.82	47.84
	Final	10:45 AM	165	2300	2300	13300					
56	Initial	10:45 AM	3		2250	0	13300	61.67	121.52	24.28	47.84
	Final	10:48 AM	168	2250	2250	13300					
57	Initial	10:48 AM	3		2150	0	13100	58.93	119.69	23.20	47.12
	Final	10:51 AM	171	2150	2150	13100					
58	Initial	10:51 AM	3		2200	0	13000	60.30	118.78	23.74	46.76
	Final	10:54 AM	174	2200	2200	13000					
59	Initial	10:54 AM	3		2250	0	13100	61.67	119.69	24.28	47.12
	Final	10:57 AM	177	2250	2250	13100					
60	Initial	10:57 AM	3		2150	0	13200	58.93	120.61	23.20	47.48
	Final	11:00 AM	180	2150	2150	13200					
61	Initial	11:00 AM	3		2200	0	13100	60.30	119.69	23.74	47.12
	Final	11:03 AM	183	2200	2200	13100					
62	Initial	11:03 AM	3		2150	0	12900	58.93	117.87	23.20	46.40
	Final	11:06 AM	186	2150	2150	12900					
63	Initial	11:06 AM	3		2200	0	13100	60.30	119.69	23.74	47.12
	Final	11:09 AM	189	2200	2200	13100					
64	Initial	11:09 AM	3		2250	0	13000	61.67	118.78	24.28	46.76
	Final	11:12 AM	192	2250	2250	13000					
65	Initial	11:12 AM	3		2150	0	12900	58.93	117.87	23.20	46.40
	Final	11:15 AM	195	2150	2150	12900					
66	Initial	11:15 AM	3		2250	0	13000	61.67	118.78	24.28	46.76
	Final	11:18 AM	198	2250	2250	13000					
67	Initial	11:18 AM	3		2150	0	12900	58.93	117.87	23.20	46.40
	Final	11:21 AM	201	2150	2150	12900					
68	Initial	11:21 AM	3		2200	0	12900	60.30	117.87	23.74	46.40
	Final	11:24 AM	204	2200	2200	12900					
69	Initial	11:24 AM	3		2150	0	12800	58.93	116.95	23.20	46.04
	Final	11:27 AM	207	2150	2150	12800					

70	Initial	11:27 AM	3		2200	2200	0	12700	60.30	116.04	23.74	45.68
	Final	11:30 AM	210	2200			12700					
71	Initial	11:30 AM	3		2250	2250	0	12500	61.67	114.21	24.28	44.97
	Final	11:33 AM	213	2250			12500					
72	Initial	11:33 AM	3		2150	2150	0	12600	58.93	115.13	23.20	45.33
	Final	11:36 AM	216	2150			12600					
73	Initial	11:36 AM	3		2250	2250	0	12600	61.67	115.13	24.28	45.33
	Final	11:39 AM	219	2250			12600					
74	Initial	11:39 AM	3		2150	2150	0	12500	58.93	114.21	23.20	44.97
	Final	11:42 AM	222	2150			12500					
75	Initial	11:42 AM	3		2200	2200	0	12300	60.30	112.38	23.74	44.25
	Final	11:45 AM	225	2200			12300					
76	Initial	11:45 AM	3		2150	2150	0	12200	58.93	111.47	23.20	43.89
	Final	11:48 AM	228	2150			12200					
77	Initial	11:48 AM	3		2200	2200	0	12400	60.30	113.30	23.74	44.61
	Final	11:51 AM	231	2200			12400					
78	Initial	11:51 AM	3		2250	2250	0	12300	61.67	112.38	24.28	44.25
	Final	11:54 AM	234	2250			12300					
79	Initial	11:54 AM	3		2150	2150	0	12300	58.93	112.38	23.20	44.25
	Final	11:57 AM	237	2150			12300					
80	Initial	11:57 AM	3		2250	2250	0	12000	61.67	109.64	24.28	43.17
	Final	12:00 PM	240	2250			12000					
81	Initial	12:00 PM	3		2150	2150	0	12200	58.93	111.47	23.20	43.89
	Final	12:03 PM	243	2150			12200					
82	Initial	12:03 PM	3		2200	2200	0	12100	60.30	110.56	23.74	43.53
	Final	12:06 PM	246	2200			12100					
83	Initial	12:06 PM	3		2150	2150	0	12000	58.93	109.64	23.20	43.17
	Final	12:09 PM	249	2150			12000					
84	Initial	12:09 PM	3		2200	2200	0	11800	60.30	107.82	23.74	42.45
	Final	12:12 PM	252	2200			11800					
85	Initial	12:12 PM	3		2250	2250	0	12400	61.67	113.30	24.28	44.61
	Final	12:15 PM	255	2250			12400					
86	Initial	12:15 PM	3		2150	2150	0	12300	58.93	112.38	23.20	44.25
	Final	12:18 PM	258	2150			12300					
87	Initial	12:18 PM	3		2250	2250	0	12300	61.67	112.38	24.28	44.25
	Final	12:21 PM	261	2250			12300					
88	Initial	12:21 PM	3		2150	2150	0	12000	58.93	109.64	23.20	43.17
	Final	12:24 PM	264	2150			12000					
89	Initial	12:24 PM	3		2200	2200	0	12200	60.30	111.47	23.74	43.89
	Final	12:27 PM	267	2200			12200					
90	Initial	12:27 PM	3		2150	2150	0	12100	58.93	110.56	23.20	43.53
	Final	12:30 PM	270	2150			12100					
91	Initial	12:30 PM	3		2200	2200	0	12000	60.30	109.64	23.74	43.17
	Final	12:33 PM	273	2200			12000					
92	Initial	12:33 PM	3		2250	2250	0	11800	61.67	107.82	24.28	42.45
	Final	12:36 PM	276	2250			11800					
93	Initial	12:36 PM	3		2150	2150	0	12400	58.93	113.30	23.20	44.61
	Final	12:39 PM	279	2150			12400					
94	Initial	12:39 PM	3		2250	2250	0	12300	61.67	112.38	24.28	44.25
	Final	12:42 PM	282	2250			12300					
95	Initial	12:42 PM	3		2150	2150	0	12300	58.93	112.38	23.20	44.25
	Final	12:45 PM	285	2150			12300					

96	Initial	12:45 PM	3		2200	2200	0	12000	60.30	109.64	23.74	43.17
	Final	12:48 PM	288	2200			12000					
97	Initial	12:48 PM	3		2250	2250	0	12200	61.67	111.47	24.28	43.89
	Final	12:51 PM	291	2250			12200					
98	Initial	12:51 PM	3		2250	2250	0	12100	61.67	110.56	24.28	43.53
	Final	12:54 PM	294	2250			12100					
99	Initial	12:54 PM	3		2150	2150	0	12000	58.93	109.64	23.20	43.17
	Final	12:57 PM	297	2150			12000					
100	Initial	12:57 PM	3		2200	2200	0	11800	60.30	107.82	23.74	42.45
	Final	1:00 PM	300	2200			11800					
101	Initial	1:00 PM	3		2250	2250	0	12400	61.67	113.30	24.28	44.61
	Final	1:03 PM	303	2250			12400					
102	Initial	1:03 PM	3		2200	2200	0	12300	60.30	112.38	23.74	44.25
	Final	1:06 PM	306	2200			12300					
103	Initial	1:06 PM	3		2150	2150	0	12300	58.93	112.38	23.20	44.25
	Final	1:09 PM	309	2150			12300					
104	Initial	1:09 PM	3		2250	2250	0	12000	61.67	109.64	24.28	43.17
	Final	1:12 PM	312	2250			12000					
105	Initial	1:12 PM	3		2350	2350	0	12200	64.42	111.47	25.36	43.89
	Final	1:15 PM	315	2350			12200					
106	Initial	1:15 PM	3		2150	2150	0	12100	58.93	110.56	23.20	43.53
	Final	1:18 PM	318	2150			12100					
107	Initial	1:18 PM	3		2200	2200	0	12000	60.30	109.64	23.74	43.17
	Final	1:21 PM	321	2200			12000					
108	Initial	1:21 PM	3		2150	2150	0	11800	58.93	107.82	23.20	42.45
	Final	1:24 PM	324	2150			11800					
109	Initial	1:24 PM	3		2100	2100	0	12400	57.56	113.30	22.66	44.61
	Final	1:27 PM	327	2100			12400					
110	Initial	1:27 PM	3		2150	2150	0	12000	58.93	109.64	23.20	43.17
	Final	1:30 PM	330	2150			12000					
111	Initial	1:30 PM	3		2250	2250	0	12000	61.67	109.64	24.28	43.17
	Final	1:33 PM	333	2250			12000					
112	Initial	1:33 PM	3		2150	2150	0	12000	58.93	109.64	23.20	43.17
	Final	1:36 PM	336	2150			12000					
113	Initial	1:36 PM	3		2200	2200	0	12000	60.30	109.64	23.74	43.17
	Final	1:39 PM	339	2200			12000					
114	Initial	1:39 PM	3		2150	2150	0	12000	58.93	109.64	23.20	43.17
	Final	1:42 PM	342	2150			12000					
115	Initial	1:42 PM	3		2100	2100	0	12000	57.56	109.64	22.66	43.17
	Final	1:45 PM	345	2100			12000					
116	Initial	1:45 PM	3		2100	2100	0	12000	57.56	109.64	22.66	43.17
	Final	1:48 PM	348	2100			12000					
117	Initial	1:48 PM	3		2100	2100	0	12000	57.56	109.64	22.66	43.17
	Final	1:51 PM	351	2100			12000					
118	Initial	1:51 PM	3		2150	2150	0	12000	58.93	109.64	23.20	43.17
	Final	1:54 PM	354	2150			12000					
119	Initial	1:54 PM	3		2150	2150	0	12000	58.93	109.64	23.20	43.17
	Final	1:57 PM	357	2150			12000					
120	Initial	1:57 PM	3		2100	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:00 PM	360	2100			12000					
121	Initial	2:00 PM	3		2100	2100	0	12000	57.56	109.64	22.66	43.17
	Final	2:03 PM	363	2100			12000					

Grain Size Distribution



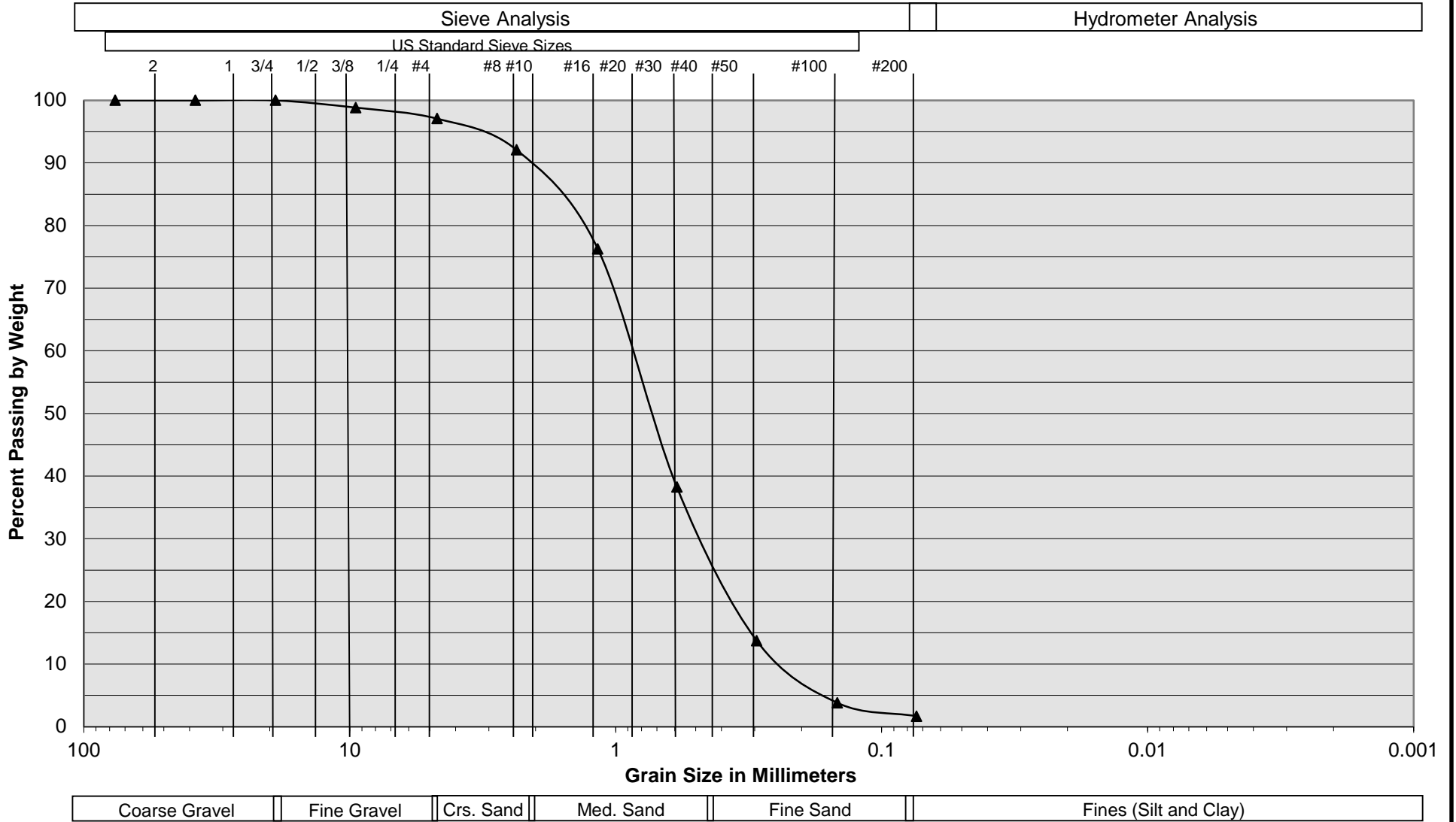
Sample Description	I-1 @ 5'
Soil Classification	Gray Brown Gravelly fine to medium Sand, some coarse Sand, trace Silt

Two Proposed Warehouses
 Highland, California
 Project No. 21G193-3
PLATE C- 1



SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Grain Size Distribution



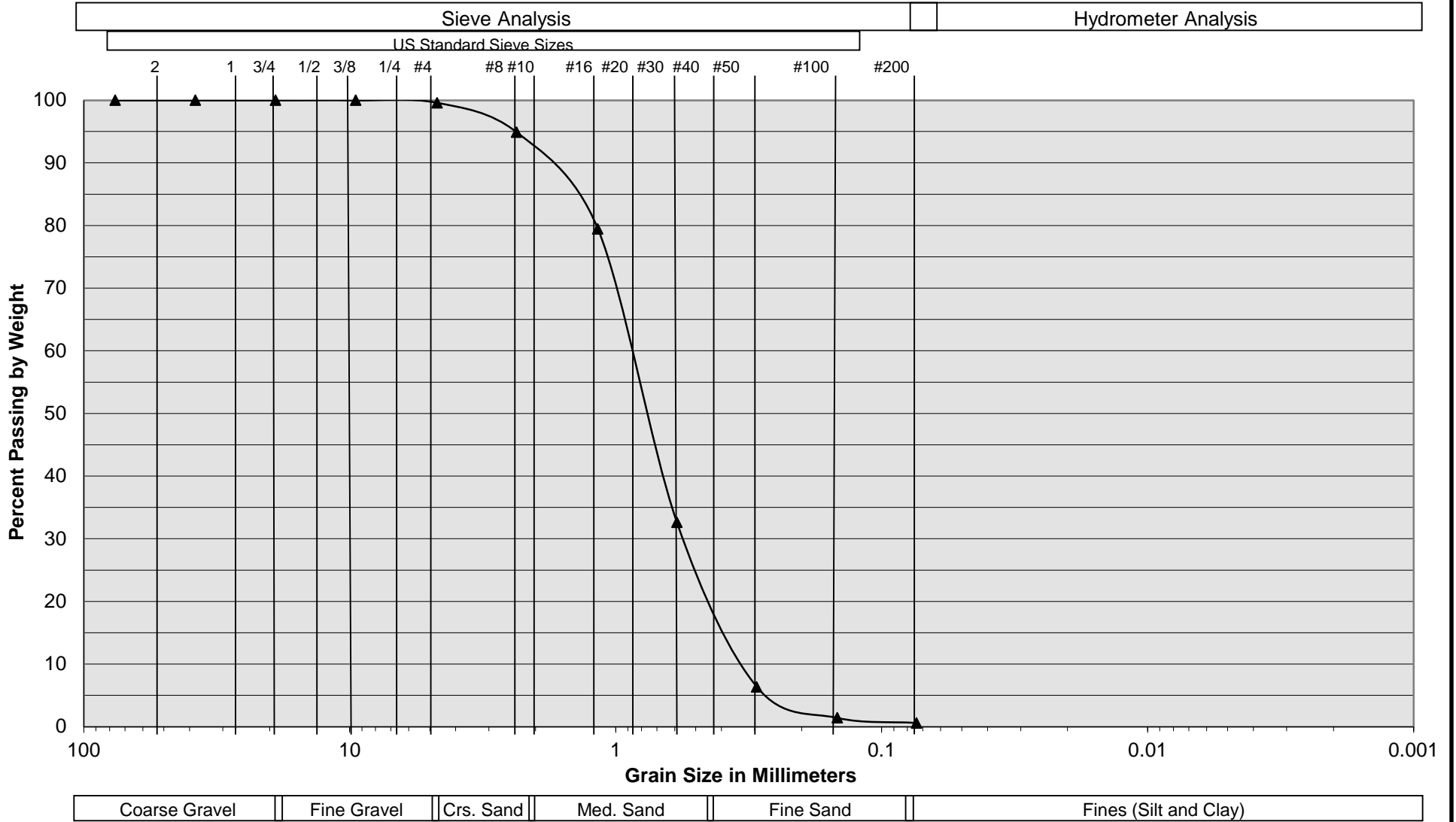
Sample Description	I-2 @ 5'
Soil Classification	Gray Brown fine to medium Sand, little coarse Sand, trace fine Gravel, trace Silt

Two Proposed Warehouses
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PLATE C- 2



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Grain Size Distribution



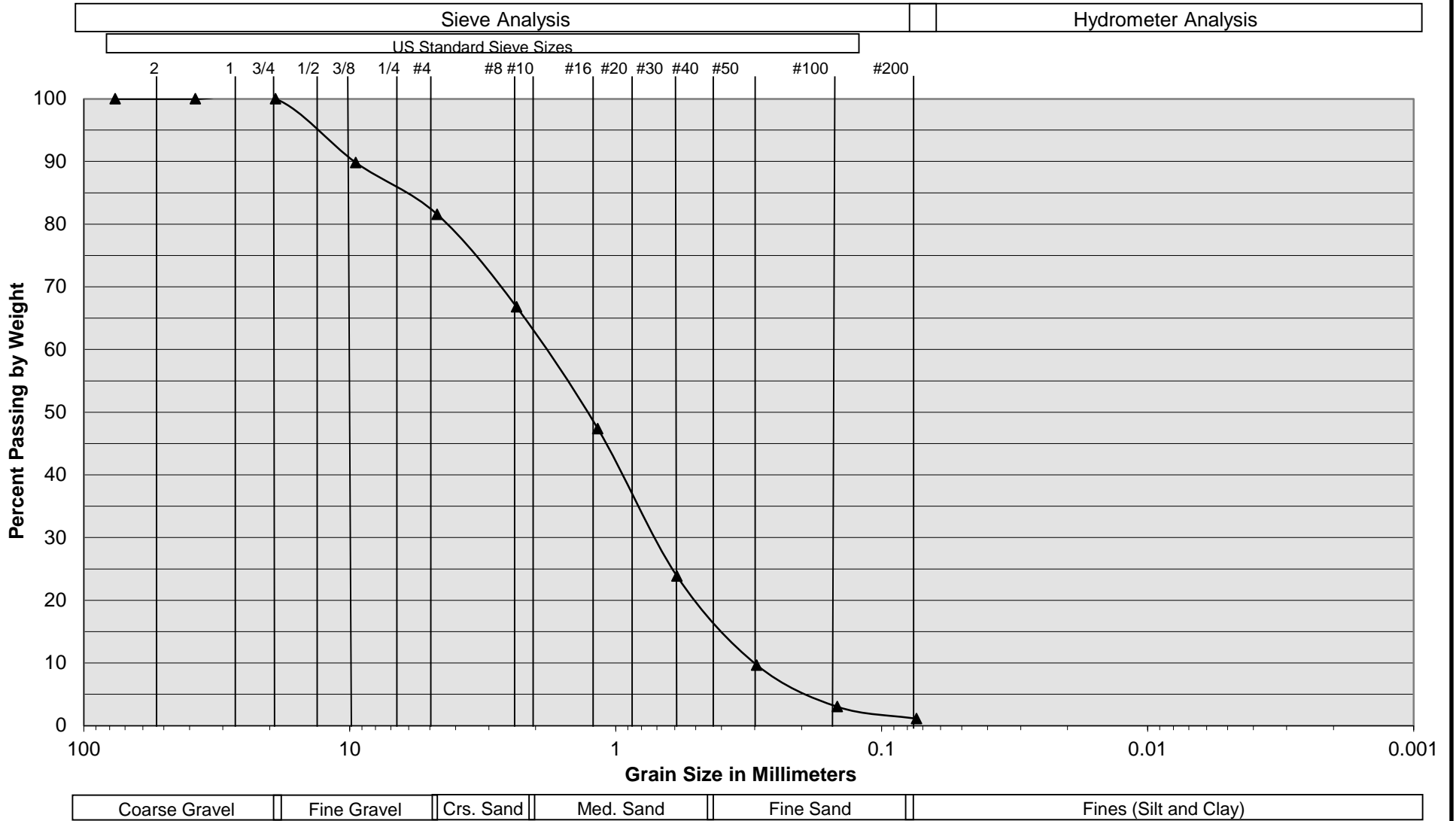
Sample Description	I-3 @ 5'
Soil Classification	Gray Brown fine to medium Sand, little coarse Sand

Two Proposed Warehouses
 Highland, California
 Project No. 21G193-3
PLATE C- 3



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Grain Size Distribution



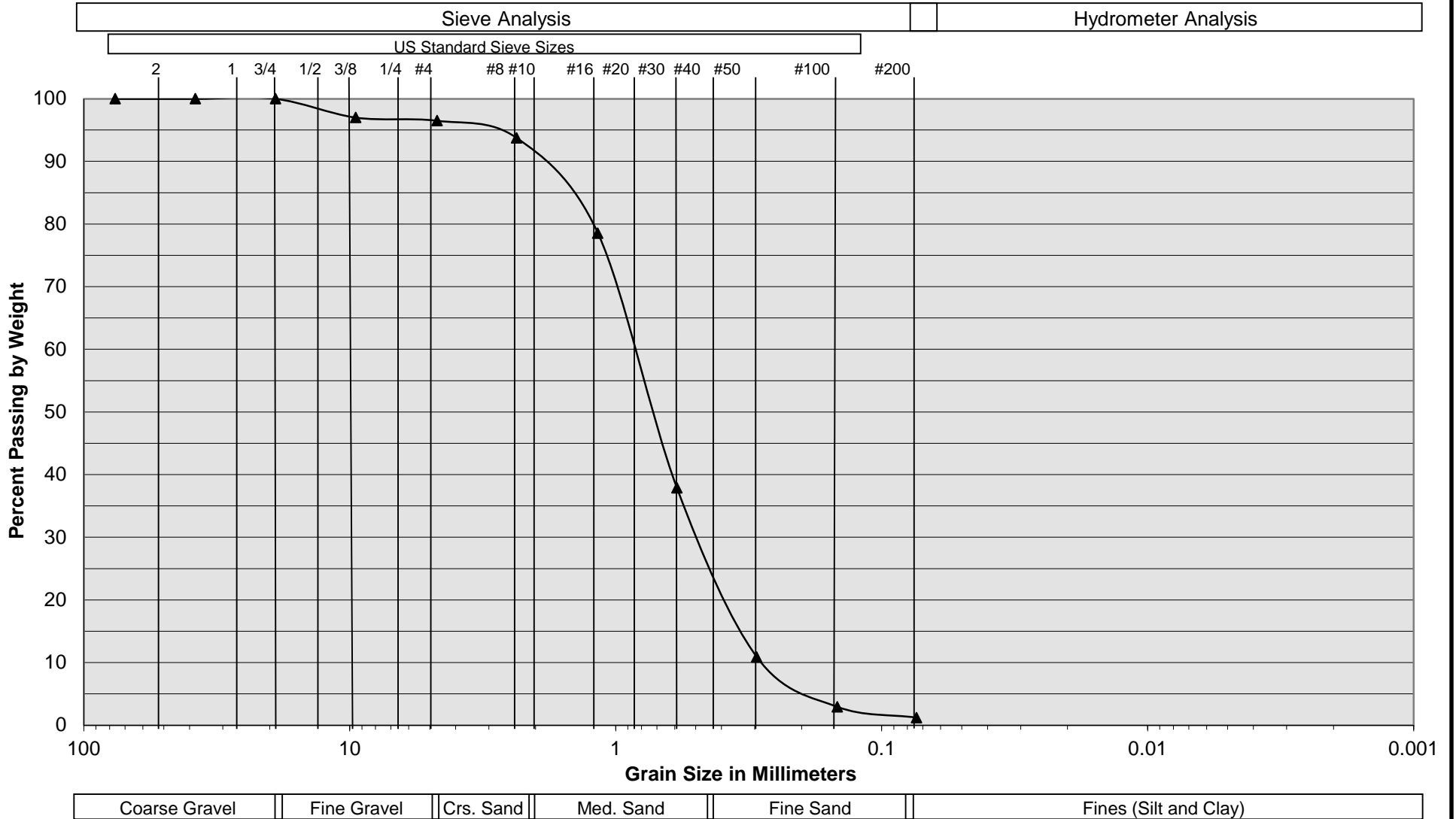
Sample Description	I-4 @ 9'
Soil Classification	Gray Brown Gravelly fine to coarse Sand

Two Proposed Warehouses
 Highland, California
 Project No. 21G193-3
PLATE C- 4



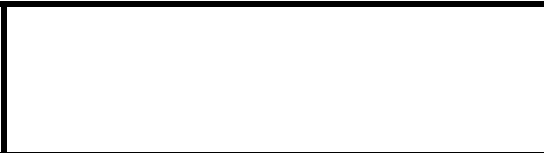
SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



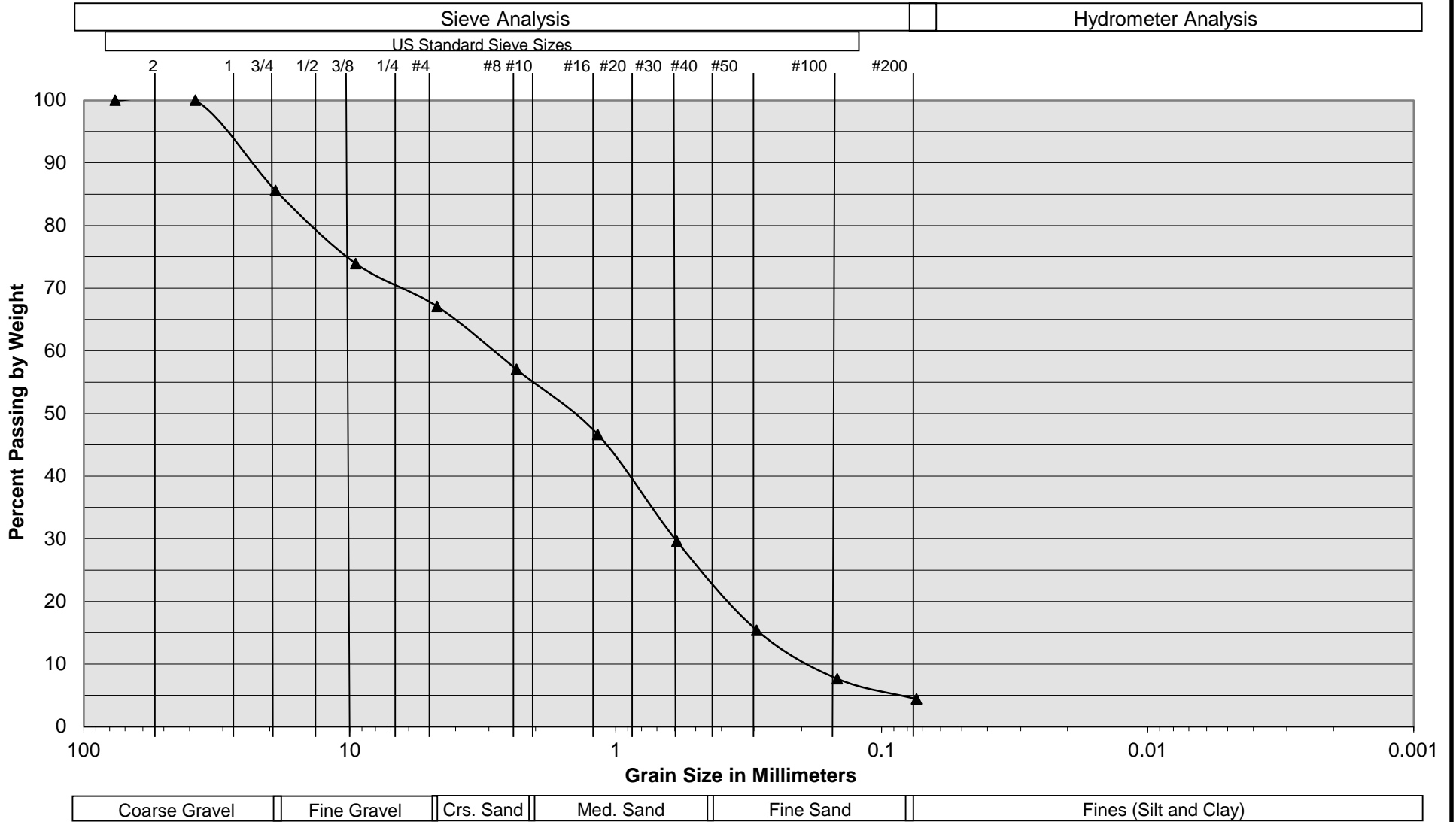
Sample Description	I-5 @ 9'
Soil Classification	Light Gray Brown fine to coarse Sand, trace fine Gravel

Two Proposed Warehouses
 Highland, California
 Project No. 21G193-3
PLATE C- 5



SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



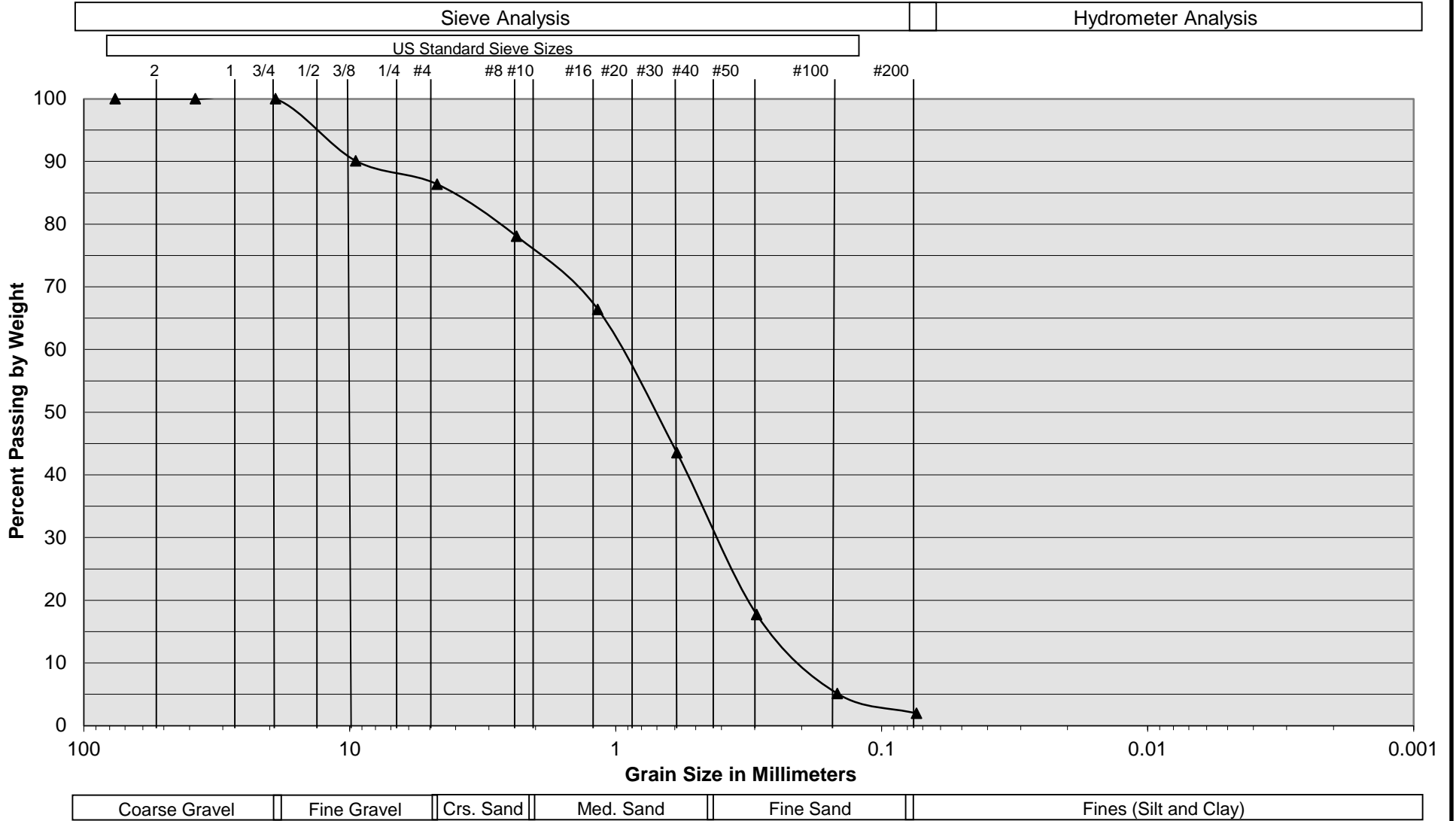
Sample Description	I-6 @ 9'
Soil Classification	Light Brown to Brown Gravelly fine to coarse Sand, trace Silt

Two Proposed Warehouses
 Highland, California
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PLATE C- 6



SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



Sample Description	-7 @ 11'
Soil Classification	Light Brown fine to medium Sand, little coarse Sand, little fine Gravel

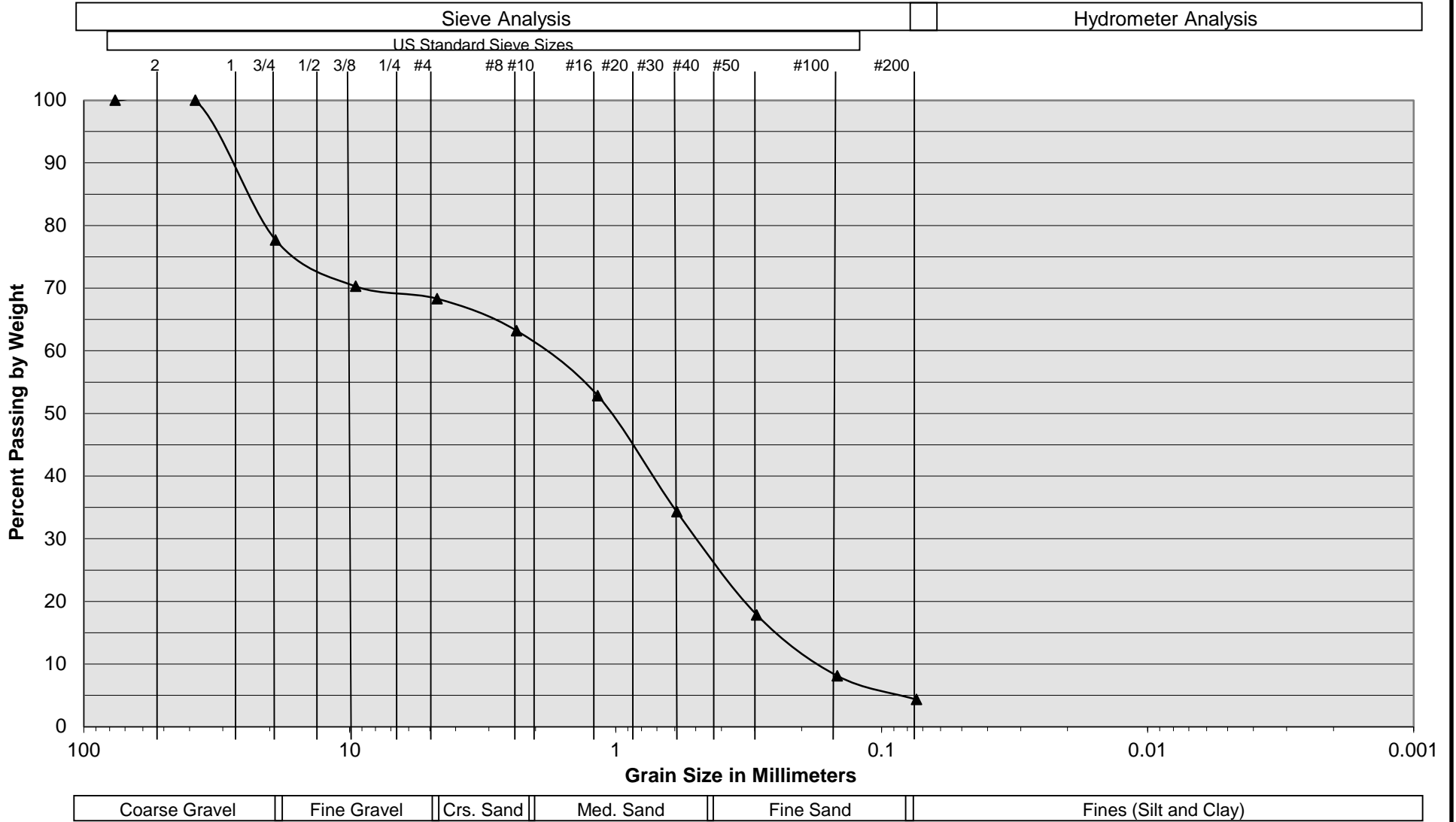
Two Proposed Warehouses
 Highland, California
 Project No. 21G193-3
PLATE C-7





SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



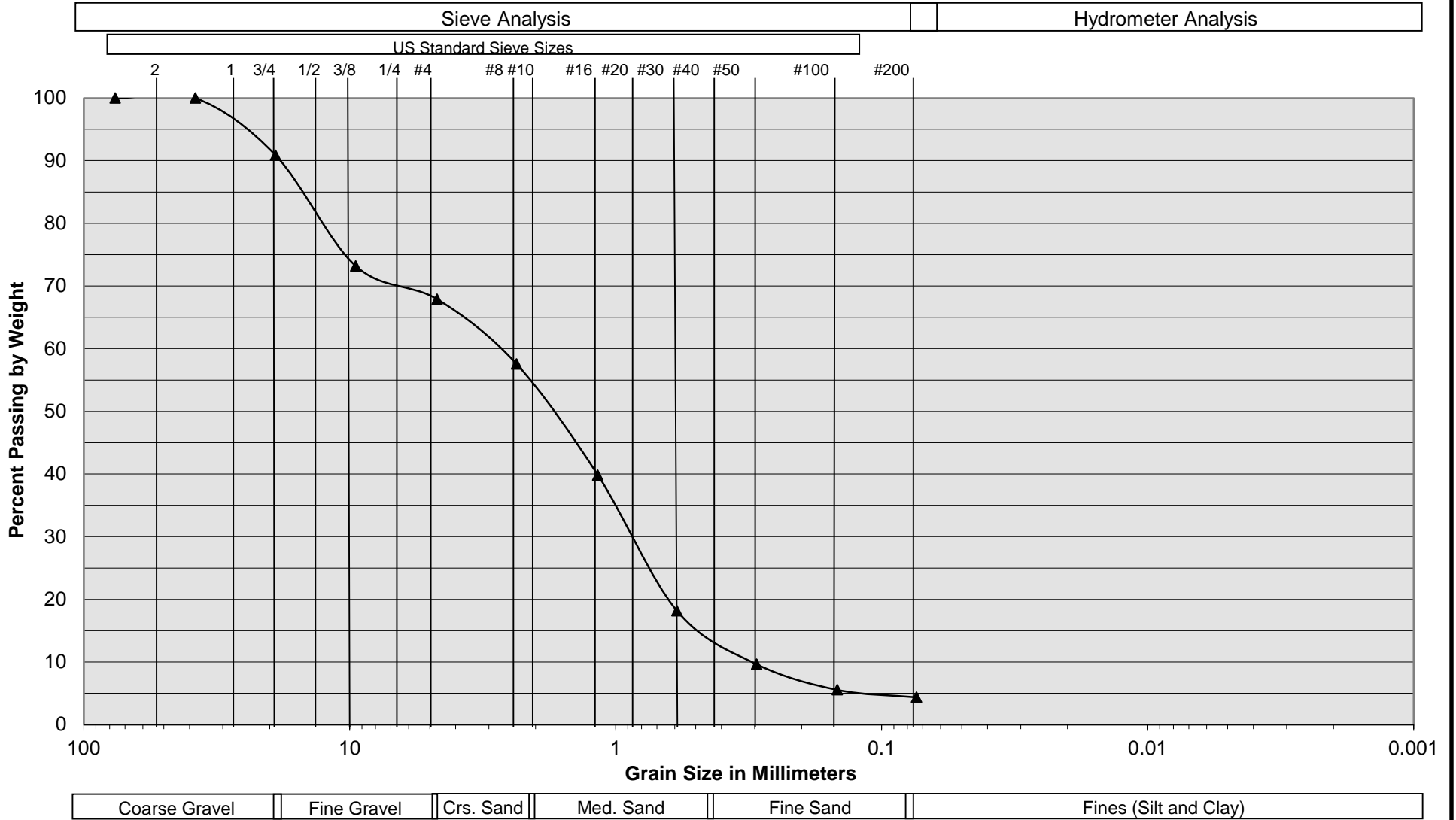
Sample Description	I-8 @ 11'
Soil Classification	Light Brown Gravelly fine to coarse Sand, trace Silt

Two Proposed Warehouses
 Highland, California
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PLATE C- 8



SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



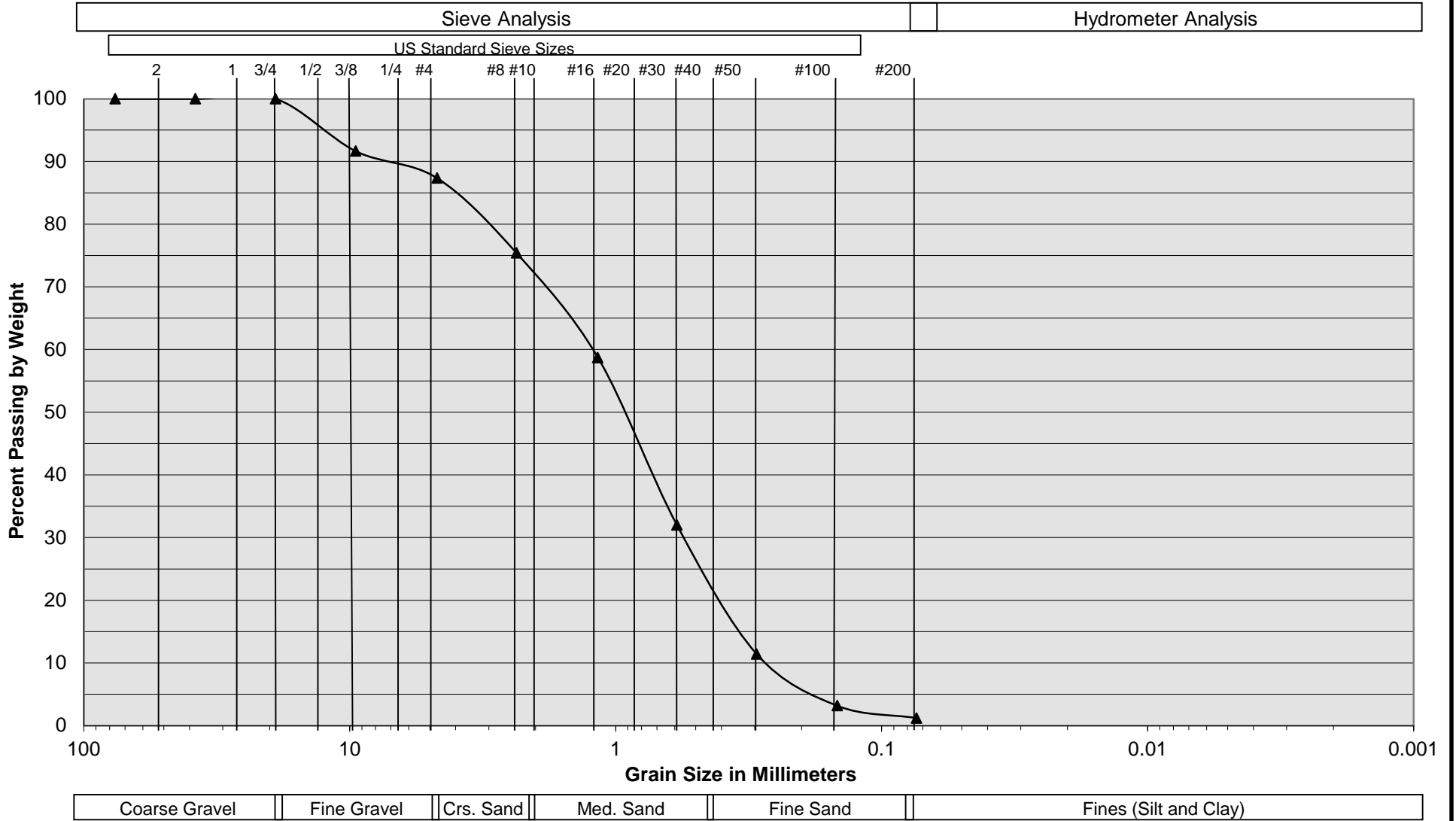
Sample Description	I-9 @ 11'
Soil Classification	Light Brown Gravelly fine to coarse Sand, trace Silt

Two Proposed Warehouses
 Highland, California
 Project No. 21G193-3
PLATE C- 9



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Grain Size Distribution



Sample Description	I-10 @ 11'
Soil Classification	Light Brown fine to coarse Sand, little fine Gravel

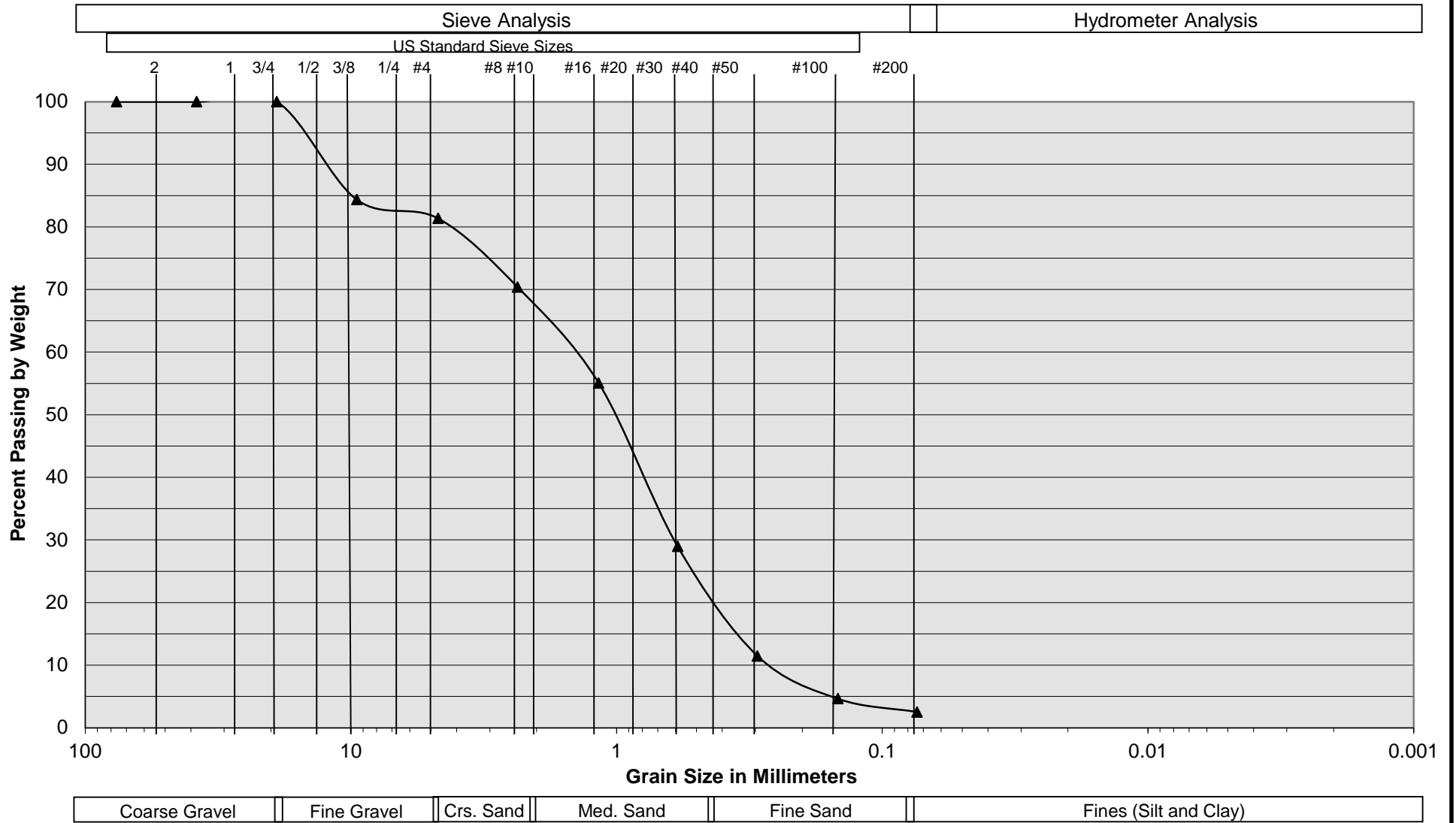
Two Proposed Warehouses
 Highland, California
 Project No. 21G193-3
PLATE C- 10





SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



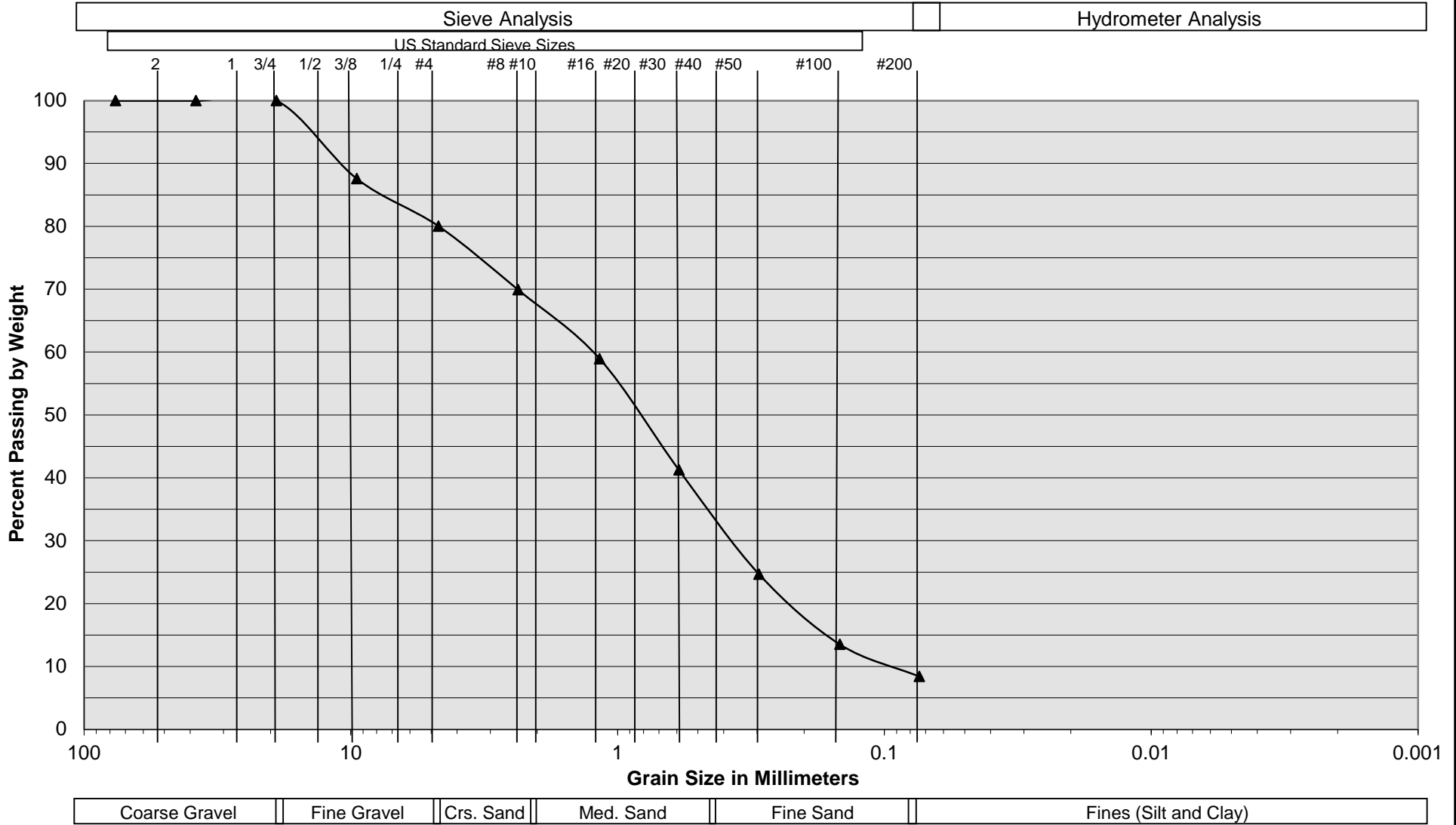
Sample Description	I-11 @ 9'
Soil Classification	Gray Brown Gravelly fine to coarse Sand, trace Silt

Two Proposed Warehouses
 Highland, California
 Project No. 21G193-3
PLATE C- 11



SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



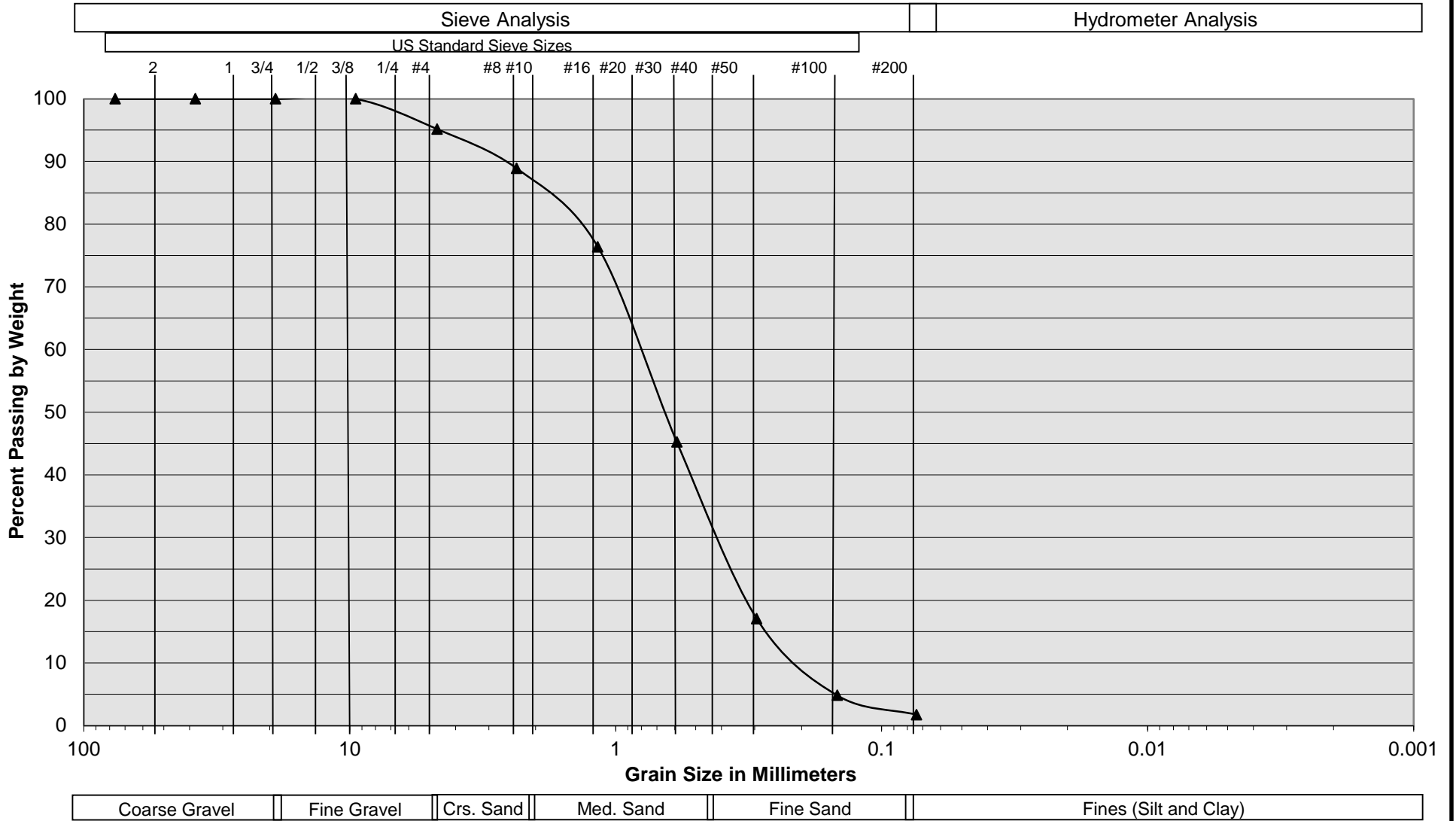
Sample Description	I-12 @ 9'
Soil Classification	Gray Brown Gravelly fine to coarse Sand, trace to little Silt

Two Proposed Warehouses
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PLATE C- 12



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Grain Size Distribution



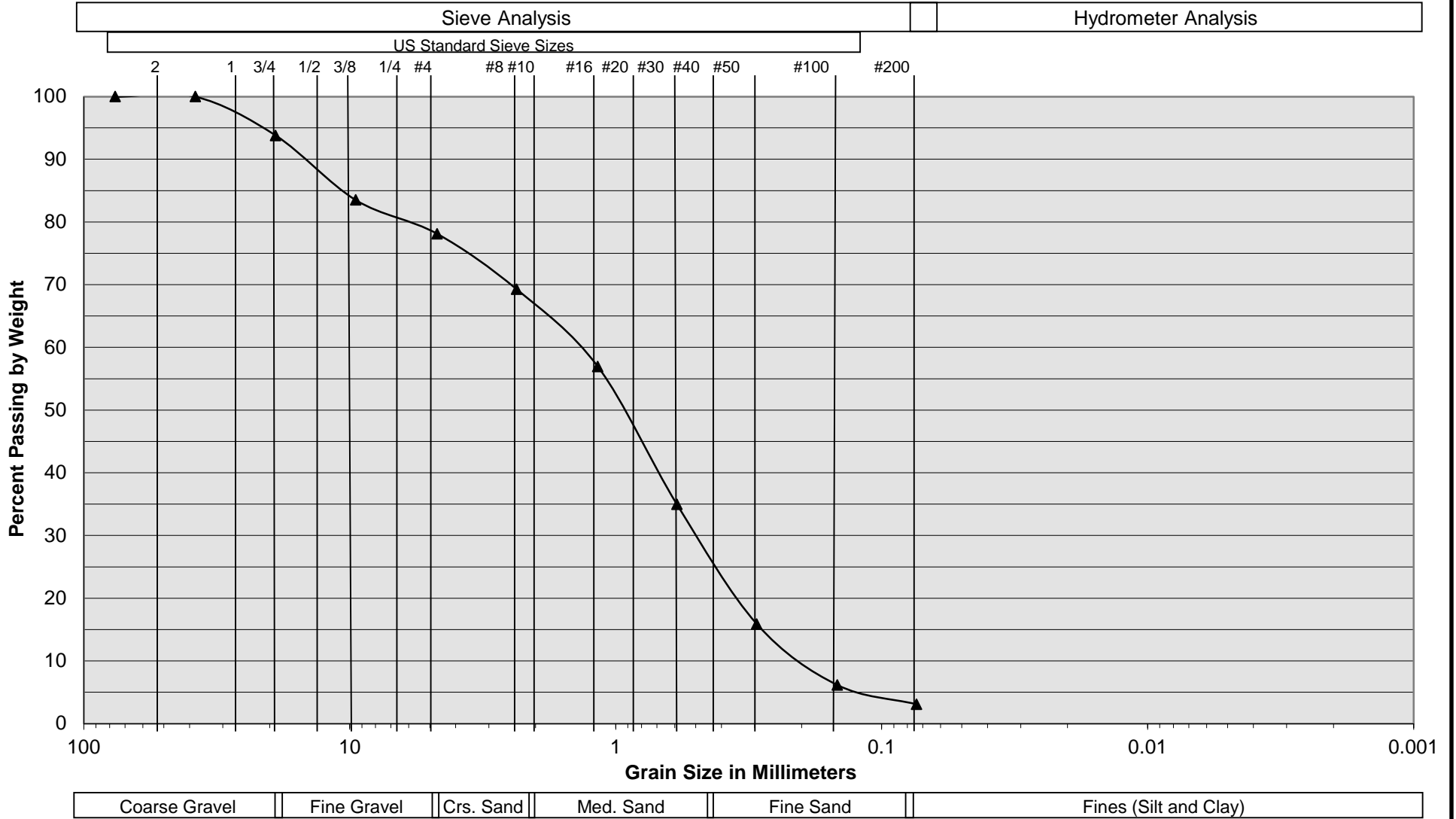
Sample Description	I-13 @ 12'
Soil Classification	Light Gray Brown fine to coarse Sand, trace fine Gravel

Two Proposed Warehouses
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PLATE C- 13



SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



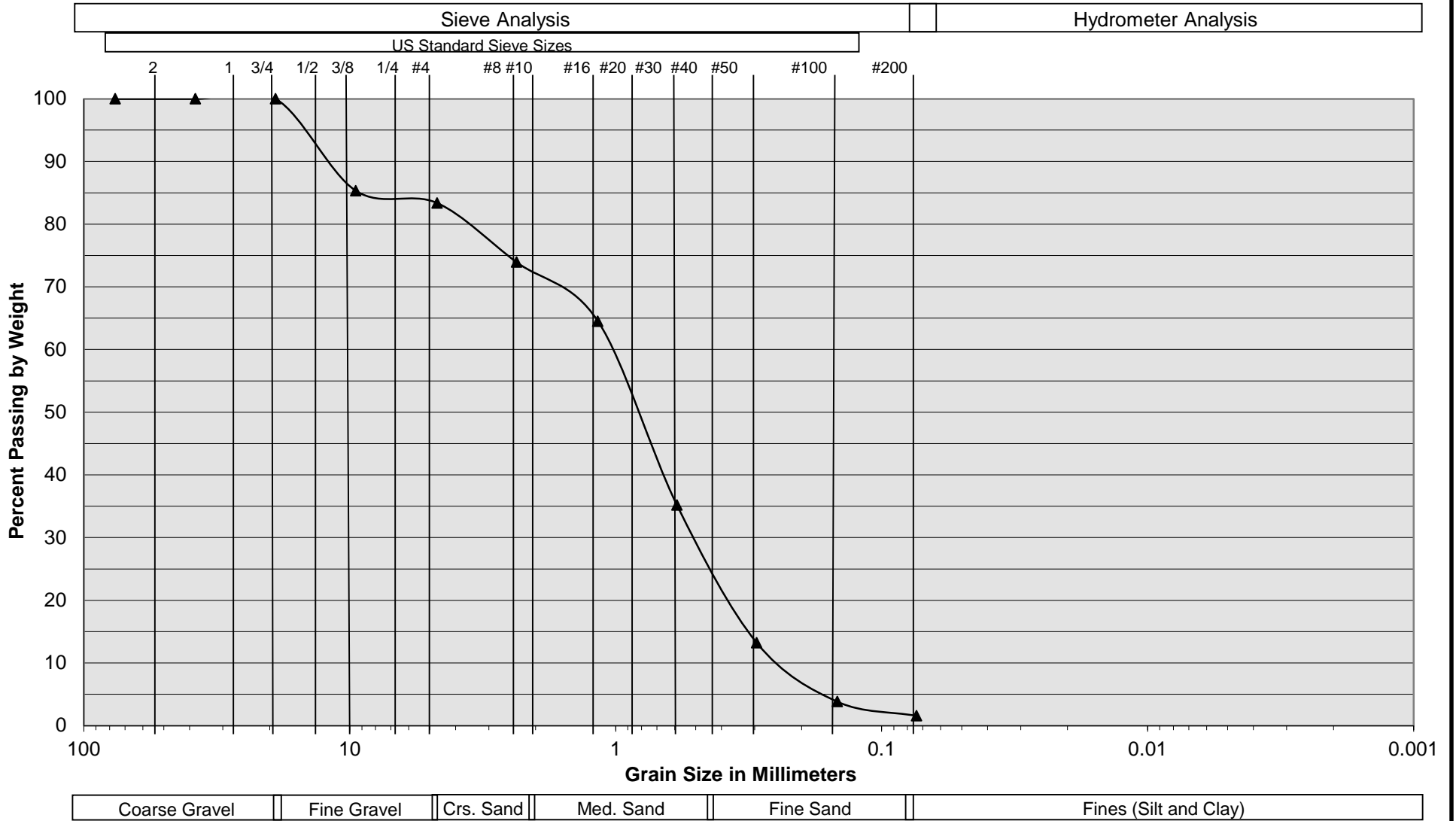
Sample Description	I-14 @ 12'
Soil Classification	Light Gray Gravelly fine to coarse Sand, trace Silt

Two Proposed Warehouses
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PLATE C- 14



SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



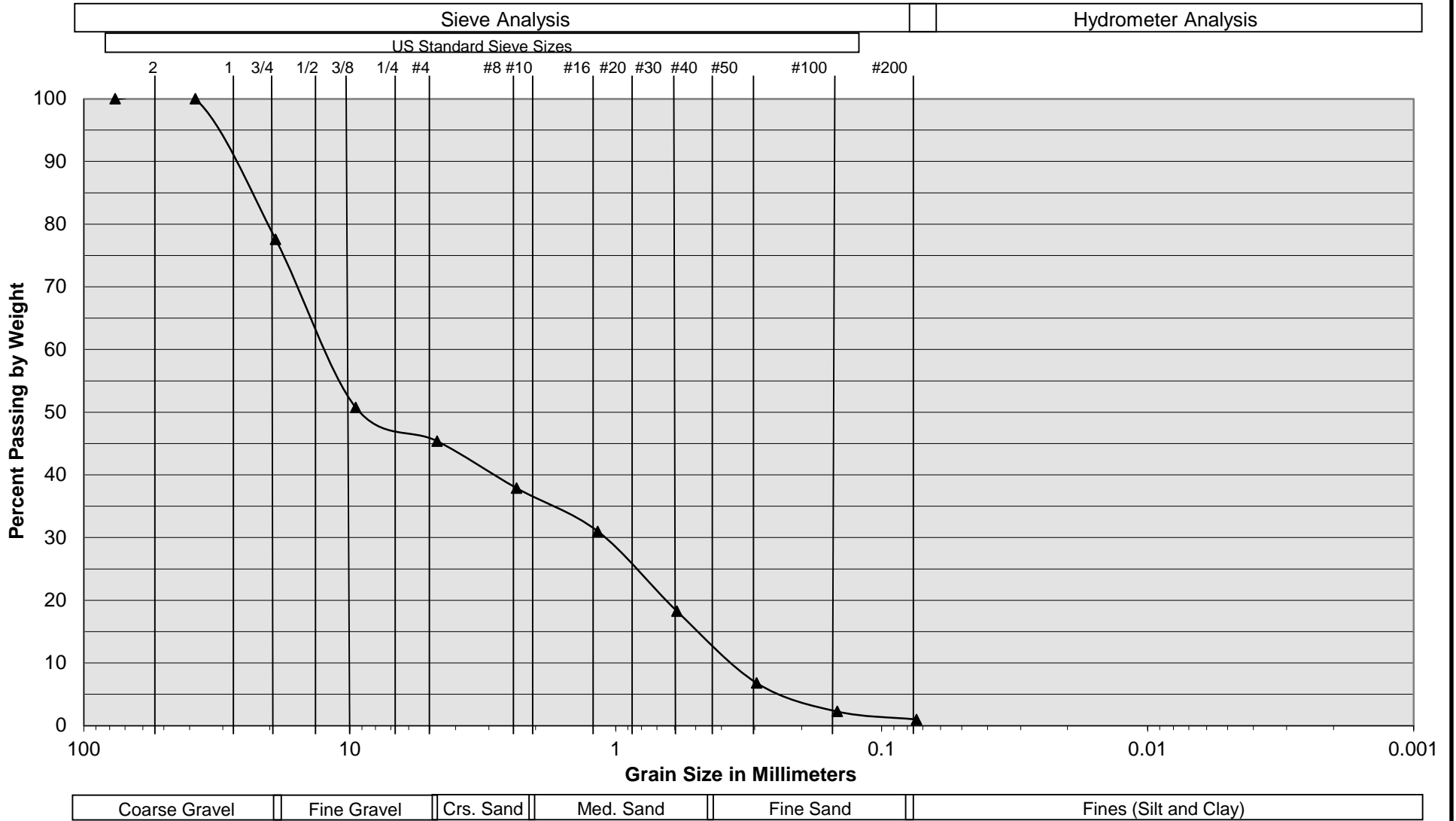
Sample Description	I-15 @ 12'
Soil Classification	Light Gray Brown fine to coarse Sand, little fine Gravel

Two Proposed Warehouses
 Highland, California
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PLATE C- 15



SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



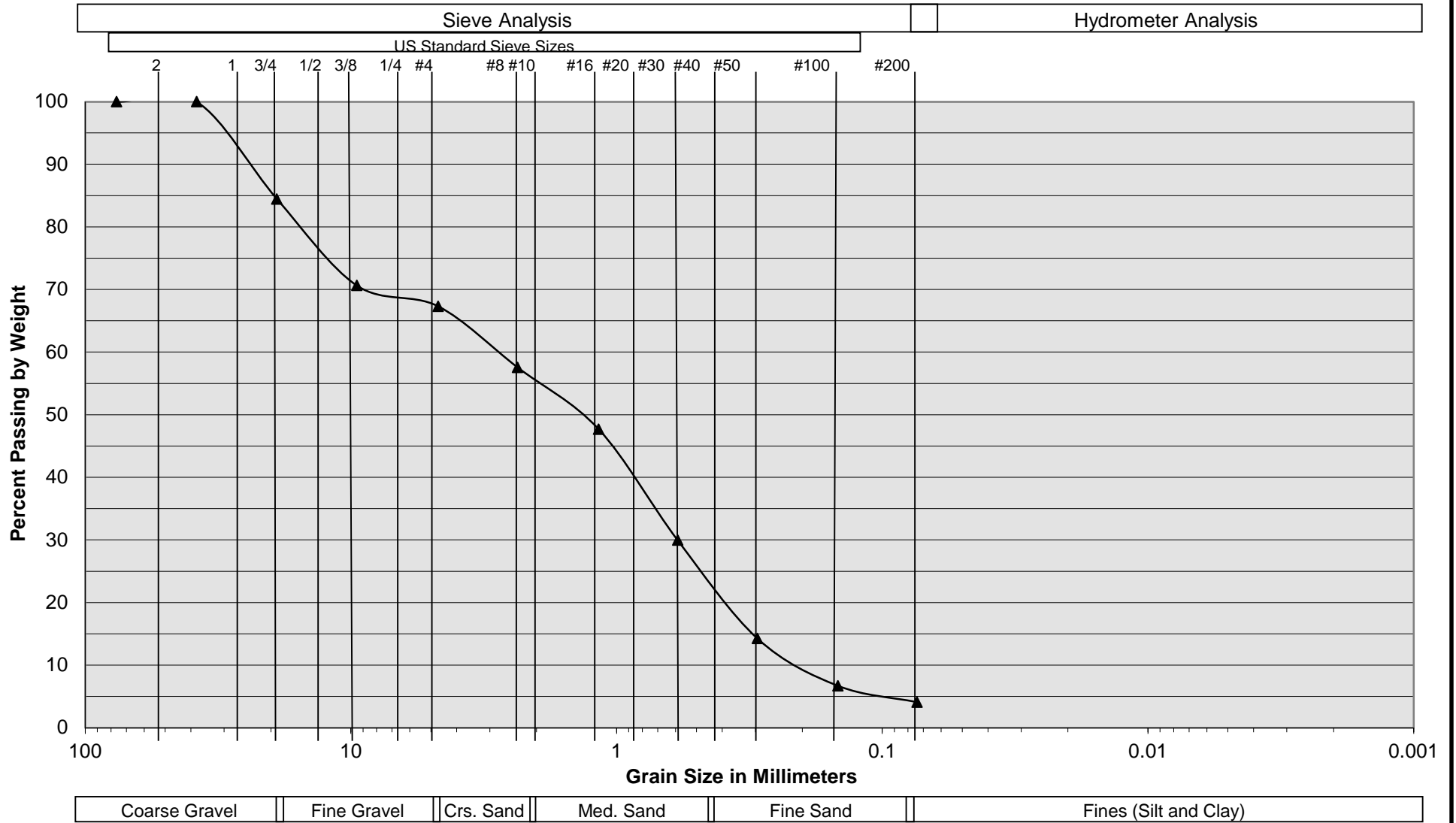
Sample Description	I-16 @ 12'
Soil Classification	Light Gray Gravelly fine to coarse Sand to fine to coarse Sandy Gravel

Two Proposed Warehouses
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PLATE C- 16



SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



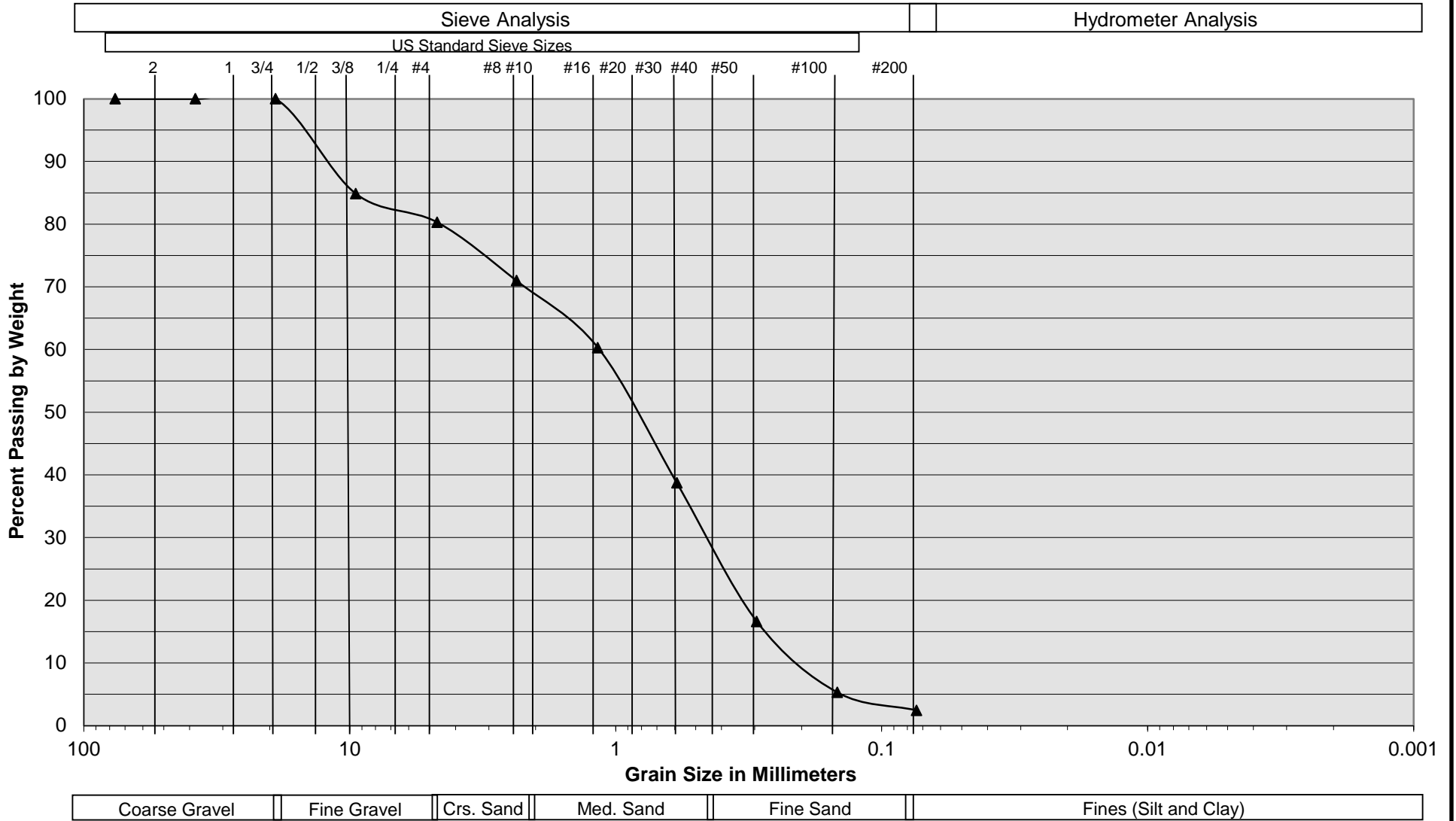
Sample Description	I-17 @ 12'
Soil Classification	Gray Gravelly fine to coarse Sand, trace Silt

Two Proposed Warehouses
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PLATE C- 17



SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



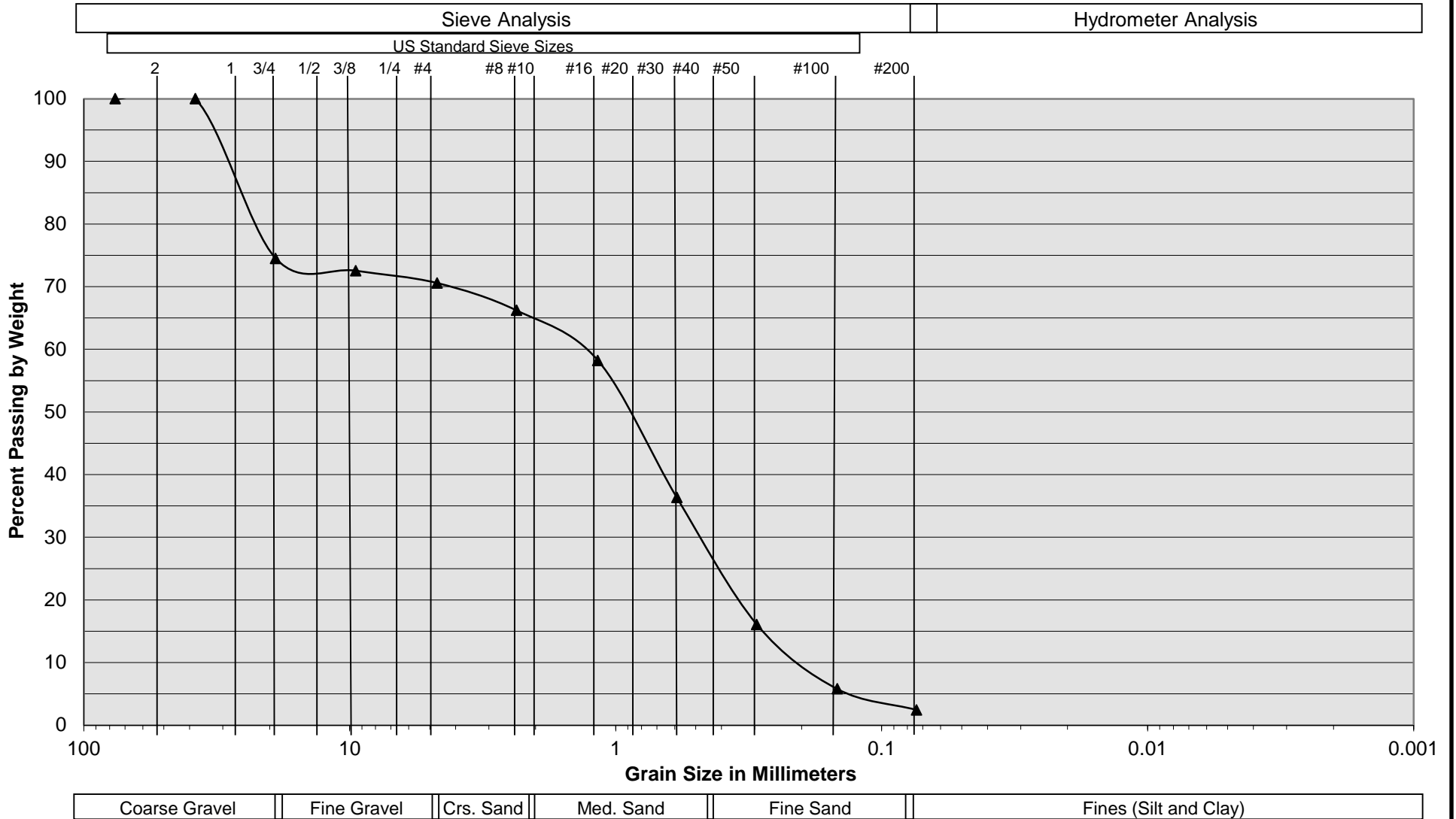
Sample Description	I-18 @ 12'
Soil Classification	Gray Brown fine to coarse Sand, little fine Gravel

Two Proposed Warehouses
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PLATE C- 18




SOUTHERN CALIFORNIA GEOTECHNICAL
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Grain Size Distribution



Sample Description	I-19 @ 12'
Soil Classification	Gray Brown Gravelly fine to medium Sand, trace coarse Sand

Two Proposed Warehouses
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PLATE C- 19





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