ARAGÓN GEOTECHNICAL, INC.
Consultants in the Earth & Material Sciences

November 23, 2020
Project No. 4658-P

WPT Industrial REIT
12405 Venice Boulevard, Suite 383
Los Angeles, California 90066

Attention: Mr. Jonah Chodosh

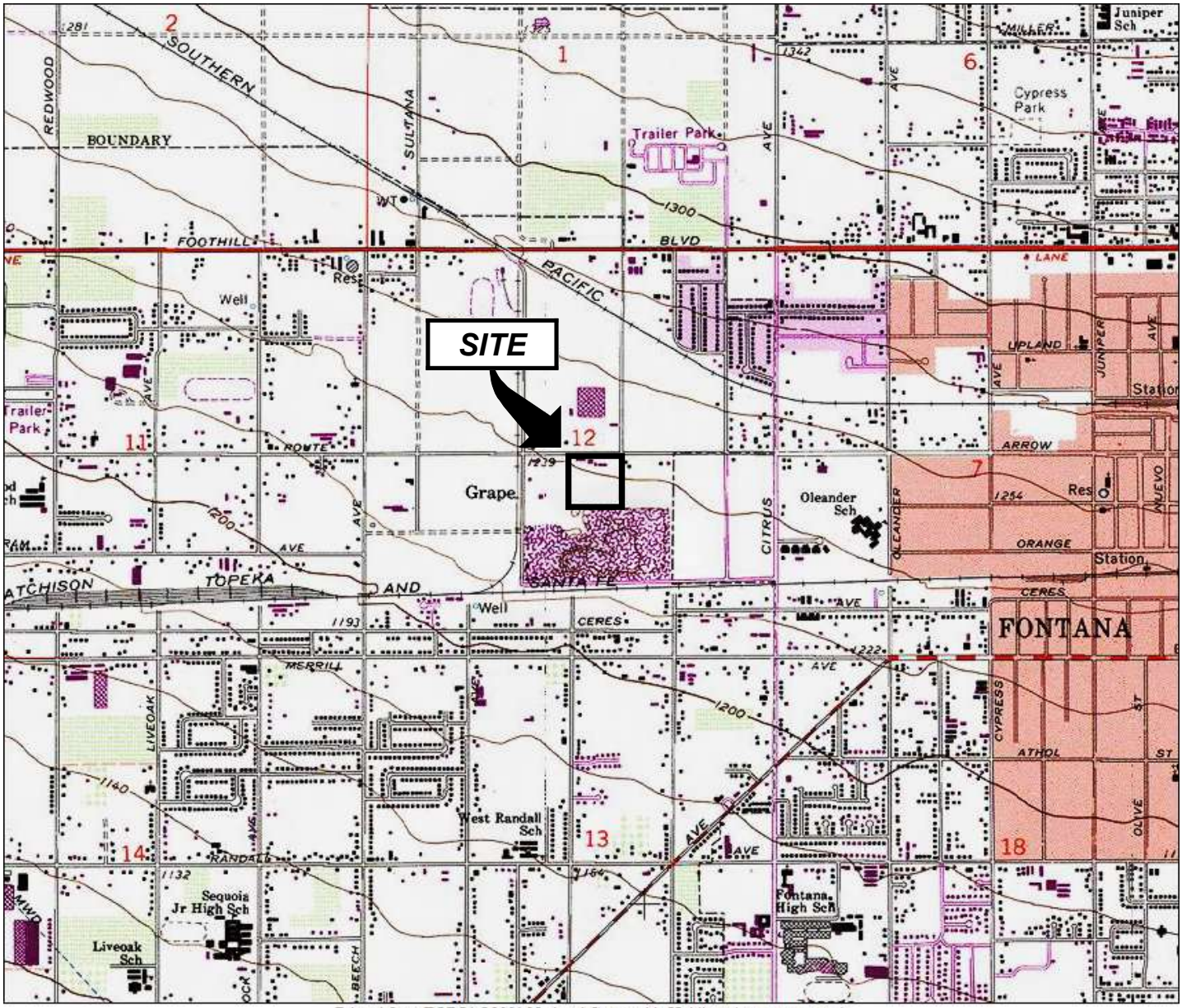
Subject: On-site Wastewater Treatment System Feasibility Report
15719 & 15755 Arrow Route Industrial Project
Fontana, San Bernardino County, California.

Dear Mr. Chodosh:

Aragón Geotechnical, Inc. (AGI) has completed determinations of site suitability for domestic wastewater treatment and disposal for the above-referenced project site. The following report summarizes the findings, opinions, and recommendations developed as a result of our surface inspections, subsurface exploration, field percolation testing, and engineering and geologic analyses. Our wastewater investigation was a companion to a comprehensive geotechnical investigation for the industrial warehouse project. Geotechnical data and recommendations are presented under separate cover. The scope and procedures for evaluating feasibility for an on-site wastewater treatment system (OWTS) were based on the regulatory requirements of the San Bernardino County Division of Environmental Health Services (DEHS) Local Agency Management Program (LAMP), adopted May 2017.

Background Information

Proposed Site Development. The square-shaped project site is identified in County databases as a contiguous pair of parcels, APN 0232-161-18-0000 and adjacent APN 2032-161-19-0000. The parcels encompass 9.24 acres of flat terrain on the south side of Arrow Route east of Lime Avenue (Figure 1, next page). Although the postal address is Fontana, the properties are within an unincorporated “island” lacking some infrastructure



Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)

0 2000 4000 FT.

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Reference: U. S. Geological Survey 7½-Minute Series Topographic Map, Fontana Quadrangle (1980).

AGI	**SITE LOCATION MAP**		
	15719 & 15755 ARROW ROUTE INDUSTRIAL PROJECT, FONTANA, CA.		
	PROJECT NO. 4658-P	DATE: 11/23/20	**FIGURE 1**

improvements common to the surrounding community, including storm drains and municipal sewer hookups. Sewage disposal is regulated by the County under authority granted by local Regional Water Quality Control Boards [Santa Ana, Lahontan, and Colorado River districts]. The industrial project appears to meet three basic criteria for agency approval of a standard leach-line OWTS installation: (1) The redevelopment has a minimum lot size of at least one-half acre gross; (2) The project does not have the option of "available" municipal sanitary sewer service; and (3) The urban site is not next to a Board-listed impaired water body. We understand from the owner's civil engineer that the nearest sewer main is ~2,200 east of the industrial redevelopment. Jurisdictional control for entitlements will be exercised by the County of San Bernardino.

Exploration and test locations were based on an October 9, 2019 conceptual development plot plan [Scheme 1] electronically forwarded to our office. The plans illustrated a 195,960-square-foot warehouse or logistics building. Paved areas will surround the structure. Twenty-two dock doors would span the south side of the warehouse. Consistent with regional practice, we anticipate the industrial building will consist of concrete tilt-up walls resting on shallow strip footings, with a concrete slab-on-grade industrial floor. The development will be served by piped municipal water and underground dry utilities stubbed in from the adjacent public street right-of-way. Specific knowledge of prospective employee count or total number of fixture units to be accommodated was not available.

Future grading is planned to be a cut-and-fill operation. Total site relief is around 13 feet, with the highest elevation toward the northeast corner and a low point at the southwest corner. "Raw" cut and fill depths have preliminarily been depicted on working drawings at about 4 feet and 7 feet, respectively. Raw cut-and-fill quantities can be expected to increase based on ground preparation measures we can foresee for the building pad. We do not expect major earthen slopes or retaining walls at this low-relief site.

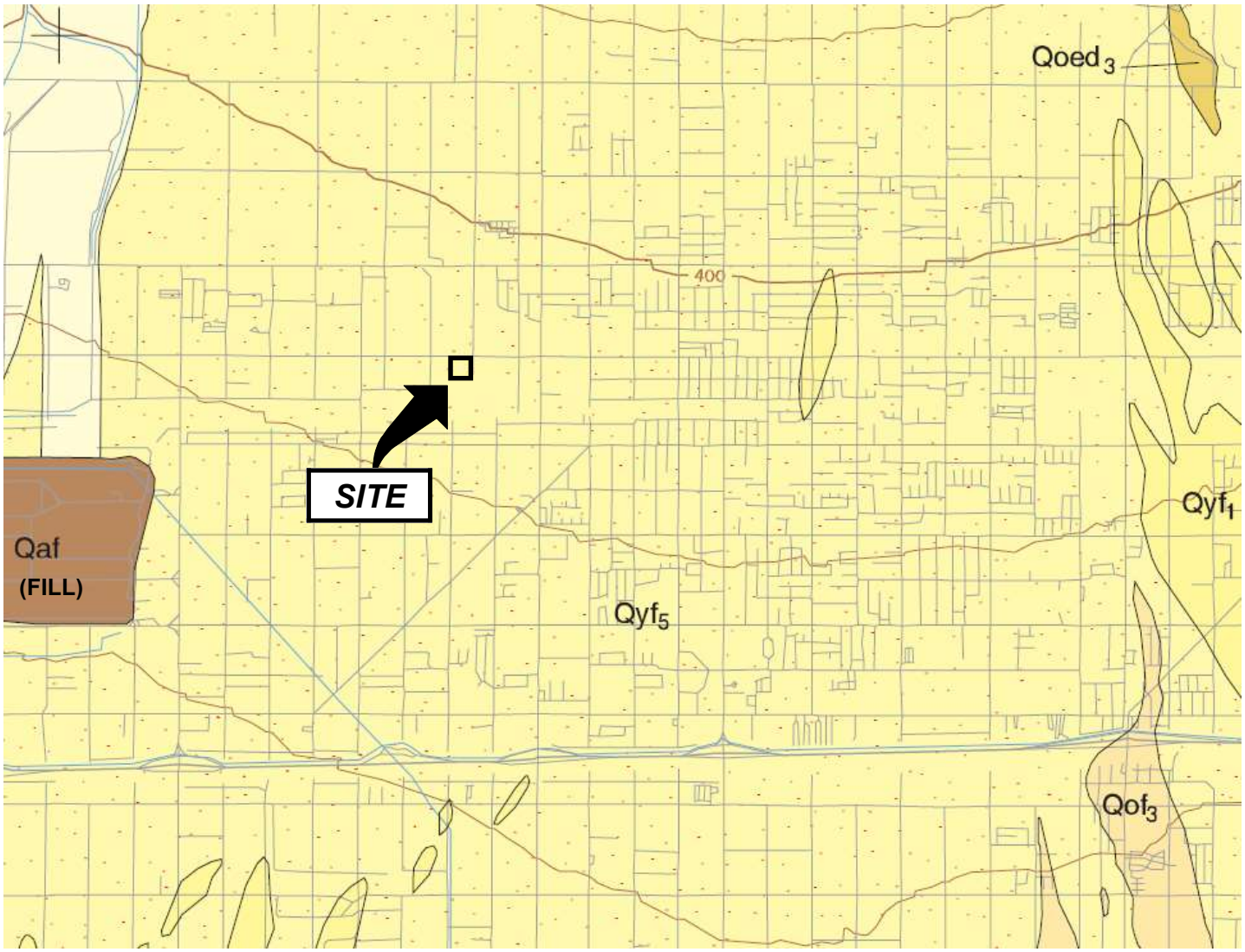
The anticipated landscape area of 15% of total project area would in large part be taken by basins and other water-quality improvements needed to satisfy stormwater management regulations. Owner consultations established that a planned landscape strip next to Arrow Route might be the most favorable location for conventional shallow leach-line absorption fields (active and expansion areas). Over 13,000 square feet of unpaved area is plotted on drawings.

Surface Conditions. The overall site comprises three existing fenced and gated businesses with access from Arrow Boulevard. Two of the businesses are auto dismantlers, while the westernmost parcel also is partly leased to a pallet yard operator. The pallet yard in turn was also once used for auto dismantling based on historical photos dating to the early 1950's. Both parcels have multiple metal buildings, shed canopies, and paved customer parking areas in addition to yard spaces for wrecked cars and pallets. The future warehouse would be bordered to the west by a scrap metal recycling business, to the east by a local supplier of transit-mixed concrete, and to the south by the former "Fontana sand pit". Sand and coarse aggregates were mined from the pit for decades before the quarry was reclaimed as open space in 2014.

The prospective absorption field is currently a mix of landscaped street buffer and paved surfaces used daily for customer and employee parking. Surface elevations are mostly close to original grades, although minor cuts of up to 30 inches or so created a drainage swale west of AGI's selected deep OWTS exploration site. Analyses of historical aerial photos performed for the main geotechnical investigation did not disclose stream corridors or riparian indicator species in images dating back to 1933. The oldest reviewed images indicated the industrial site was a grape vineyard.

Local Geologic Setting. Between the Transverse Ranges mountain front and the Jurupa Mountains, the City of Fontana and its neighboring communities have been developed across several coalescing alluvial fans. The site is in the medial portions of the Lytle Creek fan. The Lytle Creek watershed features plutonic and metamorphic rock types that are represented in the crudely layered deposits at the site. Morton and Miller (2006) assign late Pleistocene to late Holocene ages for younger fan alluvium (unit Qyf_5 in Figure 2, next page) mapped across the majority of Fontana. A slightly older unit labeled Qyf_1 has scattered surface distribution east and south of the Arrow Route project. We would suspect that most on-site deposits deeper than about 30 feet are in fact correlative with the older unit, based on clast weathering.

Large areas of Ontario, Fontana, Colton, and Rialto feature fine-grained surficial sandy soils at least a few feet deep. Characteristics including loose relative densities, low unit weights, and typically massive character with minimal pedogenic soil development are consistent with eolian (wind-deposited) sediments. East of the site around Colton and



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0 0.5 1.0 mi.

Selected vicinity units:

Qyf_5	Unconsolidated younger alluvial fan deposits (late Holocene)
Qyf_1	Moderately dissected young alluvial fan deposits (early Holocene and late Pleistocene)
$Qoed_3$	Older stabilized dune landforms.
Qof_3	Older fan alluvium (middle Pleistocene)

Reference: Modified after Morton and Miller (2006). Scale is approximate.

AGI

VICINITY GEOLOGIC MAP

15719 & 15755 ARROW ROUTE INDUSTRIAL PROJECT, FONTANA, CA.

PROJECT NO. 4658-P	DATE: 11/23/20	**FIGURE 2**

Bloomington, these young deposits transition into actual dune landforms. Interpreted eolian sand sheets at the Arrow Route site have been further modified by burrowing fauna.

The maximum depth of alluvium at the warehouse site is not known with certainty, but has been inferred to be over 850 feet based on the completion depths of private water wells within two miles of the site. Buried bedrock relief towards the San Gabriel Mountains is not well understood. Limited data indicate that some areas have in excess of 2,000 feet of sediment.

Native earth materials within 50 feet of grade in the project are dominated by coarse-grained, medium dense to very dense alluvial soils classified as silty sand, gravelly sand, and sandy gravel (Unified Soil Classification System symbols SM, SW-SM, GW-GM, and GW). Silty sand with variable but low gravel proportions caps the site to typical depths of 2 to 7 feet. Deeper sediments tend to be under 15% estimated silt fines. Clay is undetectable by visual-manual methods. Especially coarse-grained cobble or boulder deposits appear to be absent at least in the upper several tens of feet of alluvium. None of AGI's geotechnical or OWTS soil borings encountered cemented hardpans or sedimentary formation strata to the maximum exploration depth of 51.5 feet.

Soil scientists assign native soils to the Tujunga soil series TvC, comprising somewhat excessively drained gravelly loamy sand without any limiting layers to water transmission in the upper 80 inches (Natural Resources Conservation Service, Web Soil Survey, https://websoilsurvey.nrcs.usda.gov/). These materials are accorded a status of hydrologic soil group A, with effective hydraulic conductivity K_{sat} ascribed to a range of about 6 to 20 inches per hour.

Absorption Area Drilling Investigations and Percolation Testing

AGI's percolation evaluation was conducted to meet or exceed DEHS guidelines for a commercial/industrial parcel greater than 0.5 acres in area and a "favorable" site condition limitations classification. A minimum of 4 tests were planned. Test methods and general system design criteria were based on requirements outlined in the DEHS LAMP and *Percolation Testing and Reporting Standards for Onsite Wastewater Treatment Systems* revised September 2019.

Personnel. All field exploration, percolation testing, and system design calculations were performed by the following qualified company principals or consultants:

- Kelly Lauritsen, Senior Technician, with more than 25 years of mass grading and infiltration test experience.
- Carlos Fernando Aragón, PE, GE, Graduate, California Registered Geotechnical Engineer, with over 15 years of professional experience.
- Mark G. Doerschlag, PG, CEG: Graduate, California Professional Geologist and Certified Engineering Geologist, with over 37 years of professional experience.

Exploration & Testing. Test boring preparation, presaturation, and percolation testing were completed on November 6 and 9, 2020. DEHS was contacted via email on November 3, 2020 and a Percolation Test Notification form sent as an attachment. County personnel did not elect to observe the testing. Four primary tests were conducted in accordance with percolation test procedures for a leach-line type system described in Section 4.2 of the standards manual. Desired test locations were tape-measured from cultural features and plotted on a scaled site plan. The four tests were conducted in machine-augered and manually cleaned borings with bottom depths of 34 to 64 inches below the top of the street-side concrete sidewalk (judged a good fixed reference datum for future construction). AGI professionals sited the tests based on the following findings and concepts:

- The subject site featured young sandy alluvium. Good percolation performance was predicted. Relatively shallow-depth leach line trenches would be feasible and in fact preferred, based on desirable near-surface filtration characteristics and potential to maximize evapotranspiration in the proposed landscape strip.
- Absorption fields cannot interfere with or coincide with prospective building footprints, driveways, streets, or LID BMP features such as runoff detention basins.
- Leach line trenches must maintain minimum horizontal setbacks from buildings, property lines, utility mains, and domestic water service laterals.

An 8-inch-diameter OWTS exploratory boring was drilled with a truck-mounted Mobile Drill B-71 hollow-stem auger rig near the approximate center of the proposed landscape strip. The exploration site was in a parking lot. The soil boring was easily drilled to a depth of 16½ feet. Periodic sampling was completed with a 3-inch-diameter California-modified split-spoon barrel approximately every 5 feet. The ring-lined barrel samples were retained

for selective laboratory test assignments. All percolation and related geotechnical borings were observed and continuously logged during drilling by a qualified engineering geologist. Subsurface conditions were described according to a standardized soil classification scheme. The drilled OWTS exploration was subsequently completed as a temporary piezometer, capped at grade but not covered with asphalt cold patch (the hole is accessible below an inch or two of compacted soil if needed for a DEHS groundwater check). The OWTS-specific Field Boring Log is included in the attached Appendix. Other site soil borings were relied upon to gauge the continuity of units across the project site and the variability of geotechnical engineering characteristics. All project soil borings and shallow OWTS test locations are illustrated on the Exploration & Percolation Test Location Map (Plate No. 1) located at the back of this report.

Laboratory Testing. Three mechanical sieve analyses were performed on alluvial soil samples recovered from depths of 5, 10, and 15 feet. Fines proportions (entirely silt, according to visual-manual classification) ranged from 2.2 to 86.6 percent. The highest silt percentage correlated to a thin sandy silt zone seen in possibly one other boring. However, stratification in the local fan alluvium is generally viewed as discontinuous or lenticular. Silty soils with fines contents of 15 percent or more were judged very uncommon at depths below 10 to 12 feet.

Groundwater

Groundwater was not detected in the OWTS-specific boring or other geotechnical soil borings. Auger cuttings were usually only slightly moist to dry. The deepest geotechnical boring remained unsaturated to a termination depth of 51.5 feet below ground surface. Recovered samples were not stained or mottled. Other characteristics of regularly saturated soil such as soft, crumbly, clay-coated sand and gravel grains were not observed in any site exploration.

Well data and references concerning historical minimum depths to water in the Fontana area were checked via the Chino Basin Watermaster website and the State of California CASGEM database. Few monitored wells exist in Fontana. Aquifers below the site and neighboring elevated portions of the Lytle Creek fan are quite deep. State Well Number 01S06W12P0015 located just southwest of the Fontana sand pit had recorded depths to

groundwater of ~420 feet almost a century ago; this would be a reasonable historical minimum depth. Well extractions have lower the groundwater table by around 100 feet since then. The property relies on piped municipal water service and lacks any wells. Data indicate groundwater will not be a limitation for design or construction of a suitable OWTS.

Test Procedure

Four 8-inch-diameter percolation test borings were created with the hollow-stem auger rig or a smaller hand-operated power earth auger. After light sidewall scarification and slough removal with a manual orchard auger, two inches of crushed ½-inch rock was placed in the bottom of each test hole, followed by placement of a 6-inch-diameter plastic perforated cylinder. At all four test locations it was verified that the infiltration medium would consist of natural sandy alluvium with fines contents estimated to range from around 10 to 20 percent. The target test depth of ~60 inches below sidewalk was judged optimal for avoiding siltier and possibly slightly compacted surface soils. Test borings were carefully filled to 6.0 inches over the gravel with municipal water from a full 5-gallon bottle. One or two time trials of durations needed to drain the 6-inch pool were made to determine whether a rate faster than 1 minute per inch was achievable. None of the augered holes met this rapid-test standard. After the trials, water levels were restored to approximately 10 inches over the cylinder bottom, with periodic additions until the remainder volume of the 5-gallon bottle was exhausted. With preliminary findings showing uptake rates on the order of 1½ to 3 minutes per inch, the presoak periods were still quite short at around an hour.

After the 5-gallon pre-soak, same-day testing was completed. Tests were performed for a cumulative duration of at least 3 hours, or longer as needed to arrive at readings differing by less than 10%. AGI's test protocol relies on measuring *time* for an exactly fixed water level drop, in contrast to measuring the water level drop (*inches*) for a fixed or variable time increment. AGI cylinders include metal pins at 6.0 inches and 5.0 inches from the bottom of the cylinder. We have found that for the cases of "slow" rates or for very rapid drops, measuring the time for the exactly fixed 1.0-inch drop is considerably more precise and results in better convergence to a final test value. All test trials began with a 6.0-inch-deep (cylinder depth) pool. Water was restored to a 6.0-inch depth following each 1-inch drop. The field data sheets are included in the Appendix.

Test Results

Table 1 summarizes percolation test field data, the effluent hydraulic loading rate for leach-line type dispersal systems served by a standard septic tank, and corresponding calculated dispersal areas in square feet per 100 gallons of effluent volume per day. Loading rates and calculated absorption field unit areas were based on the slowest timed water drops. Some soil coarsening was noted in the test bores proceeding from west to east, reflected in faster rates. We would judge the slowest (but still quite favorable) P-4 test rate to be close to the slowest-possible site-wide rate. The Field Boring Log in the Appendix should be referred to for appropriate soil descriptive information and other geologic characteristics.

Table 1 – Percolation Test Results

Test Site	8" Test Head Interval (Top of Sidewalk Datum)	Percolation Rate (Min:Sec / in.)	Leach Line Effluent Application Rate ($ft.^2$/gal/day)*	Required Dispersal Area per 100 Gallons Effluent ($ft.^2$)*
P - 1	55" - 63"	9:31	1.25	125
P - 2	54" - 62"	6:13	1.25	125
P - 3	56" - 64"	4:02	0.83	83
P - 4	26" - 34"	3:18	0.83	83

* Based on Fig. 4.1 of San Bernardino County DEHS LAMP.

Preliminary Recommendations

Based on the test findings and interpretations, it is our opinion that a standard leach-line type OWTS should be feasible for the industrial site, at least from a soils viewpoint. Test results correlated well with subsurface stratigraphy, predicted good permeability based on soil classification, and NRCS hydrologic soil group. Per the DEHS LAMP requirements concerning uniformity of test data, AGI recommends adoption of the *slowest* percolation rate (~9½ minutes per inch) shown in Table 1 for preliminary site planning, budgeting, and absorption field and expansion area sizing.

The recommended disposal area is highlighted on the Exploration and Percolation Test Location Map. Active effluent absorption areas and required 100-percent expansion areas can probably be sited in almost any natural or landscaped area within the 9.24-acre site, but additional testing is recommended by AGI and could be mandated by the regulatory authority if relocated leach lines would be far from the as-tested area.

Absorption Field Site Preparation. All leach line trench bottoms must be placed in natural ground. No special site preparation requirements have been identified. We recommend that temporary fencing or other delineation around OWTS disposal fields be employed to exclude heavy grading equipment (scrapers, large loaders) during construction. This action should minimize compaction and help preserve evapotranspiration capacity. *The recommended leach line trench depth is 60 inches from existing sidewalk grade.*

The total required leach line length will be a function of daily effluent design volume (gallons) and leach-line trench geometry. AGI advises maximizing the leach line "area factor" (square feet of credited absorption surface per linear foot of trench) by specifying 3'W x 3'D rock-filled trenches below distribution lines. The assigned area factor would be 7, i.e., a 50-foot-long trench would introduce 350 square feet of area to the system. The calculated leach line length should be divided by 2 and the disposal field plotted with at least 2 trenches. AGI finds that the map-view offset distance from the building (~75 feet) will be adequate. Design aids can be downloaded from the DEHS website at http://www.sbcounty.gov/uploads/dph/dehs/Depts/EnvironmentalHealth/FormsPublications/550049_how_to_size_leach_lines.pdf

Setbacks. Septic tanks, distribution boxes, primary active fields, and required 100% expansion absorption areas should maintain structural and property line setback distances consistent with Table 3.1 of the San Bernardino County DEHS LAMP. AGI recommends at least 25 feet of horizontal separation between effluent disposal fields and any proposed water quality management basins. The highlighted area on the Plate No. 1 exhibit depicts disposal field limits at 5 feet from property lines. The design engineer needs to check that our suggested effluent disposal area will also have adequate setbacks from domestic water mains in Arrow Route or the service laterals that will serve the new industrial building. Absorption areas may remain natural or be landscaped. Impermeable surfacing shall not be placed over OWTS absorption fields. We advise and recommend that leach line trenches remain at least 5 feet from asphalt or concrete-paved surfaces.

OWTS Plan Reviews. AGI recommends a geotechnical plan check of the OWTS element locations once a specific design is available. The project civil engineer should verify that the proposed septic tank and absorption field locations will comply with all applicable setback distances. Future OWTS civil drawings must illustrate the structure footprint, precise grade flowlines, utility laterals, and system siting before final DEHS approvals are granted. As conceptually shown on our drawing, the septic tank could be placed in a paved parking area for future ease of servicing; traffic-rated risers and lids are easily specified. Flotation risks are judged nil due to very deep groundwater.

Owner Responsibilities. Wastewater source management and regular maintenance will prolong the life of an installed system and prevent the development of a public nuisance. AGI recommends the owner and building maintenance staff be familiar with the DEHS pamphlet *Taking Care of Your Septic System*. This handout may be downloaded from http://www.sbcounty.gov/uploads/dph/dehs/Depts/EnvironmentalHealth/FormsPublications/550008_septic_book_eng.pdf

County of San Bernardino Declarations

Provided the preceding AGI and County recommendations are adhered to, we find that the following statements would be true for a system at 15719 & 15755 Arrow Route:

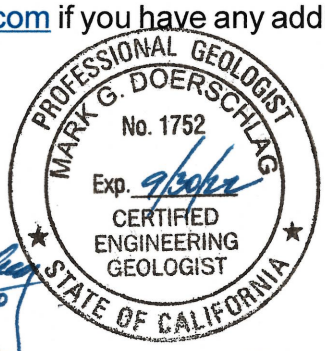
> *Based on the data presented in this report and using the recommendations set forth, it is AGI's opinion that there is sufficient area on each lot [sic] to support a primary and expansion OWTS that will meet the current standards of the Division of Environmental Health Services and the Regional Water Quality Control Board (RWQCB).*
>
> *Based on the data presented in this report and the testing information accumulated, it is the judgment of AGI geologists and engineers that the groundwater table will not encroach within the current allowable limits set forth by DEHS and the approved LAMP. Moreover, it is our judgment that although the property appears to lack at least 5 feet of soils with fines content ≥15% within 45 feet of the proposed absorption field, depths to permanent groundwater are more than 500 feet. A minimum separation of 40 feet will thus always be maintained between the effluent dispersal system and groundwater.*

Closure

All professional services provided in connection with the feasibility test results and preliminary design recommendations presented in this report have complied with generally accepted local practice and the minimum requirements of the San Bernardino County Division of Environmental Health Services at the time of issuance. This warranty is in lieu of all other warranties, either expressed or implied. Inasmuch as reviewing agency standards sometimes change and all agency approvals are discretionary, AGI does not guarantee agency approval. AGI's authorized scope is exclusive of any additional services prompted by County requests, consultations with distributors or contractors who furnish wastewater systems, future plan reviews and wet signatures, or construction observation.

We appreciate your trust in selecting AGI to assist with the engineering and development of the Arrow Route project. Contact us at our Riverside office at (951) 776-0345 or through our website at www.aragongeo.com if you have any additional service needs or questions.

Respectfully submitted,
Aragón Geotechnical, Inc.



Mark G. Doerschlag, CEG 1752
Engineering Geologist

Carlos Fernando Aragón, P.E., M.S.
Geotechnical Engineer, G.E. No. 2994

MGD/CFA

Attachments: Appendix:
- Field Boring Log, Boring B-7
- Sieve Analysis Plots
- Field Test Data Sheets
- Plate No. 1, Exploration & Percolation Test Location Map

Distribution: (4) Addressee

APPENDIX

A P P E N D I X

MAP EXHIBIT & SUBSURFACE EXPLORATION LOGS

The Exploration & Percolation Test Location Map (Plate No. 1, fold-out at the back of this report) was prepared based upon information supplied by the client, or others, along with Aragón Geotechnical's field measurements and observations. Field exploration and test locations illustrated on the map were derived from taped measurements of distance to surrounding improvements, and should be considered approximate. Geotechnical borings have been retained on the map for this OWTS report to highlight the intensity of the overall site characterization scope; the percolation-specific boring reported in this Feasibility Study is identified as Boring B-7 based on the ordinal numbering scheme used in AGI's geotechnical investigation report.

The Field Boring Log on the following page schematically depicts and describes the subsurface (soil and groundwater) conditions encountered at the specific exploration location on the date that the exploration was performed. Unit descriptions reflect predominant soil types; actual variability may be much greater. Unit boundaries may be approximate or gradational. Text information often incorporates the field investigator's interpretations of geologic history, origin, diagenesis, and unit identifiers such as formation name or time-stratigraphic group. Additionally, soil conditions between recovered samples are based in part on judgment. Therefore, the log contains both factual and interpretive information. Subsurface conditions may differ between the reported borings and other exploration locations, and within areas of the site that were not explored. The subsurface conditions may also change at the exploration locations over the passage of time.

Classification of Soil Samples

Bulk drill cuttings and discrete soil samples were visually-manually classified, based on texture and plasticity, utilizing the procedures outlined in the ASTM D2487-11 standard. The assignment of a group name to each of the collected samples was performed according to the Unified Soil Classification System (ASTM D2488-09). Where reported, plasticity comments on field logs refer to soil behavior at field moisture content unless noted otherwise. Wherever corroborating laboratory gradation data was available, field classifications were adjusted to match measured grain-size proportions. Soil classifications are reported on the Field Boring Log. Gradation plots have been included following the logs for selected representative samples.

FIELD LOG OF BORING B - 7

Sheet 1 of 1

Project: ***15755 ARROW ROUTE INDUSTRIAL PROJECT***

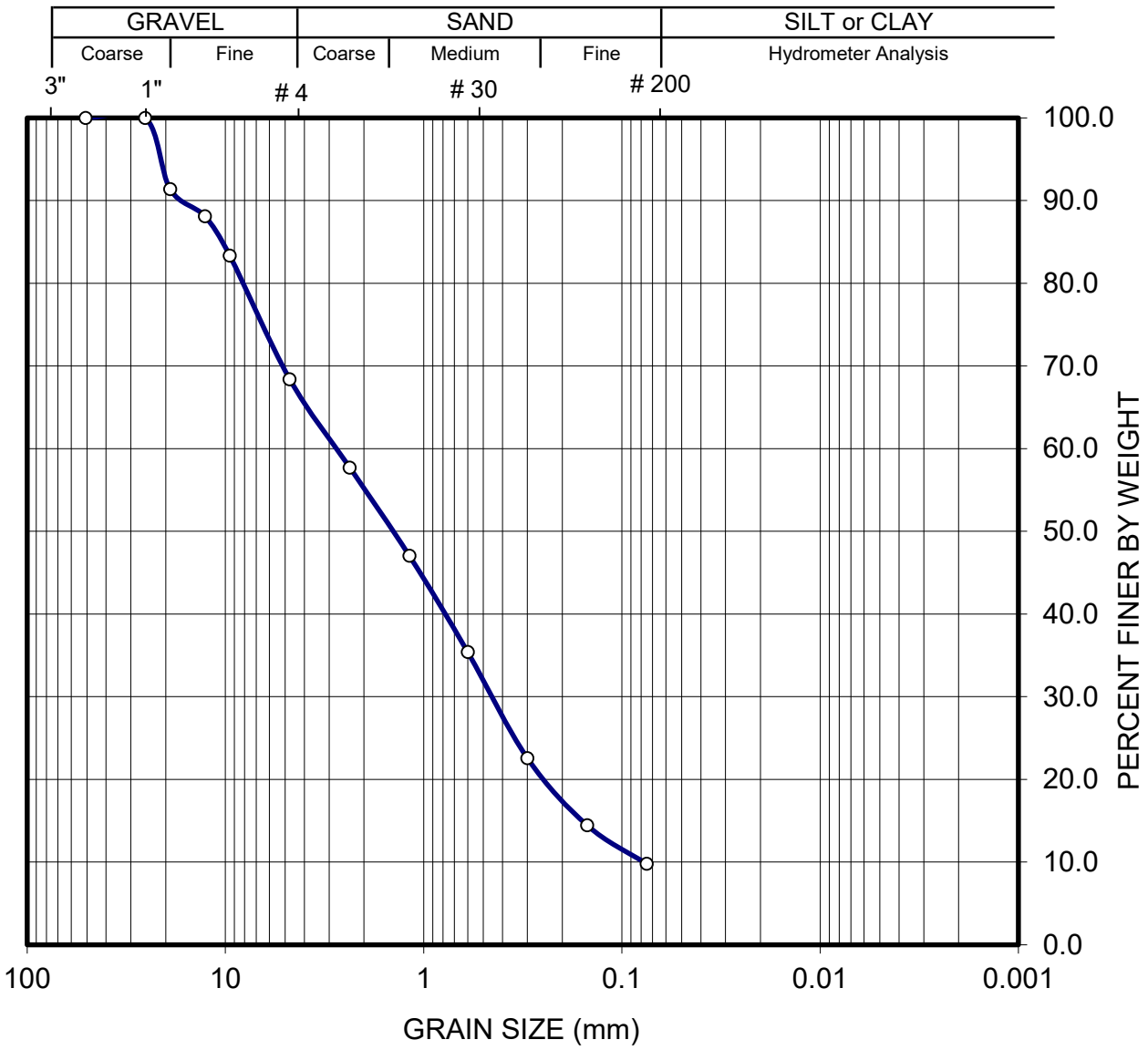
Location: ***FONTANA, SAN BERNARDINO COUNTY, CALIF.***

Date(s) Drilled:	**11/2/20**	Logged By:	**M. Doerschlag**
Drilled By:	**GP Drilling**	Total Depth:	**16.5 Ft.**
Rig Make/Model:	**Mobile B-61**	Hammer Type:	**Automatic trip**
Drilling Method:	**Hollow-Stem Auger**	Hammer Weight/Drop:	**140 Lb./30 In.**
Hole Diameter:	**8 In.**	Surface Elevation:	**± 1245 Ft. AMSL per Earth DEM**

Comments: Located at prospective OWTS absorption field (landscape strip) parallel to Arrow Route.

DEPTH (ft.)	ELEVATION (MSL DATUM)	SAMPLE INTERVALS: BULK / DRIVE / TYPE; "N" or (Blows/ft.)	GRAPHIC LOG	USCS	GEOTECHNICAL DESCRIPTION	DRY DENSITY (pcf)	WATER CONTENT (%)	WELL COMPLETION	OTHER TESTS
0	1245			SM	Asphaltic Concrete Pavement: 2½" thick, no aggregate base course.				
					Silty Sand: Light yellowish brown; medium dense, dry, mostly fine to medium grained, with traces of rounded gravel (gap-graded). [Younger alluvium w/ eolian contribution]				
				SW-SM	Gravelly Sand: Yellowish brown; medium dense; dry; fine to coarse-grained sand and gravel, plus occasional small cobble; unit averages ~30% gravel and 10% fines. Layering either indistinct or absent. Clasts hard and durable. [Younger alluvium]				
5	1240	RING 16 17 17 (34)							SIEVE
10	1235	RING 8 13 15 (28)		GW-GM	Classifies sandy gravel. Sharp contact.				
				ML	Sandy Silt: Yellowish brown; very stiff; slightly moist; ~15% fine sand; massive; not visibly porous; uncemented. [Younger alluvium]				SIEVE
				GW	Sandy Gravel: Grayish brown; medium dense; dry. Unit is mostly >50% hard gravel, with clasts 1"-2" diameter and fines-poor sandy matrix. Heavy rig chatter and light bounce. [Younger alluvium]				
15	1230	RING 9 13 25 (38)		SW	← Gravelly sand, gravel fine to medium grained, cohesionless.				SIEVE

Bottom of boring at 16.5 ft.
No groundwater encountered..
Perforated pipe and gravel pack brought to pavement grade.

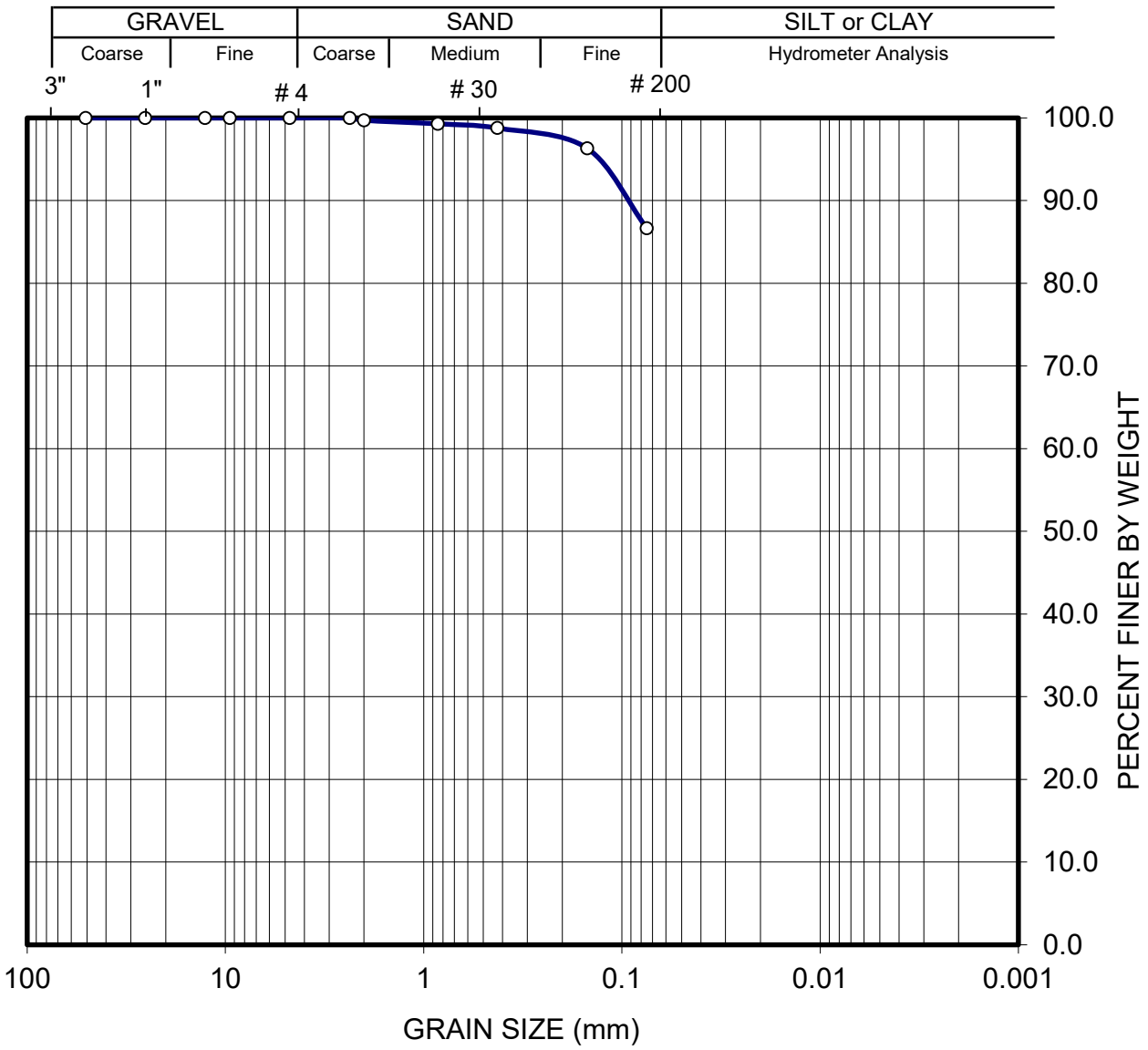


Boring: B-7	Depth (ft): 5.0	Sample I.D.: 20-2390
Gravel (%): 31.6	Sand (%): 58.6	Fines (%): 9.8
Sample Description: Gravelly sand (SW-SM), ring blow count = 34.		

GRAIN SIZE DISTRIBUTION CURVE

15719 & 15755 Arrow Route, Fontana, California

PROJECT NO. 4658-P | DATE: 11/23/2020 | **PAGE A-3**

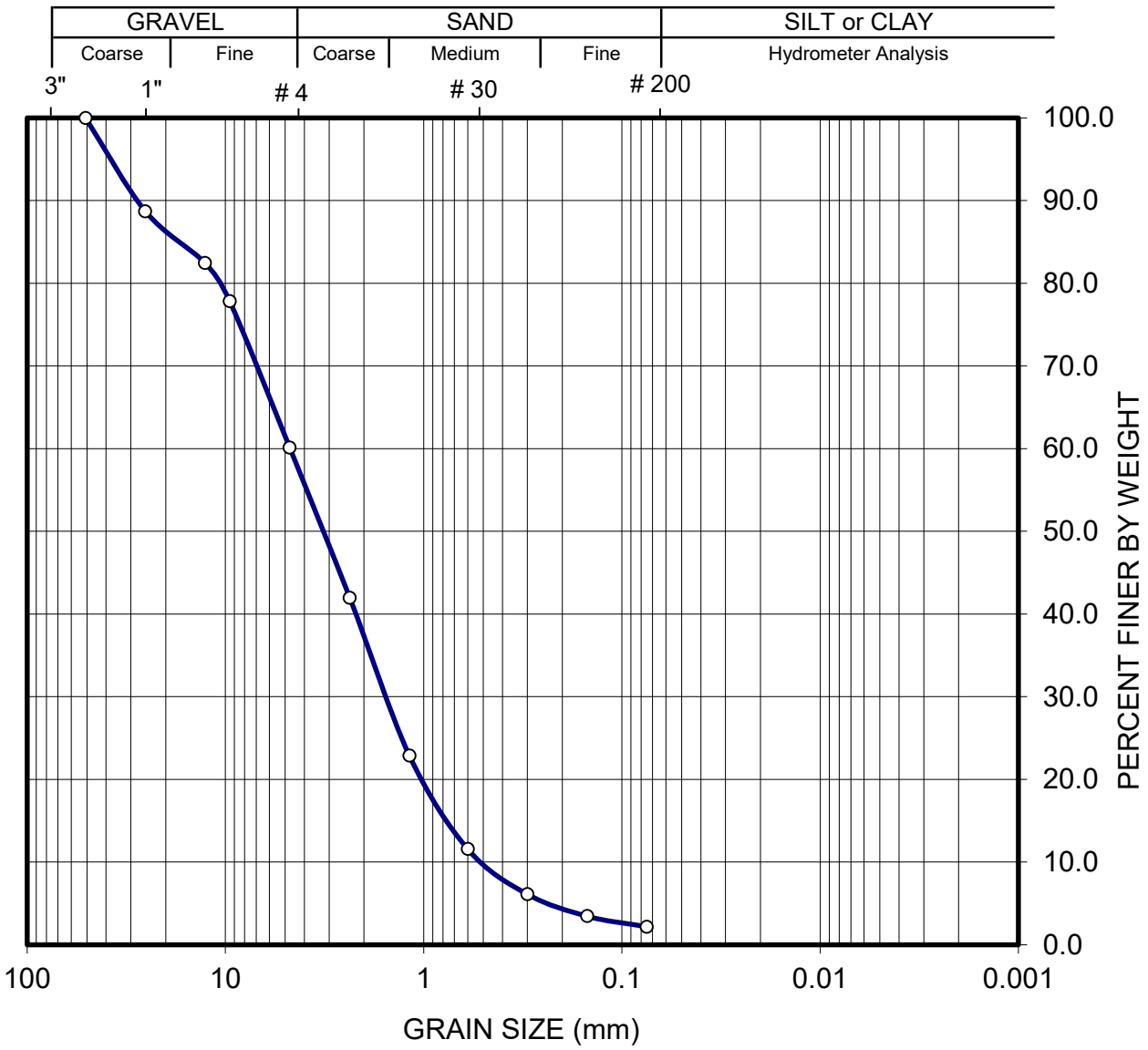


Boring: B-7	Depth (ft): 10.0	Sample I.D.: 20-2391
Gravel (%): 0.0	Sand (%): 13.4	Fines (%): 86.6
Sample Description: Sandy silt (ML), ring blow count = 28.		

GRAIN SIZE DISTRIBUTION CURVE

15719 & 15755 Arrow Boulevard, Fontana, California

PROJECT NO. 4658-P | DATE: 11/23/2020 | **PAGE A-4**



Boring: B-7	Depth (ft): 15.0	Sample I.D.: 20-2392
Gravel (%): 39.9	Sand (%): 57.9	Fines (%): 2.2
Sample Description: Gravelly sand (SW), ring blow count = 38.		

GRAIN SIZE DISTRIBUTION CURVE

15719 & 15755 Arrow Route, Fontana, California

PROJECT NO. 4658-P | DATE: 11/23/2020 | **PAGE A-5**

Percolation Data Sheet (San Bernardino County DEHS Leach Line)

Project: 15755 Arrow Route, Fontana, CA	Project No. 4658-P
Test Hole No. P-1 (WEST END)	Date Excavated: 11/6/2020
Hole Depth/Diameter: 63" sidewall / 8"	Soil Classification: SM w/ fr. gravel
Presoak: Start 10:07 End 11:15 Gallons 5	☒ Same-Day Test?
Field Percolation Test By: MOD/KL	Date: 11/6/20

Sandy Soil Rapid Test Screen

Trial No.	Time	Time Interval (Min.)	Initial Water Level (In.)	Final Water Level (In.)	Δ in Water Level (In.)
1	10:07 10:19	11:30	6.0	0.0	6.0
2		FAIL			

Use: ☒ Normal Soil Criteria ☐ Rapid Test Criteria (5" drop in <5 min. both trials)

Time	Time Interval (Min:Sec)	Total Elapsed Time (Min.)	Initial Water Level (In.)	Final Water Level (In.)	Δ in Water Level (In.)	Percolation Rate (Min./In.)
t_i 11:41 t_f 11:44	3:35	3:35	6.0	5.0	1.0	3:35
11:50	4:28	13	6.0	5.0	1.0	4:28
11:58	5:34	17	6.0	5.0	1.0	5:34
12:07	5:41	26	6.0	5.0	1.0	5:41
12:23	6:06	58	6.0	5.0	1.0	6:06
12:40	6:25	65	6.0	5.0	1.0	6:25
12:51	8:53	78	6.0	5.0	1.0	8:53
12:59	8:29	86	6.0	5.0	1.0	8:29
1:12	8:51	99	6.0	5.0	1.0	8:51
1:29	9:03	117	6.0	5.0	1.0	9:03
1:46	8:36	133	6.0	5.0	1.0	8:36
1:57	9:31	145	6.0	5.0	1.0	9:31
2:21	9:04	169	6.0	5.0	1.0	9:04
2:43	9:29	191	6.0	5.0	1.0	9:29
2:53	8:58	204 END	6.0	5.0	1.0	8:58

6+120+19

Percolation Data Sheet (San Bernardino County DEHS Leach Line)

Project: 15755 Arrow Route, Fontana, CA	Project No. 4658-P
Test Hole No. P-2	Date Excavated: 11/6/2020
Hole Depth/Diameter: 62" sidewalk / 8"	Soil Classification: SM w/ gravel
Presoak: Start 10:22 End 11:00 Gallons 5 ☐ Same-Day Test?	
Field Percolation Test By: KL	Date: 11/9/20

Sandy Soil Rapid Test Screen

PRE-SAT, RE-DONE 11/9

Trial No.	Time	Time Interval (Min.)	Initial Water Level (In.)	Final Water Level (In.)	Δ in Water Level (In.)
1	10:22 10:39	16:40	6.0	0.0	6.0
2		FAIL			

Use: ☒ Normal Soil Criteria ☐ Rapid Test Criteria (5" drop in <5 min. both trials)

Time	Time Interval (Min:Sec)	Total Elapsed Time (Min.)	Initial Water Level (In.)	Final Water Level (In.)	Δ in Water Level (In.)	Percolation Rate (Min./In.)
t_i 8:01 t_f 8:04	3:32	3:32	6.0	5.0	1.0	3:32
8:16	4:43	19	6.0	5.0	1.0	4:43
8:27	5:06	31	6.0	5.0	1.0	5:06
8:39	5:22	43	6.0	5.0	1.0	5:22
8:51	5:36	55	6.0	5.0	1.0	5:36
9:04	5:39	68	6.0	5.0	1.0	5:39
9:18	5:48	82	6.0	5.0	1.0	5:48
9:30	5:46	94	6.0	5.0	1.0	5:46
9:55	5:48	120	6.0	5.0	1.0	5:48
10:02	5:49	127	6.0	5.0	1.0	5:49
10:22	6:02	141	6.0	5.0	1.0	6:02
10:30	6:06	155	6.0	5.0	1.0	6:06
10:45	6:09	170	6.0	5.0	1.0	6:09
11:06	6:12	191	6.0	5.0	1.0	6:12
11:14	6:13	199 END	6.0	5.0	1.0	6:13

Aragón Geotechnical, Inc.

Percolation Data Sheet (San Bernardino County DEHS Leach Line)

Project: 15755 Arrow Route, Fontana, CA	Project No. 4658-P
Test Hole No. P-3	Date Excavated: 11/6/2020
Hole Depth/Diameter: 64" sidewall / 8"	Soil Classification: SM ~ 15% fines
Presoak: Start 10:42 End 10:32 Gallons 5 ☐ Same-Day Test?	
Field Percolation Test By: KL	Date: 11/9/20

Sandy Soil Rapid Test Screen

Trial No.	Time	Time Interval (Min.)	Initial Water Level (In.)	Final Water Level (In.)	Δ in Water Level (In.)
1	10:42 10:47	5:35	6.0	0.0	6.0
2	10:49 10:56	7:20	6.0	0.0	6.0

FAIL

Use: ☒ Normal Soil Criteria ☐ Rapid Test Criteria (5" drop in <5 min. both trials)

Time	Time Interval (Min:Sec)	Total Elapsed Time (Min.)	Initial Water Level (In.)	Final Water Level (In.)	Δ in Water Level (In.)	Percolation Rate (Min./In.)
t 7:50 t 7:52	1:50	1:50	6.0	5.0	1.0	1:50
8:08	2:40	20	6.0	5.0	1.0	2:40
8:23	2:47	35	6.0	5.0	1.0	2:47
8:34	2:39	46	6.0	5.0	1.0	2:39
8:47	2:26	59	6.0	5.0	1.0	2:26
8:58	2:33	70	6.0	5.0	1.0	2:33
9:11	2:28	83	6.0	5.0	1.0	2:28
9:25	2:28	97	6.0	5.0	1.0	2:28
9:42	3:02	115	6.0	5.0	1.0	3:02
9:48	3:13	121	6.0	5.0	1.0	3:13
10:07	2:25 ?	137	6.0	5.0	1.0	2:25
10:12	2:08	144	6.0	5.0	1.0	2:08
10:17	2:14	149	6.0	5.0	1.0	2:14
10:37	2:25	169	6.0	5.0	1.0	2:25
10:52	2:05	184	6.0	5.0	1.0	2:05
10:56	3:20	189 END	6.0	5.0	1.0	3:20 VV

Percolation Data Sheet (San Bernardino County DEHS Leach Line)

Project: 15755 Arrow Route, Fontana, CA	Project No. 4658-P
Test Hole No. P-4 (EAST END)	Date Excavated: 11/6/2020
Hole Depth/Diameter: 34" bgs (STONES)	Soil Classification: SM w/ cobbles
Presoak: Start 11:27 End 11:42	Gallons 5 ☒ Same-Day Test?
Field Percolation Test By: MGD/KL	Date: 11/6/20

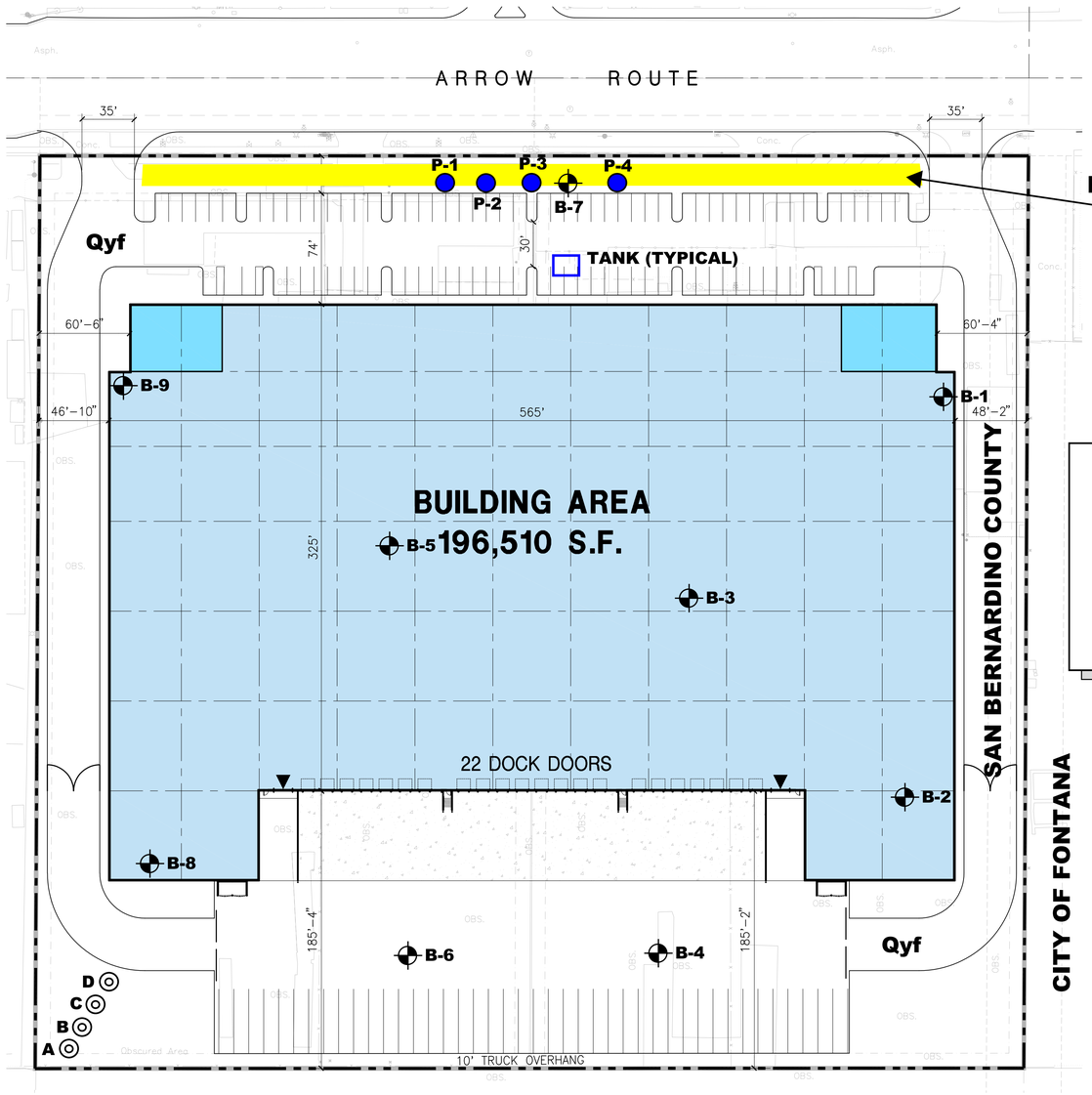
Sandy Soil Rapid Test Screen

Trial No.	Time	Time Interval (Min.)	Initial Water Level (In.)	Final Water Level (In.)	Δ in Water Level (In.)
1	11:27 11:42	14:25	6.0	0.0	6.0
2		FAIL			

Use: ☒ Normal Soil Criteria ☐ Rapid Test Criteria (5" drop in <5 min. both trials)

Time	Time Interval (Min:Sec)	Total Elapsed Time (Min.)	Initial Water Level (In.)	Final Water Level (In.)	Δ in Water Level (In.)	Percolation Rate (Min./In.)
t_i 11:46 t_f	2:21	2:21	6.0	5.0	1.0	2:21
11:59	2:27	15	6.0	5.0	1.0	2:27
12:11	2:28	27	6.0	5.0	1.0	2:28
12:21	2:33	37	6.0	5.0	1.0	2:33
12:38	2:36	54	6.0	5.0	1.0	2:36
12:48	2:45	64	6.0	5.0	1.0	2:45
12:59	2:54	75	6.0	5.0	1.0	2:54
1:12	3:00	89	6.0	5.0	1.0	3:00
1:24	2:58	100	6.0	5.0	1.0	2:58
1:34	2:59	110	6.0	5.0	1.0	2:59
1:53	3:06	130	6.0	5.0	1.0	3:06
2:07	3:11	144	6.0	5.0	1.0	3:11
2:25	3:14	162	6.0	5.0	1.0	3:14
2:34	3:16	171	6.0	5.0	1.0	3:16
2:46	3:18	183 END	6.0	5.0	1.0	3:18

CAUTION: IF THIS SHEET IS NOT 30"X42", IT IS A REDUCED PRINT



Legend

- POTENTIAL OFFICE W/ 2ND FLOOR
- WAREHOUSE
- DRIVE THRU DOOR

Aerial Map

GEOTECHNICAL LEGEND

B-9	Approximate location of exploratory boring
P-4	Approximate location of percolation test
D	Approximate location of infiltration test
Qyf	Younger fan alluvium

Tabulation

SITE AREA		
In s.f.	402,152	s.f.
In acres	9.23	ac
BUILDING AREA		
Footpirnt	194,510	s.f.
Office - 1st floor	2,000	s.f.
Office - 2nd floor	2,000	s.f.
Warehouse	192,510	s.f.
TOTAL	196,510	s.f.
COVERAGE	48.4%	
FLOOR AREA RATIO	48.9%	
AUTO PARKING REQUIRED		
Office: 1/250 s.f.	16	stalls
Whse: 1st 40k @ 1/1,000 s.f.	40	stalls
above 40k @ 1/4,000 s.f.	39	stalls
TOTAL	95	stalls
AUTO PARKING PROVIDED		
Standard (9 'x 19')	95	stalls
TRAILER PARKING PROVIDED		
Trailer (10' x 53')	42	stalls
BUILDING COVERAGE		
Coverage - 60%		
MAXIMUM FLOOR AREA RATIO		
FAR - .55		
MAXIMUM LOT COVERAGE		
Coverage - 85%		
ZONING ORDINANCE FOR CITY		
Zoning Designation- Regional Inudstrial (Valley Region)		
MAXIMUM BUILDING HEIGHT ALLOWED		
Height - 150'		
SETBACKS		
Arrow Route. - 25'		
Side/Rear - 10'		
LANDSCAPE REQUIREMENT		
Percentage - 15%		
LANDSCAPE PROVIDED		
Percentage -	15.2%	
In s.f.	60,957	s.f.

Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.

north

1" = 40'
0 40 80 120

EXPLORATION & PERCOLATION TEST LOCATION MAP

15719 & 15755 ARROW ROUTE INDUSTRIAL PROJECT, FONTANA, CA

PROJECT NO. 4658-P	DATE: 11/23/20	PLATE NO. 1

Conceptual Site Plan

15719 & 15755 Arrow Route

County of San Bernardino, CA

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INDUSTRIAL WPT REIT

October 22, 2020 / Job #20437

Scheme 1