DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

MANUFACTURED HOUSING DESIGN-BUILD AGREEMENT

STONE PINE COVE FARMWORKER HOUSING PROJECT

PROJECT ID: CEOFW

THIS AGREEMENT, dated this _____ day of _____, 2024 by and between Bigfoot Homes, Inc. whose place of business is located at 2460 17th Street, #1002, Santa Cruz, CA 95062 ("Design-Build Entity" or "DBE"), and the County of San Mateo ("Owner"), acting under and by virtue of the authority vested in Owner by the laws of the State of California for preconstruction and construction services ("Work") for the Stone Pine Cove Farmworker Housing Project ("Project") in accordance with the Contract Documents. By executing this Agreement, each of the Signatories represents that he or she has the authority to bind the Party on whose behalf his or her execution is made.

Owner:
County of San Mateo
County Executive Office
400 County Center, 1st Floor
Redwood City, CA 94063

By: _____
(Signature)

Name:

Telephone No.:

Facsimile No.:

Email:

Design-Builder:
Bigfoot Homes, Inc.
2460 17th Sreet, #1002
Santa Cruz, CA 95062

By: DocuSigned by: JASON TAYLOR 0471E29B89BC49E...
(Signature)

Name: Jason Taylor, CEO

Telephone No.: (530) 654-5192

Facsimile No.: N/A

Email: jason@bigfoot.homes

CA License No.: 534976

DIR Registration No.: 1001134873

THE PARTIES AGREE TO THE FOLLOWING TERMS AND CONDITIONS

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

TABLE OF EXHIBITS

All Exhibits set forth below are incorporated into the Agreement.

Exhibit 1	**Supplemental Conditions**	Attached
Exhibit 2	**Bridging Contract Documents**	
Exhibit 2A	Project Description, Schedule, and Budget	RFP Appendix A
Exhibit 2B	Project Design Criteria	RFP Appendix B
Exhibit 2C	Conceptual Site Plan	RFP Appendix C
Exhibit 2D	Geotechnical Report	RFP Appendix E
Exhibit 3	**Scope of Work**	
Exhibit 3A	Scope of Work	Attached
Exhibit 4	**Price Proposal**	
Exhibit 4A	Price Proposal	Attached
Exhibit 5	**Personnel & Equipment**	
Exhibit 5A	Staffing Plan	Attached
Exhibit 5B	Key Personnel	Attached
Exhibit 6	**Schedule and Site Logistics Plan**	
Exhibit 6A	Project Baseline Schedule	Attached
Exhibit 7	**Schematic Design Documents**	Attached
Exhibit 8	**Design-Builder's Proposal**	Attached

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

TABLE OF CONTENTS

1. GENERAL 1
2. THE DESIGN-BUILD TEAM AND RELATIONSHIP OF THE PARTIES 1
3. CONTRACT DOCUMENTS 3
4. OWNER'S OBLIGATIONS 4
5. DESIGN-BUILDER'S OBLIGATIONS 6
6. SUBCONTRACTORS 16
7. COMPENSATION 17
8. CONTRACT TIME 19
9. CHANGES 21
10. PAYMENT 23
11. INDEMNIFICATION 26
12. INSURANCE AND BONDS 29
13. WARRANTY OF THE WORK 32
14. OWNERSHIP AND USE OF DOCUMENTS 34
15. ACCOUNTING RECORDS 35
16. TERMINATION, SUSPENSION AND ABANDONMENT 35
17. MISCELLANEOUS PROVISIONS 37

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

DESIGN-BUILD AGREEMENT

This Design-Build Agreement (**"Agreement"**) is executed as of_____ 2024 (**"Effective Date"**) by and between the **"Owner"** and **"Design-Builder"** for completion of the **"Project."** The Owner and Design-Builder may collectively be referred to as **"the Parties."**

Owner:
County of San Mateo
County Executive Office
400 County Center, 1st Floor
Redwood City, CA 94063

Design-Builder:
Bigfoot Homes, Inc.
2460 17th Street, #1002
Santa Cruz, CA 95062

Project:
Stone Pine Cove Farmworker Housing Project
880 Stone Pine Road
Half Moon Bay, CA, 94019

The Owner and Design-Builder agree as set forth below:

1. GENERAL

1.1 Definitions. All defined terms will be capitalized throughout the Agreement. The definitions for this Agreement appear in alphabetical order in Section 1 of the "**Supplemental Conditions**" to the Agreement and may also be set forth herein for convenience as defined terms the first time the term is used.

1.2 Project Description. The Project involves **Preconstruction Phase Services and Construction Phase Services for** Housing and Urban Development (HUD) and CA Housing and Community Development (HCD) title 25 standards Homes will consist of 1-Bedroom/1-Bath, 2-Bedroom/1-Bath, and 3-Bedroom/2-Bath home types. Up to (7) homes will require ADA accessible features. For project description ,locations and layout of homes, refer to the Exhibit 2A - Project Description, Schedule, and Budget, Exhibit 2B - Project Design Criteria, and Exhibit 2C - Conceptual Site Plan attached hereto.

1.3 Project Delivery. The Project will be delivered using a design-build delivery method pursuant to Sections 22160, et seq., of the California Public Contract Code.

2. THE DESIGN-BUILD TEAM AND RELATIONSHIP OF THE PARTIES

2.1 Design-Build Team. The Design-Builder is responsible to the Owner for completion of the Project. The Design-Build Team includes all team members providing services for or on behalf of the Design-Builder, and is comprised of, at a minimum, the **"General Contractor,"** the **"Design Professionals"** and "**Design-Build Subcontractors,**". All **"Design Services"** will be performed by the manufactured home design professional and Design-Builder's Engineer

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

(collectively, **"Design Professionals"**). The Design-Builder shall name the Owner as a third party beneficiary to all design service agreements and/or design-build subcontracts and the parties agree that the Owner is an intended third party beneficiary of such contracts. The Design-Build Team is currently comprised of the entities identified in **Exhibit 5B Key Personnel**.

2.2 **Licensing.** Design-Builder must possess a valid California state class "C-47" General Manufactured Housing Contractor license during the entire term of this Agreement. All members of the Design-Build Team must possess the appropriate California state design licenses for their particular discipline. Subcontractors must all possess the appropriate California state specialty license for their particular trade. Nothing in this Agreement will require a Design-Build Team member, or any of their respective Consultants or Subcontractors, to perform any portion of the Work outside of their respective licenses or contrary to Applicable Law.

2.3 **Good Faith.** The Design-Builder will perform all Work under this Agreement in compliance with each of the following requirements: (i) use its best skill and judgment in pursuit of the Project; (ii) furnish effective and efficient design, construction administration and supervision; (iii) furnish at all times an adequate supply of **"Skilled Labor"** and materials; and (iv) perform the Work in the most expeditious and economical manner consistent with the Bridging Contract Documents **in Exhibit 2**, and good engineering practices.

2.4 **Standard of Care.** The Design-Builder warrants that it possesses the design and construction licenses and expertise required for this Project under Section 2.2 and will use the same degree of care and skill customarily used by California state licensed professionals performing similar services for residential construction projects in the state of California.

2.5 **Collaboration.** Owner and Design-Builder commit at all times to cooperate fully with each other and proceed on the basis of trust and good faith to permit each party to realize the benefits afforded under this Agreement. Design-Builder and its Design Professionals, Subcontractors, suppliers, and equipment vendors will perform their respective portions of the Work using collaborative tools and methods. The Design-Build Team will actively participate and collaborate with Owner to achieve best value, optimal design, increased labor efficiency, and elimination of waste and re-work. The Design-Builder will collaborate with Owner to develop the design within the Contract Price, and to ensure that the design satisfies the Bridging Contract Documents.

2.6 **Communications.** All communications from the Design-Builder shall be directed to Owner via the Owner's Representative, Capital Program Management, Inc. Project Manager, Steven McGuckin, and others as designated and directed by the Owner's Project Manager.

2.7 **Relationship of the Parties.** The Design-Builder's relationship with the Owner is that of an independent contractor whose involvement in the Project is to act solely in the capacity of a California licensed design professional and general contractor and not as an agent, fiduciary, partner, member of, subsidiary of, or otherwise affiliated with the Owner.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

2.8 Responsibility. Design-Builder acknowledges and agrees that it is solely responsible to Owner for the sufficiency, quality, adequacy and completeness of the Work, and that Design-Builder is responsible for any acts, errors, or omissions of the Design-Builder's principals, employees, agents, and/or any other parties either directly or indirectly in privity of contract with Design-Builder including, but not limited to, the Design Professionals, Subcontractors, suppliers, equipment vendors, and their agents and employees, and other persons performing any portion of the Work on behalf of Design-Builder.

2.9 Conflicts of Interest. Design-Builder warrants that it is not aware of any existing conflicts of interest under Applicable Law that would prevent any member of the Design-Build Team from participating in the Project. Design-Builder has an ongoing obligation to monitor and disclose conflicts or potential conflicts of interest. If an organizational conflict of interest is discovered, the Design-Builder must make an immediate and full written disclosure to the Owner that includes a description of the action that the Design-Builder has taken or proposes to take to avoid or mitigate the conflict. If the contract is terminated due to a conflict of interest that existed at the time of the award, the Owner has no obligation, responsibility or liability to reimburse all or part of the costs incurred or alleged to have been incurred by the Design- Builder.

2.10 Prevailing Wage. The Design-Builder must be appropriately, licensed and registered in the State of California Department of Industrial Relations (DIR), as required by law. The DBE will be required to comply with all applicable California Labor Code provisions related to public works project, including those related to prevailing wage requirements, skilled and trained workforce requirements, and the County's bonding and insurance requirements,

3. CONTRACT DOCUMENTS

3.1 Contract Documents. The **"Contract Documents"** consist of this Agreement, the Supplemental Conditions, and all other Exhibits attached to this Agreement, all subsequent modifications through amendments and change orders executed by Owner and Design-Builder, and the Construction Documents to be developed by the Design-Builder.

3.2 Interpretation and Intent. The intent of the Contract Documents is to include all items necessary for proper completion of all Work within the **"Contract Time"** and within the **"Contract Price."** The Contract Documents are intended to be complementary and what is required by any one of them is as binding as if called for by all of them.

3.3 Sufficiency of Contract Documents. The Design-Builder acknowledges that all documents and materials submitted by the Owner to the Design-Builder in connection with the process culminating in the execution of this Design-Build Agreement, are complete and sufficient for pricing, changes, and conditions to have enabled the Design-Builder to determine the cost of the work in order to enter into this Agreement. The Design-Builder confirms that it has examined the site and all physical, legal and other conditions affecting the Work and is fully familiar with the site and with such conditions. The Design-Builder specifically represents to the Owner that it has examined (a) the nature, location, and character of the Project

and the site, including, without limitation, the surface conditions of the site and subsurface conditions of the site to the extent that such conditions affect the design and constructability of the Project, and all structures and obstructions on the site and thereunder, both natural and man-made, and all surface and subsurface water conditions of the site and the surrounding area; (b) the nature, location, and character of the general area in which the Project is located, including without limitation, its climatic conditions, available labor supply and labor costs, and available equipment supply and equipment costs; and (c) the quality and quantity of all materials, supplies, tools, equipment, labor, and professional services necessary to complete the Work in the manner and within the cost and time required by the Contract Documents. In connection with the foregoing, and having carefully examined all Contract Documents, and having examined the site, the Design-Builder acknowledges and declares that it has no knowledge of any discrepancies, omissions, ambiguities or conflicts in the Contracts Documents and agrees that if it becomes aware of any such discrepancies, omissions, ambiguities or conflicts, it shall promptly notify the Owner thereof.

3.4 **Order of Precedence.** In the event of inconsistencies between requirements contained in different components of the Contract Documents, the content of each document listed below prevails over any inconsistent content in any document listed below it:

3.4.1 Amendments of the Design-Build Agreement;

3.4.2 Change Orders approved by Owner;

3.4.3 The Design-Build Agreement executed between Owner and Design-Builder not including Exhibits;

3.4.4 Project Baseline Schedule, as approved by Owner and updated pursuant to Section 8.2 of this Agreement;

3.4.5 The Scope of Work set forth in **Exhibit 3** to the Agreement;

3.4.6 The Supplemental Conditions included in **Exhibit 1** to the Agreement;

3.4.7 The Bridging Contract Documents included as **Exhibit 2**;

3.4.8 100% Construction Documents developed by Design-Builder;

3.4.9 All other Exhibits to the Design-Build Agreement and all other Contract Documents not listed above;

3.4.10 Proposal submitted by Design-Builder;

4. OWNER'S OBLIGATIONS

4.1 **Information and Documents.** The Owner may make various Background Documents related to the Project available to the Design-Builder, including but not limited to any surveys and other information that describe the Project Site as well as schedule requirements, budget constraints and other criteria, and procurement

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

schedules. Any Background Documents provided are for information only and will not be included as part of the Contract Documents.

4.2 Bridging Contract Documents. The "Bridging Contract Documents," consisting of the Design Criteria, both included in **Exhibit 2** to this Agreement, were developed by the Owner to provide an understanding of the baseline design requirements for the Project. The Bridging Contract Documents, along with other information provided during the RFP and proposal process, provides a basis for the Contract Price, initial Project Baseline Schedule, and initial design work. The Design-Builder must conduct all Work in accordance with the Bridging Contract Documents.

4.3 Ownership of Facilities. The Owner will own the Facilities, and control easements on which certain Facilities are to be built. Owner will provide Design-Builder with access to the Work site and easements for the purpose of fulfilling its obligations under this Agreement.

4.4 Governmental Approvals. The Design Builder will be responsible for obtaining the permits and approvals for the Project facilities. Owner shall reimburse the Design Builder without mark-up for all permits and fees associated with this work. Design-Builder's responsibility for permits, licenses, and approvals is set forth in Section 5.5.

4.5 Owner's Project Manager. Owner's interests on the Project will be represented by the Owner's Representative, Capital Program Management, Inc- Project Manager, Steven McGuckin, as well as any other individuals authorized by the Owner. The Project Manager is authorized to act on the Owner's behalf with respect to the daily operations of the Project, including, without limitation, review of Work, invoices, claims, change orders, and submittals, or may delegate authority to another representative. For simplicity, where this Agreement refers to the Owner, Design- Builder may assume that the Project Manager is the appropriate point of contact. Where necessary, the Project Manager will elevate issues to the County Board of Supervisors or to appropriate executives.

4.6 Stop Payment Notice. The Owner will comply with all stop payment notices submitted in compliance with applicable laws by withholding appropriate amounts from payments otherwise due to Design-Builder or otherwise responding consistent with legal requirements.

4.7 Separate Contracts. The Owner reserves the right to perform construction, maintenance, and operations related to the Project with the Owner's own forces, and to award contracts for work that lies outside of the Design-Builder's Project Scope of Work. The Design- Builder and Owner will coordinate to allow for any other separate contracts to be performed, and to minimize interference with the Work and the work that the Owner is having performed through separate contract or contracts. Design-Builder shall perform all Work in such a manner as to avoid any material interruption of Owner's existing operations, including, without limitation, use of the athletic fields. When performing construction, maintenance, or operations related to the Project, the Owner agrees that its separate contractors will be subject to the same obligations as the Design-Builder with respect to insurance, indemnification, safety, protection, inspections and non-conforming work. The Owner will remain responsible to the Design-Builder for any delays to

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

the Contract Time or cost impacts resulting from work performed by its separate contractors. Any cost and/or time impacts will be addressed through the Change Order process set forth in Section 9.

4.8 Timeliness. In order to avoid any impacts to the Contract Time, information or services under the Owner's control, including reviews and approvals, will be furnished within the timeframes set forth in the Contract Documents.

4.9 Owner Direct Payments. In case of a material breach by the Design-Builder, the Owner hereby retains the right to make direct payment to Subcontractors and Design Professionals, less retention, and to deduct the amounts from future payment requests from Design-Builder. Owner shall give Design-Builder notice and a reasonable opportunity to cure the material breach before exercising any rights described in this Section 4.9.

5. DESIGN-BUILDER'S OBLIGATIONS

5.1 Design-Build Services. Design-Builder will provide all labor, materials and equipment necessary to complete the Work in compliance with the Contract Documents as described in further detail in the Scope of Work included in **Exhibit 3.** Unless otherwise provided in the Contract Documents, the Design-Builder shall provide or cause to be provided, and shall pay for services, labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

5.2 Preconstruction Phase Services – Preparation of Design and Construction Documents. Design-Builder will work collaboratively with Owner to validate Conceptual Design **(Exhibit 7),** propose alternatives where such alternatives create value to the Owner, evaluate design and construction phasing alternatives, and potential early work packages. Design Builder to produce Schematic, Design Development, and Construction Documents for the Project in accordance with: Bridging Contrat Documents (**Exhibit 2**), its attachments, and supporting documents: Project Description, Schedule, and Budget, Project Design Criteria, Conceptual Site Plan, Geotechnical Report; and Scope of Work **(Exhibit 3).** Also complete design per meetings with the County for input, conformance with Criteria Documents, and approval at each design phase for the schematic design, design development, construction phase documents.

5.2.1 Conduct of Design Services. Design-Builder must perform all design-services, including architectural, engineering and other design professional services, consistent with applicable state licensing laws, and through qualified, licensed design professionals employed by Design-Builder, or procured from qualified, independent licensed Design Professionals, and in accordance with the standard of care described in Section 2.4. The Design-Builder's manufactured housing's design professional will be responsible for the manufactured homes and the Design-Builder's Engineer will be responsible for all on-site design professional services.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5.2.2 Schematic Design. Prior to starting design, DBE is to conduct site investigations and familiarize themselves with the existing conditions and supporting documents provided by the County. Prepare Schematic Design Documents based on the Conceptual Drawings, site observations, Criteria Document and supporting documents. Include site layout drawings for approval by the County. Attend review meetings with the County and incorporate conformance review comments.

5.2.3 Design Development. Upon the County's written acceptance of the Schematic Design Documents, prepare Design Development Documents for approval by the County from the Criteria Documents, including related architectural, structural, mechanical, electrical, plumbing, and civil plans. Attend review meetings with the County and incorporate conformance review comments.

5.2.4 Construction Documents. Upon the County's written acceptance of Design Development Documents, prepare 100% complete construction documents for review and written approval by the County prior to submitting for permitting. Perform quality assurance/quality control and constructability reviews of the documents prior to submitting to the County. The County will perform its own constructability and conformance reviews. The 100% Construction Documents shall consist of complete detailed working drawings and Specifications addressing required materials, products, equipment, their installation and operation, quality assurances, reference standards, product data, warranty data, etc. These 100% Construction Documents shall contain all required drawings and Specifications completed in detail sufficient to construct the Project, confirm conformance with Bridging Contract Documents, and obtain agency approvals. The 100% Construction Documents shall be consistent with approved interim design submissions, as such submissions may have been modified in a design review meeting and recorded in the meetings minutes. Design-Builder shall remain responsible for correcting any deviation from the Bridging Contract Documents, whether discovered prior to or during construction work. Attend meetings with the County and incorporate review comments prior to submitting for permitting purposes.

5.2.5 Permitting. Submit completed accepted plans and specifications and obtain all local jurisdictional agency plan approvals and permitting, necessary to meet the Project Schedule **(Exhibit 6)**. DBE to pay and be reimbursed without mark-up for all permitting fees.

5.2.6 Any other services that are reasonable and necessary for design and permitting of the Project, including close-out with local jurisdictional agencies.

5.3 Construction Phase Notice to Proceed. Prior to commencing any work on the Construction Phase of the Project, the Design-Builder will submit a Final Design Package to Owner that Design-Builder proposes would govern the Construction Phase work. The Final Design Package shall be comprised of the following documents: 1) the 100% Construction Documents; 2) a Construction Phase project schedule; 3) all documents required as part of the Project Manual for Construction

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Phase Work, including a number of forms and plans (Safety Plan, Traffic Control Plan, Quality Control Plan, various mitigation plans) to be identified by Owner and developed by Design- Builder during the course of the Preconstruction Phase; and 5) any other documents or materials reasonably required by Owner inclusive of justifiable wage rates for all contractors. Design-Builder must submit one (1) electronic set and (5) sets of prints. Owner shall review the Final Design Package in order to determine whether this Design-Build Agreement provides Owner with the best value for completing the Construction Phase of the Project. Owner reserves the right to take any of the following actions in response to the proposed Final Design Package submitted by Design-Builder.

5.3.1 Owner may elect to proceed with the Construction Phase of this Agreement by delivering to the Design-Builder a written Notice to Proceed with Construction (the "NTP "), Builder elect to proceed with the Construction (in reasonably acceptable form), Building Permit and Clearance of Bird Nesting. Design-Builder will coordinate in good faith and in a commercially reasonable manner with respect to securing the Building Permit and the Clearance of Bird Nesting.

5.3.2 The Owner may notify the Design-Builder of any objections to the Final Design Package within fourteen (14) calendar days after their submittal. In the event that the Owner makes objections to the 100% Construction Documents, the Design-Builder may complete, correct and/or modify the 100% Construction Documents in question and resubmit the Final Design Package to the Owner. If the need for re-submittal of the Final Design Package (or any part of it) shall not be due to a change requested by the Owner in the Final Design Package, then the Design-Builder shall have ten (10) calendar days within which to correct, complete and re-submit the Final Design Package, but there shall be no extension of the dates in the Project Baseline Schedule. In the event the Owner shall request any change in the Final Design Package that represents a change in the Scope of Work, such request may require an adjustment of time and compensation pursuant to a Change Order.

5.3.3 The Owner may elect not to proceed with the Construction Phase of this Agreement in its sole discretion, and may take such action without cause and for its own convenience whether or not the Owner elects to have the project constructed, terminate the Agreement with Design-Builder for convenience in accordance with Article 16.3, and take possession of the 100% Construction Documents and all other design documents and related work product developed by Design-Builder for potential award to a separate contractor.

5.4 Construction Phase Services. Design-Builder shall proceed to execute and complete the Construction Phase services only upon issuance by the Owner to the Design- Builder of a NTP and other Documents set for the in Section 5.3.1 of this Agreement with the construction phase of the Work. Design-Builder will provide all Construction Phase Services required for the Project. Design-Builder's construction Phase services will also include each of the responsibilities summarized below.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5.4.1 Unless otherwise provided in the Contract Documents to be the responsibility of Owner or a separate contractor, Design-Builder shall provide through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities and other temporary facilities to permit Design-Builder to complete the Construction Services consistent with the Contract Documents.

5.4.2 (Not Used)

5.4.3 Design-Builder shall perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Contract Documents. Design-Builder shall at all times exercise complete and exclusive control over the means, methods, sequences and techniques of construction.

5.4.4 Design-Builder shall coordinate the activities of all Subcontractors. If Owner performs other work at the Site with separate contractors under Owner's control, Design- Builder agrees to reasonably cooperate and coordinate its activities with those of such separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption to the Work or the work that the Owner is having performed by separate contractors.

5.4.5 Design-Builder shall fully comply with all environmental and permit mitigation requirements set forth in these Contract Documents, including, without limitation, remediation of all hazardous materials, including preexisting hazardous materials, at the Project Site.

5.4.6 Design-Builder must promptly remove from the Project Site, or from property adjacent to the site of the Work, all unused and rejected materials, and construction waste, to permit Design-Builder to perform its Construction Phase Services efficiently, safely and without interfering with the use of adjacent property. In particular, the Design-Builder shall keep the Project Site clean to maintain safe access and to avoid fire hazard. Upon Substantial Completion of the Work, or a portion of the Work, Design-Builder shall remove all debris, trash, construction waste, materials, equipment, machinery and tools arising from the Work or applicable portions thereof to permit Owner to occupy the Project for its intended use. Upon Substantial Completion of the Work, Design-Builder shall return the premises to its pre-existing condition or better, based on a preconstruction survey to be performed by Design-Builder.

5.5 Governmental Approval Services. Design- Builder is responsible for obtaining all permits, licenses, and approvals necessary for the completion of the Work.

5.5.1 Review of Approvals. Owner reserves the right to review any submittals and final terms and conditions of permits, licenses, and approvals obtained pursuant to this Section 5.5, and to deal directly with any agencies responsible for the approvals. Design- Builder will be entitled to an extension of time to the extent that a delay is caused by Owner's unreasonable delay in reviewing and/or approving such approvals.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5.5.2 Permit Documents. Only documents prepared for or by Design- Builder for this project may be used for obtaining building permits for construction. No drawings or specifications prepared by the Owner or by the Project Manager or by their representatives shall be used for permits or construction without the Owner's and the Project Manager's prior written permission in each instance.

5.6 Project Support Services. Owner may require Design-Builder to provide other incidental services relating to the Project, including, without limitation, public outreach, and presentations at Board of Supervisor meetings. The parties acknowledge and agree that, to the extent that the services described in this Section 5.6 are, in fact, incidental, the Design-Builder shall perform them without additional compensation. In the event that the Owner requests services pursuant to this Section 5.6 and the Design- Builder asserts that such services are not incidental, the Design-Builder shall promptly, and before performing any such work, notify the Owner of its contention and shall provide any supporting documentation. Owner shall promptly respond to any such notice from the Design-Builder and the parties shall meet and confer in good faith regarding any disagreements with respect to services under this Section 5.6.

5.7 Site Investigations. By executing this Agreement, the Design-Builder represents that it has visited the Project premises and is familiar with the local conditions under which the Work is to be performed.

5.8 Test and Inspections. The Design-Builder shall be responsible for and coordinate all inspections required of the Design Build homes by any governmental body that has jurisdiction over the Project. Failure to obtain any permits, licenses, or other approvals because of the failure of the Design-Builder to conform to this paragraph will not extend the Contract Time and the contractor shall not be entitled to an increase in the Contract Price, therefore. Further, the Design-Builder shall be liable to the Owner for any financial damage such failure may cause the Owner. The Owner will pay for all third party (owner directed) testing and inspection including the special inspections, structural, mechanical, chemical, air and water pollution tests, tests for hazardous materials, and other laboratory and environmental tests, inspections and reports required by law or the Contract Documents, however, the Design-Builder shall be responsible for costs related to any tests required for corrective work.

5.9 Coordination with Owner and Owner's Separate Contractors. The Design-Builder will coordinate its Work with any of Owner's employees or contractors performing work in the vicinity of the Project Site.

5.10 Sole Responsibility. The Design-Builder acknowledges and agrees that it is solely responsible to the Owner for the sufficiency, quality, adequacy and completeness of all services performed by the Design-Builder, including, without limitation, design work (whether during the Preconstruction Phase or Construction Phase), and construction services. Design- Builder is responsible for any acts, errors, or omissions of the Design-Builder, its Design Professionals, its Subcontractors, employees, agents, and/or any other parties either directly or indirectly in privity of contract with Design-Builder including, but not limited to, the "Design-Build Team" identified in Section 2.1, second tier-subcontractors, and vendors who are

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

performing any portion of the Work. The Design-Builder's design must meet the minimum design requirements as defined by the Bridging Contract Documents, and all other design requirements included in the agreement. The Owner may review (at its sole discretion) and as it may deem necessary or desirable, the design at specific design development milestones for consistency and compliance with such design requirements. If the Owner shall elect to review any such documents, it shall be entitled (but not obligated) to limit its review to a cursory review or to such review as may be required to enable the Owner to determine rate of progress. Owner's review and/or approval submittals, including, without limitation, interim and final design submittals, does not reduce Design-Builder's obligations under this section.

5.10.1 Nothing in this Agreement shall relieve the Design-Builder of its obligations to complete the Project in full accordance with all applicable laws and regulations and suitable for the Owner's intended purposes.

5.10.2 The Design-Builder, on behalf of itself and its design Team, specifically acknowledges and agrees that the Owner shall have the discretion to determine whether the 100% Construction Documents comply with the requirements of the Contract Documents.

5.11 Applicable Laws.

5.11.1 Statutory Authority. The Owner is awarding this Project pursuant to the design-build authority provided under Sections 22160, et seq., of the California Public Contract Code. The Design-Builder and the Owner acknowledge that they have reviewed this statutory authority, are familiar with all requirements, and will comply with applicable requirements and duties.

5.11.2 Compliance with All Applicable Laws. The Design-Builder and the Owner agree to comply with all Federal, State, Municipal and local laws, ordinances, rules, regulations, building codes and standards, orders, notices and requirements applicable to proper design and construction of this Project.

5.12 **Staffing Plan and Key Personnel.** The Design-Builder agrees that it will staff this Project in accordance with the staffing plan included in **Exhibit 5A.** The Staffing Plan will include a staff-level organizational chart indicating hierarchy and reporting responsibilities, as well as all Key Personnel.

5.12.1 **Key Personnel.** The Design-Builder will identify all **"Key Personnel"** in **Exhibit 5B** and will not remove any of its Key Personnel from this Project without the express written consent of the Owner, except for death, disability or departure of person from employment. The Owner's Project Manager will be able to request the removal of any person employed by the Design-Builder whom it believes is incompetent, improper or a hindrance to the design-build process. If any Design-Builder personnel become unavailable to work on the Project, or if the Owner requests that an employee be removed, the Design-Builder will propose a replacement person within 10 business days for approval by the Owner. The recommended replacement person will have similar or better qualifications

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

and experience, and must be approved in writing by the Owner. Additional Staffing and Key Personnel requirements are set forth in the Scope of Work in **Exhibit 3.**

5.13 Safety. The Design-Builder is the "Controlling Employer" as defined by Cal/OSHA and will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work and in accordance with the Design- Builder's Health and Safety Program. The Design-Builder shall comply with all statutory safety requirements.

5.14 Project Baseline Schedule. The initial Project Baseline Schedule is attached as **Exhibit 6A**. This initial Project Baseline Schedule will be regularly updated in conjunction with Section 8.2 of this Agreement (at least monthly) and refined as project development and design proceeds. The updates to the initial Project Baseline Schedule will coordinate and integrate the progress of Design Services with milestone dates for design development and Construction Documents, procurement of long lead items and Subcontracts, and construction of major components of the Project. The initial Project Baseline Schedule, and all subsequent versions, shall include all major components of the Work and the Owner's occupancy requirements projecting milestones for each of the following:

- Completion of Schematic Design
- Completion of 100% Construction Documents
- Submission of Final Design Package
- Issuance of Construction Phase Notice to Proceed
- "Substantial Completion" of the Project including Issuance of Final Certificate of Occupancy for the Project
- "Final Completion" of the Project

The Project Baseline Schedule must be prepared utilizing CPM scheduling software. The schedule must be broken down by activity and duration highlighting the critical path.

The schedule submitted by the Design-Builder and agreed to by the Owner shall be referred to as the Project Baseline Schedule, and shall not be adjusted except through Change Order under Section 9 for permitted delays as defined in Section 8. The Project owns all float in the Project Baseline Schedule and monthly updates. Therefore, there will not be any adjustments to the Contract Time until all Project float is exhausted and the critical path is impacted.

5.15 Taxes and Fees. The Design-Builder will pay all sales, consumer, use, gross receipts, and other similar taxes legally related to the work enacted at the time of Contract Award.

5.16 Consultants and Laboratories. The Design-Builder will make recommendations to the Owner regarding selecting, retaining and coordinating any additional professional services, special consultants and testing laboratories required for the Project.

5.17 Construction Administration.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5.17.1 Preliminary Notices. Within 5 business day's receipt, Design-Builder will forward to the Owner all Preliminary Notices (Civil Code sections 9300, 9500 and 9560) served on it by any person or entity entitled to assert a payment bond or stop payment notice claim. Design-Builder will maintain a written record of all Preliminary Notices received by it including the manner of receipt, date of receipt, and name and address of person or entity serving the Preliminary Notice. This written record will be turned over to the Owner at Project Close-out.

5.17.2 Supervision. The Design-Builder will manage, supervise and direct the Work using its best skill and judgment. The Design-Builder shall identify the ("Design-Builder's Manager") who will represent the Design-Builder with respect to the daily operations of the Project or may delegate authority to another representative. For simplicity, where this Agreement refers to the Design-Builder, Owner may assume that the Design-Builder's Manager is the appropriate point of contact. The Design-Builder's Manager may not be changed without Owner's written consent. The Design-Builder will also provide a qualified superintendent and assistant superintendent at the Project Site to properly supervise all of Design-Builder's employees, Subcontractors and their agents and employees, and other persons performing construction work and to ensure that the construction work is carried out in strict accordance with the Contract Documents. Both the superintendent and assistant superintendent shall be English language proficient and approved by Owner in its sole discretion. Neither the superintendent nor the assistant superintendent may have other project or business responsibilities or calls on his or her time other than this Project.

5.17.3 Discipline. The Design-Builder will always enforce strict discipline and good order among Design-Builder's employees, Design Professionals and Subcontractors and will not employ or contract with any unfit or unskilled person(s) or entities on this Project. The Design-Builder and its Design-Professionals and Subcontractors will comply with all Owner policies, standards, and procedures throughout the duration of this Project.

5.17.4 Construction Coordination. Before starting each portion of the construction work, the Design-Builder will: (i) coordinate with Owner's Project Manager, or his designee, to coordinate any necessary shut-down of equipment, and related operations issues; (ii) review and compare the various Contract Documents relative to that portion of the construction work, as well as the information furnished by the Owner, Design Professionals and Subcontractors that may affect proper installation of the work; (iii) field measure existing conditions related to that portion of the work; and (iv) observe any conditions at the site directly affecting that portion of the work.

5.17.5 Field Measurements. The Design-Builder will take field measurements to ensure proper matching and fitting of new construction with existing conditions at the Project Site.

5.17.6 Submittals. The Design-Builder and its Subcontractors shall provide timely submittal of all "Shop Drawings," "Product Data," "Samples" and

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

similar submittals (collectively referred to as "Submittals") required by the Contract Documents, to the design professional for review and approval. After approval by the design professional, all Submittals will also be provided to the Owner for Owner's information. All Submittals will be submitted in a sequence that avoids delays in the Project Schedule. Design-Builder will not submit any Submittal that is merely a tracing or copy of any of the Construction Documents. Each Submittal will be prepared by the Design-Builder and/or its Subcontractors or suppliers and will be submitted according to the Project specifications. No construction work will be performed without approval by the Design-Builder, as required. Regardless of the Submittal process, the Design-Builder remains responsible to the Owner for proper design and construction in compliance with all requirements set forth in this Agreement. Refer to OMR for additional provisions on Submittals.

5.17.6.1 Response Times to Design-Builder Submittals. Unless otherwise provided in the Contract Documents, Owner shall respond to reviews, approvals, and data needs to Design-Builder within 14 calendar days, provided that the Design-Builder shall, at Owner's request, act reasonably in allowing Owner an extension of time to respond to review, approvals, and data based on a high volume of submittals or complexity of submittals under review at a given time.

5.17.6.2 Design-Build Subcontractors. All Submittals prepared by Design-Builder and its Subcontractors shall be reviewed and approved by the Design-Builder's design professional who will remain responsible to the Design-Builder and Owner for the design.

5.17.7 Coordination of MEP. Mechanical, electrical, plumbing, fire protection and fire and life safety work will be coordinated, as appropriate, to avoid obstructions, conflicts, keep openings and other passageways clear, overcome interference with structural, framing, and equipment conditions, and coordinate with other trades.

5.17.8 Layout and Protection. The Design-Builder is responsible for all layouts and will preserve and protect all line and grade benchmarks. Any additional surveying or layout caused as a result of Design-Builder or any of its Subcontractor's failure to take the necessary precautions to protect the data will be performed at Design-Builder's own cost and expense.

5.17.9 Materials and Equipment. All materials and equipment required under the Contract Documents will be new and of good quality. Once the Construction Documents are complete, no substitutions will be accepted on this Project unless: (i) the specified materials or equipment have been discontinued; or (ii) the Owner has approved the substitution through written Change Order. Materials and equipment will be furnished in ample quantities and procured in time to ensure uninterrupted progress of construction. All materials and equipment will be properly stored and protected as required by the Contract Documents and any loss or damage due to improper storage or protection will be borne by the Design-Builder.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5.17.9.1 Long Lead Items. The Design-Builder will collaborate with Owner to establish a program to expedite ordering and delivery of materials and equipment requiring long lead time.

5.17.9.2 Shipment and Deliveries. Prior to shipment, delivery and installation of materials and equipment, the Design-Builder will verify the Phase of completion of the Project with Owner to determine the availability of facilities for access, delivery, transportation and storage, and to correlate these observations with the requirements of the Contract Documents. All shipments and deliveries will be scheduled and coordinated in accordance with the most current approved site logistics plan and the most current approved Project Schedule.

5.17.9.3 Storage of Materials and Equipment. Storage of equipment and materials will be coordinated through the Design-Builder and the Owner. Design-Builder will maintain, or cause its Subcontractor's to maintain, all storage areas and will keep storage areas clean, safe, and secure. Storage areas shall also provide for proper protection of all stored materials and equipment from all forms of corrosion. Design-Builder must request and receive Owner's approval, granted at Owner's sole discretion, for offsite storage. Any materials or equipment stored offsite will be insured or stored in a bonded warehouse. The risk of loss will remain on the Design-Builder for all materials and equipment stored off-site.

5.17.9.4 Risk of Loss. All construction work stored at the Project Site, or work related to the preparation or delivery of materials or equipment to the Project Site, will remain at the risk of the Design-Builder or appropriate insurance carrier until Final Completion of the Project.

5.17.9.5 Maintenance. The Design-Builder will provide all maintenance for systems and equipment at its own costs and expense until Substantial Completion.

5.17.10 Correction of Work. At any time prior to Final Completion, Owner may require Design-Builder to correct work that does not comply with the Contract Documents. Design-Builder must correct such defective work immediately (unless otherwise approved by Owner), at its sole cost and expense, and in a manner that does not delay the completion of the Project.

5.17.11 Covering and Uncovering Work. Design-Builder must provide notice to Owner as to the schedule for covering Work so that the Owner has adequate time to observe Work to be covered. Owner may require any Work to be uncovered, whether or not prior information was provided as to the schedule for covering. Should Work so uncovered prove to be in non-compliance with the Contract Documents, the cost of uncovering, correction of the Work and re-covering shall be borne by the Design-Builder and the Owner is not be liable for any schedule recovery costs Design-Builder may incur. If Design-Builder provided adequate notice of

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

covering and the work is compliant with the Contract Documents, Design-Builder is entitled to a change order for any extra cost caused Design-Builder, including any cost of schedule recovery. Design-Builder may comply with the notice requirements of this section as part of the project schedules described in Section 8.2 of the Design-Build Agreement.

6. SUBCONTRACTORS

6.1 Procurement. Those portions of the Work that the Design-Builder will not self-perform, or that will not be performed by Design Professionals or Subcontractors named in Design-Builder's proposal, will be performed by Subcontractors added during the course of the Work in accordance with the bidding process in Public Contract Code Sections 4100, et seq. All subcontracted work shall be performed under written subcontracts or purchase orders. The Design-Builder must furnish to the Owner in writing the names of the persons or entities the Design-Builder proposes to engage as subcontractors at least ten (10) days before said entity shall start any Work as a subcontractor. The Design- Builder may not contract with any subcontractor to whom the Owner has made reasonable and timely objection.

6.2 Written Agreements. All subcontracts will be in writing and will bind the Subcontractor to the Design-Builder by the terms of the Contract Documents, and Subcontractor will assume toward the Design-Builder all the obligations and responsibilities that the Design- Builder assumes toward the Owner, including but not limited to obligations related to prevailing wage under California law. Each subcontract agreement will preserve and protect the rights of the Owner and Design-Builder under the Contract Documents with respect to the portion of the Work to be performed by the Subcontractor so that subcontracting the Work does not prejudice the Owner's rights. Where appropriate, the Design-Builder will require Subcontractors to enter into similar agreements with its tier-subcontractors. The Supplemental Conditions to this Agreement and all necessary Exhibits to this Agreement will be a part of each Subcontract Agreement.

6.3 Licensing Requirements. All Subcontractors will be properly licensed for their respective portion of the Work.

6.4 Standard of Care. All Subcontractors will warrant that they possesses the design and/or construction licenses and expertise required for this Project and will use the same degree of care and skill customarily used by California state licensed professionals and contractors performing similar services for residential facilities construction in the state of California during the same time frame.

6.5 Responsibility. Design-Builder assumes responsibility to Owner for the proper performance of the Work of Subcontractors and any acts and omissions in connection with such performance. Nothing in the Contract Documents is intended or deemed to create any legal or contractual relationship between Owner and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights. Design-Builder shall coordinate the activities of all Subcontractors.

6.6 Conflicting Terms. All conflicts arising out of any subcontract agreement will be resolved in accordance with the order of precedence set forth in Section 3.4, and

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

this Agreement will take precedence over any terms and provisions in a subcontract.

6.7 Assignment. Each subcontract agreement will include an assignment provision. The assignment provision will allow for assignment of subcontracts to the Owner upon termination of the Design-Builder for cause or convenience provided: (i) Owner accepts assignment by written notification to the Subcontractor and Design-Builder; and (ii) assignment is subject to the rights of the surety, if any, obligated under a bond or bonds relating to this Agreement. The Design-Builder will not be responsible for acts and omissions of the Subcontractors that occur after the effective date of assignment.

6.8 Claims and Dispute Resolution. The Subcontractor will be bound to the same claims and dispute resolution procedures as set forth in Section 14.12 of the Supplemental Conditions.

6.9 Insurance. The Design-Builder may, at its discretion, require its Subcontractors, through written subcontract, to carry appropriate insurance and bonding. Design-Builder's insurance must satisfy all requirements set forth in **Paragraph 12** regardless of any subcontractor coverage.

6.10 Indemnity. The Design-Builder will cause its Subcontractors, through written subcontract, to include the indemnification provisions set forth in Section 11 and to indemnify and defend the Owner and its Board of Supervisors, the Owner, and Design-Builder from all claims, damages and liability pursuant to the provisions in Section 11, except to the extent that such subcontractors cannot legally be required to indemnify (e.g., with respect to design-related claims) .

6.10.1 Third Party Beneficiary. The Owner will be an express third party beneficiary to all design-build subcontracts.

6.10.2 Subcontracts. Subcontracts may be awarded on a lump sum or best value basis.

6.10.3 Contract Time. Subcontractors will be tied to similar provisions governing Contract Time under Section 8.

7. COMPENSATION

7.1 Preconstruction Phase Compensation. During the Preconstruction Phase of the Project, the Design-Builder will complete all Preconstruction Phase Services summarized in Section 5.2 of this Agreement and elaborated in more detail in the Scope of Work in **Exhibit 3.** Compensation for all Preconstruction Phase Services, including labor, materials, overhead, and profit of Design-Builder and all of its Design Professionals, and design-assist Subcontractors, will be on the basis of a lump-sum amount of Three Hundred Thousand and NO/100 Dollars ($300,000.00) as full compensation to the Design- Builder for the Work called for in Step One ("Preconstruction Phase Price"). Payments will be made based on monthly invoices, with monthly invoices/payments based on the percentage complete of the scope of work for the Preconstruction Phase services.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

7.2 Construction Phase Compensation. During the Construction Phase of the Project, the Design-Builder will perform all Construction Phase Services, as summarized in Section 5.4 of this Agreement. Compensation for the Construction Phase Services will be on the basis of a lump sum of Five Million Five Hundred Fifty-Four Thousand Three Hundred Sixty and No 100 Dollars ($5,554,360.00) which will cover all labor, equipment, materials, profit, overhead, taxes and any other expenses to be incurred by the Design-Builder ("Construction Phase Price"). Design-Builder will be paid pursuant to monthly invoices based on a Schedule of Values and percentage of completion of the Work and verifiable by an Inspector of Record and as stated in Section 10 Payments. The Preconstruction Phase Compensation and the Construction Phase Compensation shall, in the aggregate, constitute the Contract Price.

7.3 Construction Contingency. The Contract Price includes a Construction Contingency (which is not to be used for trade damage or re-work) in the amount of One Hundred Forty-Five Thousand and No/100 Dollars ($145,000.00). The Construction Contingency is Owner controlled. Use of the Construction Contingency requires Owner's prior approval. All unspent funds in the Contingency at Final Completion shall accrue to Owner. The Construction Contingency is available for Design-Builder to cover cost of the Work unanticipated by Design-Builder on the effective date of the Design-Build Agreement, such as unanticipated field conditions or differing site condition, re-sequencing the Work for the good of the Project, acceleration in the Schedule for improvement in the overall Contract Time, and Owner requested changes.

7.4 Owner Contingency. There is an Owner Contingency in the amount of Two Hundred Fifty Thousand and No/100 Dollars ($250,000.00). The Owner Contingency is Owner controlled and requires Owner's prior approval. All unspent funds in the Contingency at Final Completion shall accrue to Owner. The Owner Contingency is available to cover Owner requested changes.

7.5 Contract Price. The Contract Price is the sum of the Preconstruction Phase Price, Construction Phase Price, and Constriction Contingency, and shall represent the sum total of all compensation due to the Design-Builder for all design and construction services under the Agreement. The Contract Price for this Agreement is the lump sum of Five Million Nine Hundred Ninty-Nine Thousand Three Hundred Sixty and No/100 Dollars ($5,999,360.00).

7.6 Design-Builder's Fee. The Design-Builder's Fee is included in the Contract Price. However, the Design-Builder's Fee of 20% can be applied to the direct cost of the construction in the event of contingency work and approved change orders. Design-Builder will not be entitled to Design-Builder's Fee for work necessitated by its own substandard workmanship, errors or omissions.

7.7 Design-Builder Allowances. Design-Builder may propose additional allowance, including appropriate allowances for defined items of Work that cannot be appropriately quantified and estimated at the time the Design-Build Agreement is executed, only with specific approval of Owner. Each such item of Work will be covered in a separate line item and have a clear description of what is covered by such allowance. Allowance items will be converted to, and included as, typical contract work by Change Order once conditions exist that allow them to be properly

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

quantified and priced. Allowance items that cannot reasonably be quantified and estimated before the allowance work begins will be reconciled based on the actual cost of the allowance Work. If the actual cost of the Work for any item of Work covered by an allowance will be greater than the amount of the allowance, Design-Builder will so notify Owner and if Owner authorizes the allowance Work in a Change Order, the Construction Phase Price will be increased by such difference with an additional agreed upon amount for overhead and profit. If the cost of any item to which such an allowance applies is less than the amount of the allowance, Owner may issue a Change Order decreasing the Construction Phase Price by the sum of the amount of such difference and the mark-up for overhead and profit on the difference.

8. CONTRACT TIME

8.1 Contract Time. The Design-Builder must achieve Final Completion of the Work using best practical safe speed to achieve Final Completion as soon as reasonably possible. The Contract Time is the time allotted for the Design-Builder to achieve Substantial Completion and Final Completion of the Work. Completion of the Preconstruction Phase must be achieved within Seventy-Three (73) calendar days from issuance of the Notice to Proceed. Substantial Completion must be achieved within Two Hundred Sixty-Nine (269) calendar days from issuance of the Notice to Proceed. Final Completion must be achieved within Seven (7) calendar days of achieving Substantial Completion. Total Contract Time is Two Hundred Seventy Six (276) calendar days. The Design-Builder must also achieve all specific milestone completion dates as set forth in the Project Baseline Schedule in Exhibit 6A.

8.2 Monthly Project Schedules. The Design-Builder will create monthly updates of the initial Project Baseline Schedule, referred to as "Monthly Project Schedules," incorporating activities and schedule updates of the Design Professionals and Subcontractors on the Project as necessary to reflect the status of design and construction and projected milestone dates for Substantial Completion and Final Completion. The Design-Builder will provide for Owner's approval information in an agreed upon format, and as requested by the Owner, for the scheduling of times and sequences of operations required for its Work in coordination with the work of Owner's employees and separate contractors, if any.

8.2.1 3 Week Look-Ahead Schedules. The Owner will require the Design-Builder, with the assistance of its Design Professionals and Subcontractors, to create 3 Week Look-Ahead Schedules for the performance of upcoming Work and document all Work performed during the prior 3 week period. The Design-Builder will require its Subcontractors and Design Professionals to continuously monitor the Monthly Project Schedule and 3 Week Look- Ahead schedules to understand the timing, phasing and sequencing of operations of their respective work with other Work being performed at the Project. The 3 Week Look-Ahead Schedules are to be used as a working tool to evaluate any schedule slippages and collaborate on methods for labor efficiency. Work flow will be scheduled based on providing information, material and resources as required by the user of the information, material or resources, optimizing the flow of Work and reducing bottlenecks and activity that will not advance the Project

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Schedule. The Design-Builder will provide Owner with copies of the 3 Week Look-Ahead Schedules and will meet with Owner to review and coordinate with any work being performed by Owner's separate contractors. Design-Builder shall request input from Owner on 3 Week Look- Ahead Schedules, as necessary, no less than one week before the 3 Week Look-Ahead Schedule submission date.

8.3 **Prosecution of the Work.** The Design-Builder will commence the Work within 5 days of receipt of a Notice to Proceed by the Owner and receipt of performance bond. Design-Builder will be expected to diligently prosecute and complete its Work pursuant to the most approved current Monthly Project Schedule.

8.3.1 **Schedule Slippage.** The Design-Builder will notify Owner and the Owner within 72 hours of any slippage in the Monthly Project Schedule as a result of its Work and must submit a detailed recovery plan for evaluation and approval by Owner. All costs associated with the recovery, which shall provide for completion of the Project within the Contract Time, will be the responsibility of the Design-Builder unless the Design-Builder is entitled to an extension of time under Section 8.4

8.3.2 **Acceleration.** The Owner may direct the Design-Builder and its Subcontractors and Design Professionals to work overtime in order to accelerate the Project schedule. If the Design-Builder and its Subcontractors and Design Professionals are not in default under any of the terms or provisions of this Agreement, their respective subcontracts and/or agreements, or any of the other Contract Documents, the Owner will pay the Design- Builder, its Subcontractors and Design Professionals for actual additional wages and/or billable rates paid, if any. All additional wages and billable rates paid will be subject to audit.

8.4 **Permitted Delays.** If the Design-Builder is delayed, obstructed, hindered or interfered with in the commencement, prosecution or completion of the Work by: (i) any negligent act or omission of the Owner, or Owner's separate contractors; (ii) **"Owner Elected Changes;"** (iii) delay caused by a **"Force Majeure Event;"** (iv) **"Unforeseen and Differing Site Conditions;"** and/or (v) "**Owner's Suspension of the Work,"** such that the critical path of the most current, approved Project Baseline Schedule is impacted extending the Final Completion Date, the Substantial Completion Date, or any specific milestone completion dates, then the Design-Builder will be entitled to an extension for the same period of time that the Design-Builder was delayed provided that the delay, obstruction, interference or hindrance was not caused, in whole or in part by any fault, neglect, act or omission of the Design-Builder, its employees, Design Professionals, Subcontractors or suppliers.

Notwithstanding the above, the Design-Builder will not be entitled to an extension of time unless the Design-Builder provides the Owner with notice in writing of potential delay, obstruction, hindrance or interference within 72 hours of the discovery of the potential delay. Design-Builder shall follow up with all practical speed, but not later than 7 days after the initial notice, to summarize the cause or causes of the delay, and demonstrates that it could not have anticipated or avoided the delay, obstruction, hindrance or interference and has used all

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

available means to minimize the consequences of the delay. The Design-Builder may also be entitled to an adjustment in the Contract Price based on demonstration that the delay and resulting adverse material effect in the cost of completing the Work, after implementation of all reasonable mitigation, materially adversely affected Design-Builder's cost of completing the Work.

8.5 Liquidated Damages. The Owner and Design-Builder acknowledge and agree that if Design-Builder fails to complete Work within the time set forth in section 8.1, the Owner will suffer damages that are both extremely difficult and impracticable to ascertain. Therefore, Owner and Design-Builder agree that, liquidated damages shall be enforced on failure to achieve Substantial Completion in the amount of $3,000 per day, and failure to achieve Final Completion in the amount of $1,000 per day.

Payment of liquidated damages represents a reasonable estimate of fair compensation for the losses that reasonably may be anticipated as a result of Design-Builder's delays in completing the Work. Owner and Design-Builder acknowledge and agree that these liquidated damages provision will be Owner's sole remedy for delay damages caused by Design-Builder's failure to achieve Substantial Completion or Final Completion, within the time set forth in Section 8.1, and/or any of the specific milestone completion dates. Nothing contained in this Section 8.5 shall preclude Owner from recovery for actual damages unrelated to Design-Builder's delays, including, but not limited to, claims for actual losses incurred due to breach of contract, negligence, defective work, injury to persons or property or third-party claims.

9. CHANGES

9.1 Change Orders. A Change Order is a mutually agreed upon written order adjusting the Design-Builder's Scope of Work, Contract Price, Contract Time or any combination. A Change Order may come through an Owner Elected Change, or Design- Builder's request. All changes in the Work will only be authorized by two (2) Authorized Owner Executives and one (1) owner representative Project Manager. An Owner Elected Change, or Owner executed Change Order and performed under the applicable conditions of the Contract Documents. A Change Order signed by the Design-Builder and Owner indicates an agreement to any adjustment in the Contract Time, and/or Contract Price, which includes all Costs of Work plus Fee, and that the adjustments in the Change Order fully and completely resolves any claim by Design-Builder for additional compensation or time arising from or related to the subject of the Change Order. Change Orders for additional Work that was not considered as part of the Contract Price are limited to the following circumstances and therefore may impact the Contract Price, and may or may not impact Contract Time:

9.1.1 Owner Elected Changes

9.1.2 Force Majeure Events

9.1.3 Unforeseen and Differing Site Conditions

9.1.4 Owner's Suspension of the Work as defined in Section 16.2

9.1.5 Changes in applicable law

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

9.2 **Owner Elected Change.** The Owner will initiate a Change Order by providing the Design-Builder with a written summary of the Owner Elected Change. Within 10 business days of receipt of an Owner Elected Change, or such other mutually-agreed upon period for more complex or extensive Owner Elected Changes, the Design-Builder must submit a complete cost proposal for the revised scope to the Owner, as well as any proposed change in Contract Time under Section 8. The Owner will review and evaluate the Design-Builder's cost proposal and any proposed change in Contract Time, before presenting the Design-Builder with a proposed Change Order at either its regular weekly meeting or a special meeting.

9.3 **Design-Builder Initiated Changes.** The Design-Builder must provide the Owner written notice of a proposed change within 5 business days of discovery of the facts or circumstances giving rise to the proposed change order. The Owner will meet and discuss the proposed change either at its regular weekly meeting or at a special meeting.

9.4 **Submission.** All claims for additional compensation or extensions in Contract Time will be presented in writing to the Owner for review. The Owner will either discuss the proposed change at its regular weekly meeting or will call a special meeting to meet and review the proposed change. At the conclusion of the meeting an Owner Elected Change may be issued. Consistent with Owner's internal procedures, a change order request may require approval from Owner's Board of Trustees. All Change Orders must be approved by the Owner before the expense is incurred. Additive Change Orders will affect Contract Price and may affect Contract Time, subject to Section 8. Deductive Change Orders will affect Contract Price and may affect Contract Time.

9.5 **Continued Performance.** No Work will be allowed to lag pending the adjustment through Change Order, but will be promptly executed as directed through Owner Elected Change, even if a dispute arises. Disputes will be resolved in accordance with Section 14.12. Failure of the Design-Builder to provide the Owner with notice of its disputed claim and to submit the written claim within 10 business days of completion of the Work in dispute constitutes an agreement on the part of the Design-Builder that it will not be paid for its Work. No claim will be considered after the Work in question has been performed unless a written Change Order has been executed or timely written notice of claim has been made by the Design-Builder. The Design-Builder will not be entitled to claim or to bring suit for damages, whether for loss of profits or otherwise, on account of an omission of any item or portion of Work covered by the executed Change Order.

9.6 **Omitted Work.** If the Design-Builder omits any portion of the Work that is included in the Contract Documents, the Owner will have the right to withhold from payments due or to become due to the Design-Builder in an amount which, in the Owner's opinion, is equal to the value of portion of the Work that was omitted until the omitted Work is performed.

9.7 **Contract Price Reduction.** The Owner may also reduce the Contract Price to reflect back-charges or payments withheld pursuant to the Contract Documents upon written notice, and 48 hours opportunity to cure.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

9.8 Contract Time Impacts and Extended Costs. The Design-Builder will not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is allowable under Section 8 and claimed in a proposed change order under Section 9.3. No claims will be allowed for impact, extended overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity of changes and/or clarifications. Nothing contained in this Section will be construed as restricting the rights and remedies of Design-Builder in violation of Civil Code section 2782 or Public Contract Code section 7102. If this provision is determined to conflict with Public Contract Code section 7102 or Civil Code section 2782, this provision will be reformed to provide the greatest protection to the Owner under the law.

9.9 Surety. All changes, additions or omissions in the Work ordered through an Owner Elected Change, or Change Order are part of the Work and will be performed and furnished in strict accordance with all of the terms and provisions of the executed Change Order and the other Contract Documents. The Design-Builder will keep its surety informed of all modifications to this Agreement. The obligations of Design-Builder's surety are not to be reduced, waived or adversely affected by the issuance of Change Orders even if the Design- Builder fails to inform the surety of the Change Order(s) and the Owner will not be required to obtain consent of the surety to the Design-Builder or any of its Subcontractors.

10. PAYMENT

10.1 Progress Payments. In accordance with Public Contract Code section 20104.50, the Owner will make monthly progress payments on all undisputed Work performed within 30 calendar days of receipt of an approved monthly invoice and a monthly progress report that were properly submitted pursuant to the procedures set forth in this Section and as further established by the Owner. Each invoice will be submitted on the forms provided by the Owner, will include an itemized list of the work performed, be based on the percentage of the Work completed, and provide a level of detail to allow Owner to make a fair and reasonable estimate of the value of Work completed. The invoice must be made out to the owner, certified by the Design-Builder, and inspector of record verifying the percentage complete. . Before making payment, the Owner will review the invoice for accuracy of the Work completed to date. No such payment shall be required to be made when, in the judgment of the Owner, the request for payment is in excess of the percentage of Work completed. Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation into the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment stored off of the site at a location agreed upon in writing, provided that such off-site location shall be a bonded warehouse or secured by other means acceptable to the Owner.

10.1.1 Schedule of Values. Design-Builder must submit a draft schedule of values to Owner for approval prior to the first payment and within ten days after Notice to Proceed. As approved by Owner, the schedule of values shall be used for preparing future estimates for partial payments to the Design-Builder, and shall list the major items of Work, including materials and services, with a cost fairly apportioned to each item so that the total of the prices for all items equal the lump sum price. The schedule of values

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

shall be by area, structure, or other logical division of work. The schedule of values shall not be considered in determining payment or credit for additional or deleted work. The final Schedule of Values will be added to the Design-Build Agreement.

10.1.2 Monthly Progress Reports. Each monthly invoice must include a report providing an overall status of the Project's progress, and any concerns or impacts.

10.1.3 Evaluation of Invoice. The Owner will review the invoice based on the approved schedule of values, monthly progress report, on-site observations, inspector of record review of percentage complete, and evaluation of the Work, and on the data and documentation substantiating the invoice. Upon request, Design-Builder must substantiate the cost for any or all items and provide additional level of detail, including quantities of work. Based on that review, Owner will pay all undisputed items. An approval of an invoice is subject to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion of the Work and to specific qualifications expressed by the Owner. Owner is entitled to rely on the accuracy and completeness of the information furnished by the Design-Builder and approval will not be deemed to represent that a detailed examination, audit, or arithmetic verification of the documentation submitted with the Design-Builder's invoice has been made or that exhaustive or continuous on-site inspections have been made to verify that the Work is in accordance with the Contract Documents. A payment by Owner does not represent that Owner has ascertained how or for what purpose the Design-Builder has used money previously paid.

10.1.4 Retention. The Owner will withhold 5% of each progress payment during the Project. Retention will be withheld until the Project achieves Final Completion.

10.1.4.1 Substitution of Securities. To the extent required by law, Owner will consider and approve reasonable and appropriate requests under Public Contract Code section 22300 for substitution of securities or establishment of an escrow account for retention. Nothing contained in this Section will prevent Owner from withholding payment when grounds exist for doing so under the Contract Documents.

10.1.5 Change Orders. Applications for payment may include requests for payment on account of changes in the Work that have been properly authorized and work has been completed. When billing for any change order work, copies of the approved change order must be attached to the pay application.

10.1.6 Stored Materials and Equipment. Stored materials and equipment may be included in the invoice provided the materials and equipment are properly stored in accordance with Section 5.17.9.3 and a complete invoice accompanies the invoice. Owner will not pay for materials or equipment storage.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

10.1.7 Stop Payment Notices and Claims. Upon submission of an invoice, the Design-Builder warrants that all Work included in the invoice has been performed in accordance with the Contract Documents and to the best of the Design-Builder's knowledge, information and belief, title to all Work covered by the invoice will pass to the Owner free and clear of all stop payment notices, claims, security interests or encumbrances. Design-Builder will provide executed conditional waivers and release of claims for all amounts included in the invoice. Waivers must comply with the requirements of California Civil Code section 8132.

10.1.8 Owner Payment to Design Professionals, Subcontractors and Suppliers. The Owner will not have an obligation to pay a Design Professional or Subcontractor for work performed unless required by law. However, if the Owner is not in default of payment provisions and receives a stop payment notice or has reason to believe that the Design-Builder is not paying its Design Professionals or Subcontractors and suppliers, the Owner may make payment of sums due to Design-Builder through joint check or pay Design Professionals and Subcontractors and suppliers directly and withhold those payments from Design-Builder. The Owner shall not exercise any rights granted under this Section prior to issuing a notice to the Design-Builder and granting the Design-Builder a reasonable opportunity to cure.

10.2 Final Payment. Upon Final Completion of the Work, the Design-Builder will submit a final payment application. All prior progress estimates will be subject to correction in the final invoice. If items remain to be completed at that time, then the Design-Builder in conjunction with Owner will revise the Final Punch List and will include 150% of the estimated cost to complete each remaining item. The Owner may withhold from the final payment 150% of the estimated cost to complete the Work. The amount retained by the Owner for Final Punch List items will be released to the Design-Builder as each item is completed. Upon Final Completion of the Project, and submission of Owner's Release of Claims form, by Design- Builder, final payment of all remaining retention, if unencumbered, will be paid on all undisputed amounts no later than 30 calendar days after either Final Completion of the entire Project or recordation of a Notice of Completion (whichever is later), and in no event later than the time prescribed under Section 7107 of the Public Contract Code.

10.2.1 Contract Price Reduction. Upon Final Completion of the Project, the Owner after written notice to Design-Builder may reduce the Contract Price to reflect costs charged to the Design-Builder, back-charges or payments withheld pursuant to the Contract Documents.

10.2.2 Evidence. Before issuance of final payment, Owner may request satisfactory evidence that: (i) all payrolls, materials bills and other indebtedness connected with the Work have been paid or otherwise satisfied; (ii) insurance required by the Contract Documents will remain in force after final payment and will not be canceled or allowed to expire until at least 30 calendar days prior written notice has been given to the Owner; (iii) the Design- Builder knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract

Documents, (iv) surety, if any, has consented to final payment, ,(v) Owner has received all close-out documents required by the Contract Documents; and (vi), other data establishing payment or satisfaction of obligations, such as releases and waivers of stop payment notices, claims, security interests or encumbrances arising out of this Agreement have been received.

10.2.3 Payment Not Acceptance of Work. Approval of an invoice (final or otherwise) or partial or entire use or occupancy of the Project by the Owner will not be used as conclusive evidence that the Work was properly performed or constitute acceptance of Work that is not in accordance with the Contract Documents.

10.3 Payments Withheld. In addition to the 5% retention, the Owner may withhold payments due to the Design-Builder that may be necessary to cover: (i) stop payment notice claims; (ii) defective Work not remedied; (iii) failure of Design-Builder to make proper payments to its Design Professionals, Subcontractors or suppliers; (iv) damage to Design Professionals, Subcontractors or third party caused by Design-Builder; (v) amounts due to the Owner for claims against Design-Builder; (vi) failure to provide Owner with timely schedule updates under Section 8.2; (vii) disputed amounts in the invoice; and (viii) legally permitted penalties.

10.4 Waiver of Claims. Acceptance of final payment by the Design-Builder constitutes a waiver of claims by Design-Builder and its Design Professionals, Subcontractors and suppliers except for those previously made in writing and identified by the Design-Builder as unsettled at the time of final invoice. The Design-Builder must acknowledge this waiver on a form provided by the Owner prior to Design-Builder's receipt of the final payment.

11. INDEMNIFICATION

11.1 Indemnification. Design-Builder shall defend, indemnify, and hold harmless San Mateo County, and its trustees, officers, employees and agents, and their successors and assigns (collectively referred to as "Indemnitees") from and against all third party claims, demands, liability, suits, actions, costs or expenses (including reasonable attorneys' fees) for any and all loss or damage, including, but not limited to, personal injury or property damage, arising out of or resulting from allegations of:

a. The failure or alleged failure by any Design-Build Team member to comply with any applicable law, order, citation, rule, regulation, standard, ordinance or statute, including rules and regulations imposed by Cal-OSHA and caused by the act or omission of the Design-Builder;

b. The negligent act, omission, misconduct, or fault, or the alleged negligent act, omission, misconduct or fault of any Design-Build Team member;

c. Any and all claims by any governmental or taxing authority claiming unpaid taxes based on gross receipts, purchases or sales, the use of any property or income of any Design-Build Team member with respect to any payment for the Work made to or earned by the Design-Build Team member under the Contract Documents;

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

d. Any and all stop payment notices and/or liens filed in connection with the Work, including all expenses and attorneys' fees incurred by the Owner in discharging any stop payment notice or lien, provided that the Owner is not in default on payments owing to the Design-Builder with respect to such Work;

e. Failure of the Design-Builder to comply with the Insurance provisions set forth in Paragraph 12;

f Any release of hazardous materials:

1. Brought onto the Site by any Design-Build Team member; or
2. Where the removal or handling involved negligence, willful misconduct, or breach of Contract by any Design-Build Team member; and
3. Nothing in this section shall require the Design-Builder to defend, indemnify or hold harmless the Indemnitees for the Indemnitees' sole negligence, willful misconduct, or active negligence.

11.2 Indemnification for Infringement of Intellectual Property Rights.

The Design-Builder agrees to fully defend, indemnify, and hold harmless the Indemnitees against any demand, claim, cause of action, suit, proceeding, or judgment that design, service, method, or product called for and provided by the Design-Builder or any Design-Build Team member (herein called "deliverables") that infringes or allegedly infringes any patent, copyright, trademark, service mark, trade dress, utility model, industrial design, mask work, trade secret, or other proprietary right of a third party (collectively "Intellectual Property Right").

The Design-Builder shall pay any and all costs of such defense and settlement (including interest, fines, penalties, costs of investigation, costs of appeals, and attorney 's fees), and will pay any and all costs and damages finally awarded against any of the Indemnitees. The Design- Builder shall have the exclusive right to conduct its legal defense.

In the event that any deliverable furnished hereunder, or called for in any design or services provided under this Agreement, is in any suit, proceeding, or judgment held to constitute an infringement on any third party's Intellectual Property Right, and its use is enjoined, the Design- Builder shall, at its own expense accomplish the following:

a. Procure the fully paid-up, irrevocable, and perpetual right for the Owner to continue using the deliverable;

b. Modify the deliverable; or

c. Provide for the replacement of the deliverable with an alternative product that is functionally equivalent to the deliverable.

If the Design-Builder is unable to provide the Owner with one of the forms of relief described above, the Design-Builder shall also reimburse to the Owner the total paid by the Owner for the deliverable that is held to constitute an infringement.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

11.3 Indemnification for Design Defects. To the fullest extent permitted by law, the Design-Builder shall fully defend (with counsel acceptable to the Owner), indemnify, and hold harmless Indemnitees from any and all claims, demands, causes of action, damages, costs, expenses (including legal, expert witness, and consulting fees and costs), losses, or liabilities of whatsoever nature that arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of the Design-Builder, its employees, any of the Design-Builder's Design Professionals or Subcontractors of any tier, or anyone for whom Design-Builder or any of its Design Professionals or Subcontracts may be liable, in relation to any of their design services, including but not limited to errors, omissions, inconsistencies, inaccuracies, deficiencies, or other defects whether or not contained in the Construction Documents furnished by the Design- Builder, and whether or not such errors, omissions, inconsistencies, inaccuracies, deficiencies, or other defects were also included in the Contract Documents provided by the Owner. The Design-Builder agrees that, because the Bridging Contract Documents are preliminary and conceptual in nature and are subject to review and modification by the Design-Builder, such documents shall not be deemed a "design furnished" by the Owner or any of the other Indemnitees, as the term "design furnished" is used in Civil Code Section 2782, and that this clause is governed by Civil Code Section 2782.8. In addition, Design-Builder shall defend the Owner, or pay for the costs of such defense, to the extent of Design-Builder's proportionate percentage of fault for the underlying claim. In addition, Design-Builder shall defend the Owner, or pay for the costs of such defense, to the extent of Design-Builder's proportionate percentage of fault for the underlying claim.

11.4 Exception. The indemnification provisions in this Section 11 will extend to claims occurring after this Agreement is terminated as well as while it is in force. However, Design- Builder will not be obligated to indemnify or provide a defense to the Indemnitees from claims arising from the active negligence or willful misconduct of Indemnitees. If any of the Indemnitees are actively negligent, the Design-Builder will continue to indemnify and provide a defense to Indemnitees but only to the extent and in proportion to the degree that the Indemnitees were not actively negligent. Nothing contained in Section 11 will be construed to impose any obligation in conflict with the provisions of Civil Code section 2782 and/or Insurance Code section 11580.04. In the event of a conflict, the provision conflicting with Civil Code section 2782 and/or Insurance Code section 11580.04 will be modified to limit Design-Builder's obligations to the greatest extent permitted by law. The section does not apply to the duty to defend claims arising from design defects, which obligation is addressed separately in Section 11.3. The section does not apply to the duty to defend claims arising from design defects, which obligation is addressed separately in Section 11.3.

11.5 Duty to Defend. Except as otherwise provided herein, the Design-Builder will defend all claims defined in Section 11.1 at its own cost, expense and risk and pay and satisfy any judgment or decree that may be rendered against any Indemnitee arising out of a claim, or reimburse Indemnitee(s) for any and all legal expenses incurred by any of them in connection with the claim or in enforcing the indemnity granted in this section. The duty to defend will apply, and Design-Builder will be required to furnish a defense, regardless of whether the matter has been adjudicated. The Owner shall have the right to approve counsel defending it, which approval will not be unreasonably withheld. Following the resolution of any such

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

dispute, the Owner shall reimburse Design-Builder for the costs incurred by Design-Builder for any Indemnitees' defense, to the extent of the Owner's proportionate responsibility or fault, as determined by court or arbitrator or as agreed by settlement or otherwise.

12. INSURANCE AND BONDS

12.1 Design-Builder's Insurance Requirements. The Owner and its trustees, officers, employees, agents, and volunteers will be a named additional insured under all of Design- Builder's insurance policies except errors and omissions policies and workers' compensation policies. Likewise, the Design-Builder will require all Subcontractors to name the Owner, and its trustees, officers, employees, agents, and volunteers as additional insured on all Subcontractor policies except errors and omissions policies and workers' compensation policies. Before commencement of the Work, the Design-Builder will provide certificates of insurance and endorsements per the following as evidence of insurance and Owner's, and Owner's additional insured status under those policies.

12.2 DBE Provided Insurance

12.2.1 General DBE shall procure and maintain for the duration of this Contract at its sole cost and expense, insurance against claims which may arise from, or in connection with, the performance of the Work by, or on behalf of (whether directly or indirectly), the DBE.

Each insurance policy required by this Contract shall be endorsed to state that coverage shall not be suspended, voided, canceled, or reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to the Owner, except that ten (10) days' prior written notice shall apply in the event that cancellation for non-payment of premium.

12.2.2 Commercial General Liability: $2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit; and

12.2.3 Workers' Compensation and Employers' Liability: Workers' Compensation limits as required by the California Labor Code and Employers Liability limits of $1,000,000 per accident; and

12.2.4 Automobile Liability: $1,000,000 combined single limit per accident for bodily injury and property damage.

12.2.5 Builder's Risk/Course of Construction: DBE shall procure and maintain in effect a Builders' Risk (course of construction) insurance for completed value of the Work. No deductible shall exceed $100,000, per occurrence except for earthquakes, earth movement or flood. Builder's Risk Policies shall contain the following provisions:

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

12.2.5.1 Owner and Subcontractors of every tier shall be named as an additional insured loss payee; and

12.2.5.2 Coverage shall contain a mutual waiver of subrogation in favor of the Design Build Entity, Subcontractors at every tier, and the Owner, its officials, employees, agents, and only to the extent of onsite activity, design or engineering professionals.

12.2.5.3 Owner and Design Build Entity will share equally in payment of all deductibles from a covered event due to act of God events including earthquake, earth movement, and flood.

12.2.6 Contractor's Pollution Liability Insurance on an occurrence basis, with limits of at least $10,000,000 per occurrence and $10,000,000 policy term aggregate for bodily injury, property damage, cleanup costs and claim expenses, arising at or emanating from the Project Site arising from all operations performed on behalf of the Design Build Entity. Subcontractors will provide Pollution Liability coverage as required by their specific Subcontract.

Such insurance shall provide liability coverage for both sudden and gradual releases arising from the Work. CPL policy shall name Owner, Design-Build Entity and all Subcontractors of all tiers as insureds.

Contractor shall be responsible at its own expense for an obligation for each loss payable under this insurance that is attributable to the Design-Build Entity's acts, errors, or omissions, or the acts, errors, or omissions of any of its Subcontractors, or any other entity or person for whom Design-Build Entity may be responsible. The amount of the obligation shall be based on the amount of the initial Contract Price, as follows:

12.2.6.1 The portion of the obligation applying to the Design-Build Entity or Subcontractor shall be the responsibility of the Design Build Entity and shall remain uninsured. Design Build Entity shall promptly pay its charge pertaining to any loss. The Owner, in addition to its other remedies, may back charge Design-Build Entity for the obligation and deduct the back-charged amount from Design-Build Entity's next progress payment or final payment.

12.2.7 Professional Liability Errors and Omissions Insurance: $500,000 per claim/$1,000,000 aggregate limit

12.2.8 Waivers

12.2.8.1 Owner and Design-Build Entity waive all rights against each other and any of their consultants, including Construction Manager, Bridging Architect and their consultants to the extent of their onsite exposure, separate contractors, if any, Subcontractors, Designers, agents and employees, each of the other, and any of their contractors, subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

covered by Builder's Risk insurance obtained pursuant to paragraph 1.2 above, or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner in good faith. Owner or Design-Build Entity, as appropriate, shall require of the separate contractors, if any, and the Subcontractors, Designers, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to any individual or entity even if such individual or entity (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium directly or indirectly, and (c) whether or not such individual or entity had an insurable interest in the property damaged. The only exceptions to this waiver of subrogation are for claims that may be covered by any Professional Liability insurance to the extent that insurance responds to any loss.

12.2.8.2 Owner waives subrogation rights under the Contractor's Pollution Liability Policy, to the greatest extent permitted by law, against all other project participants, including Design-Build Entity and Subcontractors of any tier.

12.3 Performance and Payment Bonds. Prior to commencement of the Construction Phase and within 10 days of the Notice to Proceed, the Design-Builder will furnish a payment bond and a performance bond to the Owner, each in the amount equal to 100% of the amount of the Construction Phase Price, covering all on-site construction work and warranties, on the forms acceptable to the Owner. The payment and performance bonds will be provided prior to commencement of Work. The surety supplying the bonds must be an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as a surety in the State of California and satisfactory to the Owner. Failure to furnish the required payment and performance bonds to the Owner constitutes a default under this Agreement and the Owner will have all of the rights and remedies provided under the Contract Documents and afforded by law including, but not limited to, forfeiture of the bidder's bid deposit or bond to the Owner and the Owner may award this contract to another responsive and responsible bidder, or may call for new bids. Full compensation for furnishing the payment and performance bonds are included in the Contract Price.

12.4 Escow Account For Off-Site Manufactured Housing. Prior to commencement of the off-site Manufactured Housing Construction Phase, an escrow account will be established to provide 25% down payment for start of fabrication and balance due upon delivery of housing unit to project site.

12.5 Payment of Subcontractors. Without limiting the responsibilities of Design-Builder and its surety under the terms of this Agreement, the Design-Builder and its surety agree to promptly pay all lawful claims of Subcontractors, materialmen, laborers, persons, firms or corporations for labor or services performed or materials, supplies, machinery equipment, rentals, fuels, oils, tools, appliances, insurance and other items furnished, used, or consumed in connection with the

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

prosecution of the construction work including Change Orders, and will indemnify and save harmless the Owner, and Owner from and against all liability loss, damage and expense, including interest, costs and attorneys' fees, which the Owner, and Owner and/or its surety may sustain by reason of Design-Builder's or its surety's failure to do so.

13. WARRANTY OF THE WORK

13.1 Design-Builder Warranty. The Design-Builder shall provide a two-year warranty on all furnished labor and materials, commencing on the date of Final Completion of all Work under the Agreement. Design-Builder shall perform all required corrective work, and shall be responsible for the cost of all labor, materials, equipment, transport, installation and re-testing required for the corrective work. Moreover, in the event that corrective work is required under the Design-Builder Warranty, a one-year warranty shall apply to the corrected work covering any discrepancies and defects in the corrected work that are discovered after the corrected work is accepted.

The Design-Builder Warranty shall warrant that:

a. The Work conforms to the requirements of the Contract Documents;

b. All Design Services furnished under the Agreement conforms to all professional engineering principles generally accepted as standards of the industry in the State of California and complies with the standard of care of a reasonable professional that is performing the same or similar work, at the same time and locality and under the same or similar conditions;

The construction Work furnished under the Agreement is free from defects in workmanship, and was performed in a workmanlike manner and conforms to the standards of care and diligence normally practiced by recognized construction firms performing construction of a similar nature in the State of California, and conforms to the requirements of the Bridging Contract Documents and the 100% Construction Documents, as these documents may have amended during the course of Work under the Agreement;

c. Materials and equipment furnished under the Contract Documents are of good quality and new;

d. The Facilities are fit for the purposes intended in the Contract Documents;

e. The Facilities shall be free of defects in design, material, and workmanship; and

f. The Facilities shall function up to the standards set forth in the Bridging Contract Documents and all other reliability standards established in the Contract Documents.

13.2 **Subcontractor Warranties.** The Design-Builder shall obtain one year warranties commencing on the date of Final Completion of all Work under the Agreement from all Subcontractors and Design-Build Team members providing design services, labor, equipment, materials, supplies and maintenance equipment; require all such warranties to be executed in writing for the benefit of the Owner and enforce all warranties for the benefit of the Owner, if so directed by the Owner. Warranties by

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

subcontractors are in addition to, and do not replace or reduce, any other warranty obligations stated in the Contract Documents, including but not limited to the Design-Builder Warranty. All such Subcontractor warranties from Design-Build Team members shall run directly to and be enforceable by the Design-Builder and the Owner, and their respective successors and assigns.

The Design-Builder hereby assigns to the Owner all of the Design-Builder's rights and interest in all warranties that are received by the Design-Builder from any Subcontractor or Design-Build Team members unless necessary for enforcement. All such warranties shall survive Final Completion, acceptance, final payment, and termination of the Agreement if the stated warranty period extends beyond the Final Completion, acceptance, final payment, and termination of the Agreement.

13.3 Manufacturers' Warranties. The Design-Builder shall obtain manufacturers' warranties for all equipment procured and installed on the Project and shall assign all such warranties to the Owner prior to Final Completion. Owner and Design-Builder shall agree upon acceptable warranty periods for each item of equipment prior to the procurement of the equipment of not less than one year from Final Completion. Manufacturers' warranties shall all commence on Final Completion.

13.4 Remedy. The Design-Builder shall remedy, at its own expense, any failure to conform to the warranty requirements set forth in this Section 13 Warranty of the Work. If the Design-Builder fails to remedy any such failure within a mutually agreeable timeframe after receipt of notice (or immediately in the case of an emergency), the Owner shall have the right in its sole discretion to replace, remove, or otherwise remedy the failure at the Design-Builder's expense.

13.4.1 Notification to Design-Builder. The Owner shall notify the Design-Builder, in writing, within a reasonable time after the discovery of any failure to conform to the warranty requirements set forth in this Section 13, Warranty of the Work.

13.4.2 Warranties Do Not Limit the Design-Builder's Liability. The foregoing warranties are in addition to all rights and remedies available under the Agreement or applicable law, and shall not limit the Design-Builder's liability or responsibility imposed by the Agreement or applicable law with respect to the Work, including:

a. Liability for design defects;

b. Latent construction defects;

c. Strict liability;

d. Negligence; and

e. Fraud.

13.5 Assignment of Warranty. Upon providing written notice to the Design-Builder, the Design-Builder's warranties, including all warranties from Subcontractors and Design-Build Team members that have been assigned to the Design-Builder, shall be immediately assignable by the Owner to any entity, in the Owner's sole discretion.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

14. OWNERSHIP AND USE OF DOCUMENTS

14.1 Ownership of Construction Documents. The drawings, specifications and other documents prepared by or on behalf of the Design-Builder pursuant to this Agreement (including, without limitation, the Construction Documents), including all drafts, and the copyright thereto, shall at all times be and remain the property of the Owner, whether or not the Project for which they are made is commenced, so long as the Owner shall not be in default of its obligations under this Design-Build Agreement. Neither the Design-Builder nor any subcontractor or material or equipment supplier shall own or claim a copyright in such drawings, specifications and other similar or related documents, and Owner shall retain all common law, statutory, and other reserved rights with respect thereto. All copies of such documents shall be delivered by the Design-Builder to the Owner upon completion of the Work or upon the prior termination of this Agreement. Such drawings, specifications and other documents shall be used by the Design-Builder solely with respect to this Project and shall not be used by the Design-Builder or any subcontractor or material or equipment supplier on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner in each instance.

14.2 Ownership under Termination. Should the Owner elect to terminate this agreement, the Design-Builder agrees that (1) for itself and its Architect, that the Owner will be the sole and absolute owner of the 100% Construction Documents, and shall have the right to use or to modify the 100% Construction Documents in any manner it wishes, including, without limitation, using the 100% Construction Documents in construction contracts with third parties; and (2) there shall be no limitation on the Owner by the Design-Builder should the Owner subsequently engage the Design-Builder's design professional for services on this project or for other services.

14.3 Confidentiality. The documents, materials and information prepared by or on behalf of, or furnished to the Design-Builder in connection with the Work, including, without limitation, the RFP, the Contract Documents, the 100% Construction Documents and any other plans, specifications, drawings, shop drawings or details relating to the Project and the terms and provisions of this Agreement, shall be kept strictly confidential by the Design-Builder. The Design-Builder shall not disclose, furnish or make known or accessible to or use for the benefit of anyone, any such documents, materials or information or make available any reports, recommendations and/or conclusions which the Design-Builder may make for the Owner to any person, firm or corporation or use such documents or information in any manner whatsoever without obtaining the Owner's prior written approval in each instance unless such disclosure is required by law. The Design-Builder acknowledges that the Owner will incur significant damages in the event of a breach by the Design-Builder of its obligations under this Section 14.3. The provisions of Article 14 shall survive the expiration or prior termination of this Agreement.

14.4 Licensing. The Design-Builder, its Design Professionals and Design-Build Subcontractors are granted a limited, non-exclusive, license to use and reproduce applicable portions of the Design and Construction Documents and other documents prepared by the Design-Builder for use in the performance of the

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Design-Builder's Work under this Agreement. Additionally, the Owner grants the Design-Build Team members a non-exclusive, perpetual license for use, or display of the Project information solely for either educational or promotional purposes.

14.5 Exception. Nothing contained in Section 14.1 will be construed to limit the Design-Builder, its Design Professionals and Design-Build Subcontractors rights, title and interest to continue to use their respective general design details that each of them uses or has used on multiple projects, or new standard design details that were developed during design of this facility.

14.6 Copies. All copies made under this license will bear the statutory copyright notice, if any, shown on the Design and Construction Documents and any other documents prepared by the Design-Builder, its Design Professionals and Design-Build Subcontractors. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project will not be construed as publication in derogation of the Owner's copyright or other reserved rights and interests.

15. ACCOUNTING RECORDS

15.1 Audit. In accordance with Government Code Section 8546.7, records of both the Owner and the Design-Builder will be subject to examination and audit by the State Auditor General or the County of San Mateo for a period of 10 years after final payment. Design-Builder will make available to the Owner any of the Design-Builder's documents related to the Work and project accounting records immediately upon request of the Owner as set forth in Section 15.2.

15.2 Records. The Design-Builder will keep full and detailed accounts and exercise controls as may be necessary for proper financial management under this Agreement. In addition to the State Auditor rights above, the Owner will have the right during normal business hours to audit and copy ore request copies of the Design-Builder's documents related to this Project including, but not limited to, accounting records, books, estimates, correspondence, instructions, drawings, receipts and invoices for materials, supplies and equipment, temporary facilities, etc., contracts, purchase orders, vouchers, memorandums, Change Orders and all substantiating documentation such as general conditions and general requirements, certified payroll, and other data relating to the Cost of Work, the Contract Price in order to evaluate accuracy and completeness of Design-Builder's billing. The Design-Builder will preserve all Project records for a period of at least 3 years after final payment, or for such longer period as may be required by law. The Design-Builder will incorporate Section 15 accounting and auditing provisions into all Design Professional agreements and Subcontracts and require Design Professionals and Subcontractors to keep detailed and accurate accounting records for their portion of the Work for a period of at least 3 years.

16. TERMINATION, SUSPENSION AND ABANDONMENT

16.1 Termination for Fault. The Owner may terminate this Agreement upon not less than 7 calendar days' written notice and an additional 7 calendar days to commence curing upon the Design-Builder's failure to perform any material obligation under the Agreement. The Design-Builder will have 7 days after receiving

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

reasonably detailed written notice thereof from the Owner, provided that, if the nature of the breach is such that it will reasonably require more than 7 days to commence curing, the Owner may not terminate so long as Design-Builder (1) promptly, upon receipt of notice to cure, submits a plan to initiate all actions reasonably necessary to correct the default and prevent its reoccurrence, and (2) Owner accepts Design- Builder's plan, and (3) Design-Builder commences and continuously implements the plan to Owner's satisfaction.

The Owner may also terminate this Agreement without notice or opportunity to cure upon the occurrence of the following Design-Builder events of default: 1) the failure to obtain and maintain any contract security instrument, 2) the failure to achieve acceptance of the Facilities through the acceptance process, and 3) the insolvency or bankruptcy of the Design-Builder. The notice will set forth the reason for termination and the effective date of termination. If the Owner terminates this Agreement for cause, the Design-Builder will not be entitled to any further payments except for work already completed. Unless otherwise limited herein, nothing stated in this paragraph will prevent the Owner from pursuing and recovering any damages allowed by law from Design-Builder arising out of a breach of this Agreement. If a court of competent jurisdiction deems that termination of the Design-Builder was wrongful or otherwise improper, the termination will be deemed a termination for convenience under Section 16.3.

16.2 Suspension By Owner. If the Project is suspended by the Owner and not due to any fault of the Design-Builder or any of its Design Professionals or Subcontractors, the Design- Builder will be entitled to receive payment for all Work performed as of the effective date of the suspension, plus any documented reasonable direct costs incurred by Design-Builder to implement the suspension. The written notice of suspension will set forth the reason for suspension and the effective date of suspension. If the Project is resumed, and provided that the suspension was not caused or due to any fault or neglect of the Design-Builder or any of its Design Professionals or Subcontractors, then the Design-Builder's compensation will be equitably adjusted through Change Order under Section 9.1.4 and the Contract Time will be equitably adjusted for the additional time required to achieve Final Completion.

16.3 Termination For Convenience. The Owner may terminate this Agreement, in whole or in part, for convenience upon 30 calendar days' written notice at any time. The notice will state the extent of the termination and effective date of termination. For convenience termination during the Preconstruction Phase and through the issuance of a Notice to Proceed for Construction Phase, the Design-Builder will be entitled to receive payment for the percentage of Preconstruction Phase work completed, not to exceed the Preconstruction Phase lump sum amount. For convenience termination following the issuance of a Notice to Proceed for Construction Phase Services, the Design-Builder will be entitled to payment for all Work performed as of the effective date of termination based on the compensation provisions set forth in Section 7 of this Agreement, as well as reasonable demobilization costs and unmitigable costs incurred by termination. In the event that the Owner terminates the Design-Build Agreement for convenience, Design-Builder must assign all subcontracts executed pursuant to the performance of the Design-Build Agreement to Owner promptly upon request. Design-Builder is entitled to compensation for all authorized payments made to any subcontractor

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

prior to termination, which payments will be credited to Owner under the respective subcontracts, plus Design-Builder's approved costs that are incurred prior to any termination. In addition, in the event Owner terminates the Design-Build Agreement for convenience, Design-Builder must execute any documents establishing Owner's ownership of completed Work upon request. Any dispute over the amount to be paid upon termination will be resolved in accordance with the claims procedures set forth in Section 14.12 of the Supplemental Conditions.

17. MISCELLANEOUS PROVISIONS

17.1 Governing Law. This Agreement will be governed and construed in accordance with the laws of the State of California without regard to the principles of the conflict of laws. The Parties agree that any claim or enforcement of a judgment or alternative dispute award will be filed with the appropriate court of law in San Mateo County.

17.2 No Solicitation of Employees. Owner will not solicit or employ any of Design-Builder's Project personnel for the duration of the Project.

17.3 Assignment. The Owner and Design-Builder, respectively bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representatives of the other party with respect to all covenants of this Agreement. Neither Owner nor Design-Builder will assign this Agreement without the written consent of the other, and such consent will not be unreasonably withheld or delayed.

17.4 Severability. The terms and conditions of this Agreement will be interpreted in accordance with their plain meaning, and not strictly for or against either party. Any rule of construction or interpretation to the contrary will be of no force or effect with respect to this Agreement. If a court of competent jurisdiction finds any term or provision of this Agreement to be void or unenforceable for any reason that term or provision will be deemed severed, and the remainder of the Agreement will remain in full force and effect according to its terms and provisions, to the maximum extent permitted by law.

17.5 No Third Party Beneficiaries. Nothing contained in this Agreement creates a contractual relationship with, or a cause of action in favor of any third party against, either the Owner or Design-Builder. Owner and Design-Builder acknowledge and agree that the obligations of the Design-Builder are solely for the benefit of the Owner and are not intended in any respect to benefit any other third parties.

17.6 Waiver. No action or failure to act by the Owner or Design-Builder will constitute a waiver of a right or duty afforded them under this Agreement, nor will such action or failure to act constitute approval of or acquiescence in a breach of this Agreement, unless specifically agreed to in writing.

17.7 Time is of the Essence. Time is of the essence with respect to each and every provision of the Agreement and any subsequent Change Orders.

17.8 Notice. Any notice required to be given by this Agreement will be in writing and deemed effective upon personal delivery, or 1 business day after being sent via

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

registered or certified mail return receipt requested or by overnight commercial courier providing next business day delivery and addressed to the following respective parties:

To Owner:	County Executive Office - Hall of Justice Attention: Iliana Rogriguez, Assistant County Executive 400 County Center, 1st Floor Redwood City, CA 94063
Copy to:	Office of the San Mateo County Counsel Attn: Brian Wong,Deputy County Counsel 400 County Center, 6th Floor Redwood City, CA 94063
To Design-Builder:	<Name/Address>

17.9 Counterparts. This Agreement may be executed in counterparts, each of which will be deemed an original, and all of which when taken together will constitute one instrument. The counterparts of this Agreement, and all amendments, must be manually executed, but the exchange of copies of this Agreement and of manually executed signature pages by facsimile or by electronic mail as an attachment in portable document format (.pdf) to the addresses provided in this Agreement shall constitute effective delivery of this Agreement as to the Parties and may be used as a fully binding original in lieu of the original Agreement for all purposes.

17.10 Modifications. All modifications to the terms and conditions set forth in this Agreement must be in writing and signed by an authorized representative of both parties.

17.11 Section Headings. The Section headings contained in this Agreement are for reference purposes only and will not in any way affect the meaning or interpretation of this Agreement.

17.12 Legal Citations. Legal citations to statutory requirements are included in the Agreement for convenience and an omission of any statutory requirement will not relieve the Design-Builder or its Design Professionals and Subcontractors from compliance with the law.

17.13 Exhibits. The Supplemental Conditions and following Exhibits are incorporated by reference into the Agreement as though set forth in full.

17.14 Entire Agreement. This Agreement represents the entire integrated agreement between the Owner and Design-Builder and supersedes all prior oral and written negotiations, representations or agreements by the parties with respect to this

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

subject matter. This Agreement is entered into as of the Effective Date first written above.

COUNTY OF SAN MATEO	**DESIGN-BUILDER**
	DocuSigned by: JASON TAYLOR 0471E20B80BC40E...
Signature	Signature
	JASON TAYLOR
Printed Name	Printed Name

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhibit 1
SUPPLEMENTAL CONDITIONS
DESIGN-BUILD AGREEMENT

TABLE OF CONTENTS

Page

1. DEFINITIONS 1
2. WORK RESTRICTIONS 6
3. SOILS INVESTIGATIONS AND HAZARDOUS MATERIALS 6
4. SAFETY 7
5. QUALITY ASSURANCE AND QUALITY CONTROL 8
6. TEMPORARY FACILITIES 10
7. SURVEYING 12
8. DEMOLITION 12
9. PROTECTION OF WORK AND PROPERTY 13
10. WORKERS AND WORKERS' COMPENSATION 14
11. CHANGE IN NAME OR LEGAL ENTITY 14
12. PROHIBITED INTERESTS 14
13. LAWS AND REGULATIONS 14
14. STATUTORY PUBLIC WORKS CONTRACT REQUIREMENTS 15

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SUPPLEMENTAL CONDITIONS TO DESIGN-BUILD AGREEMENT

1. DEFINITIONS

1.1 "**Agreement**" means the Design-Build Agreement between County of San Mateo and Design-Builder, dated_____, 2024, including the Supplemental Conditions to the Agreement and all Exhibits.

1.2 "**Allowance**" is a non-binding, good faith, estimate of all Cost of Work attributable to the Allowance item carried in the Contract Price. An Allowance is necessary in certain circumstances because the item, components and/or systems are anticipated but undefined at the time that the Contract Price is set, and may require further development by the, Owner, or other Design Professionals.

1.3 "**Background Documents**" means any existing drawings Owner provides to Design-Builder for reference. Background Documents are not part of the Contract Documents.

1.4 **"Bridging Contract Documents"** is defined in Section 4.2

1.5 "**Change Order**" is defined in Section 9.1.

1.6 "**Construction Documents**" means the documents developed by Design-Builder that establish all requirements for work during the Construction Phase of the Project. The Construction Documents will be informed by, and be consistent with the Bridging Contract Documents.

1.7 "**Construction Phase Services**" means all labor, materials, equipment and appurtenances provided by the Design-Builder and its Subcontractors to complete construction of the Project in strict accordance with the 100% Construction Documents and other components of the Contract Documents, ensure that all mechanical and support systems, as applicable, are properly and fully operational, and obtain all required certificates, approvals, and temporary or permanent permits for occupancy, use and completion of the Project have been issued by appropriate governmental authorities.

1.8 "**Contract Documents**" are set forth in Section 3.1 of the Agreement and include the Agreement inclusive of Exhibits, the Supplemental Conditions to the Agreement, and the Construction Documents, to be developed by the Design-Builder, and all subsequent contract modifications issued after execution of the Agreement, such as Change Orders.

1.9 "**Contract Price**" is set forth in Section 7 of the Agreement and reflects the sum total of all compensation due to the Design-Builder for all design and construction services under the Agreement. The Contract Price is the sum of the Preconstruction Price and the Construction Price.

1.10 "**Contract Time**" is the time within which the Design-Builder must achieve Final Completion of all Work on the Project. The Contract Time is set forth in Section 8.1."**Daily Construction Reports**" means the daily log kept by the Design-Builder that describes the

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

weather, each Subcontractor's work on the site, the number of workers per trade, identification of equipment, construction work accomplished, problems encountered, and other similar relevant data such as accidents, service connections or disconnections, construction work stoppage, delays, material and labor shortages, and any applicable orders or requests from governing authorities.

1.11 "**Design-Builder, Design-Build Entity**" the entity that will enter into the Agreement with Owner and that will be the single point of accountability to Owner for delivering the services and the Project.

1.12 "**Design-Build Subcontractors**" means all Subcontractors that contract directly with the Design-Builder to perform design and construction services related to a specific trade or discipline.

1.13 "**Design-Build Team**" includes the General Contractor, Design Professionals and Design-Build Subcontractors members of the Design-Builder performing Preconstruction Phase Services and Construction Phase Services for the Project.

1.14 **"Design Guide Illustrations"** mean the drawings prepared by Owner and made a part of the Bridging Contract Documents.

1.15 "**Design Professionals**" means the structural engineer, and any other design consultants who are performing design services for the Project on behalf of Design-Builder but do not perform any Construction Phase Services.

1.16 "**Design Services**" includes all required design work required to complete the Project, consistent with the Bridging Contract Documents.

1.17 "**Effective Date**" means the date that the Design-Builder and Owner entered into the Agreement, which is set forth on page 1 of the Agreement.

1.18 "**Facilities**" means all equipment, products, materials, controls, software, both individually and collectively as a completed system.

1.19 "**Final Completion**" occurs on the date when Design-Builder has achieved Substantial Completion; all Final Punch List items have been completed and accepted by the Owner; all close-out documentation required under the Project specifications has been transmitted to the Owner's Project Manager.

1.20 "**Final Completion Date**" is set forth in Section 8.1 of the Agreement.

1.21 **"Final Design Package"** is defined in Section 5.3 of the Design-Build Agreement.

1.22 **"Final Punch List"** is the punch list prepared by the Design-Builder in conjunction with the Owner after completing a Project walk-through upon Substantial Completion.

1.23 "**Force Majeure Event**" means an Act of God as defined under Public Contract Code section 7105, civil disobedience, an act of terror, or unavoidable casualties beyond the

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Design-Builder's control, and not due to any act or omission of the Design-Builder or its Design Professionals and/or Subcontractors, that necessarily extends the Final Completion Date.

1.24 "**Hazardous Materials and Substances**" means any substance, product, waste, or other material of any nature that is or becomes listed, regulated or addressed under one or more of the following Environmental Laws: (1) CERCLA, (2) Hazardous Materials Transportation Act, (3) RCRA, (4) the Clean Water Act, (5) the Toxic Substance Control Act, (6) HSAA, (7) the California Porter-Cologne Water Quality Control Act, (8) the California Hazardous Waste Management Act, (9) the California Safe Drinking Water Act, (10) the California Waste Management Act, and (11) any other Federal or State law or local ordinance concerning hazardous, toxic or dangerous substances, wastes, or materials.

1.25 "**Key Personnel**" means the Design-Builder's personnel identified as key to the overall success of the Project, and, at a minimum, including those positions defined as Key Personnel in the RFQ and RFP. The Design-Builder's Key Personnel are specifically identified in **Exhibit 5B.**

1.26 "**Owner**" means San Mateo County - County Executive's Office.

1.27 "**Owner-Elected Changes**" are changes in the Work directed by the Owner that may impact the Contract Price, and Final Completion Date and are not: (i) reasonably inferable from the Bridging Contract Documents or Contract Documents; or (ii) required as a result of design errors and omissions.

1.28 "Owner's Minimum Requirements" mean the performance specifications and prescriptive specifications prepared by Owner and made a part of the Bridging Contract Documents.

1.29 "**Owner's Suspension of Work**" is when the Owner elects to suspend progress of Work on the Project under Section 16.2 of the Agreement.

1.30 "**Party**" or "**Parties**" means the Design-Builder or the Owner in the singular or the Design-Builder and Owner collectively who have executed the Agreement.

1.31 "Preconstruction Phase Services" means all services, labor, materials, equipment and appurtenances provided by the Design-Builder and its Subcontractors to prepare a Preliminary Design for the Project, as further defined in **Exhibit 3.**

1.32 "**Preconstruction Survey**" Design-Builder's deliverable comprised of a comprehensive preconstruction survey of the Work site as described in more detail in the Scope of Work.

1.33 "**Product Data**" includes illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Design-Builder's Subcontractors illustrating materials or equipment for some portion of the construction work.

1.34 "**Project**" means the completion of the Preconstruction Phase Services and Construction Phase Services.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

1.35 "Project Site" means that certain real property located at 880 Stone Pine, Half Moon Bay, CA 94019, commonly known Stone Pine Cove.

1.36 "**Project Baseline Schedule**" means the approved critical path schedule prepared by the Design-Builder for performance of all Work within the Contract Time, as approved by the Owner.

1.37 "**Punch List**" is a list prepared by the Owner's Project Manager, when Design-Builder considers a portion of the construction work substantially complete, that includes all items that are incomplete or unsatisfactorily finished and a schedule for their completion.

1.38 "**Request for Information**" ("RFI") means written requests prepared by the Design-Builder and/or its Subcontractors requesting clarification about design or raising coordination issues that impact design, cost or schedule. RFIs will be handled internally by the Design-Builder, with copies to the Owner.

1.39 "**Samples**" means physical examples of materials, equipment or workmanship required by the Construction Documents that are used to establish standards by which the construction work will be judged.

1.40 "**Shop Drawings**" means drawings, diagrams, and other data specially prepared by the Design-Builder and/or its Subcontractors, manufacturers, suppliers or distributors to demonstrate the way in which materials and equipment will perform in accordance with the design illustrated in the Construction Documents. Shop Drawings will be approved by Design- Builder, but Owner will also review.

1.41 "**Site Logistics Plan**" will provide phasing, establish the areas of the site that will be used for trailers, deliveries, staging, ingress and egress, location of major pieces of equipment, storage containers, stockpiles of materials, clearways used for emergency access, environmental controls, trailers for Design-Builder and Owner, parting facilities for Design- Builders, employees, and Owner, access road, fence line, etc.

1.42 "Specifications" means the component of the Construction Documents separate from the drawings, addressing all required materials, products and equipment, their installation and operation, quality assurances, reference standards, submittal requirements etc., not already addressed in the OMRs. The Specifications shall be developed in conjunction with the Construction Specifications Institute ("CSI") 50 Division/Three Part Format, as established in the CSI Manual of Practice.

1.43 "**Staffing Plan**" means the plan submitted by the Design-Builder with its proposal.

1.44 "**Subcontractor**" means all contractors under direct contract with Design-Builder for performance of a portion of the construction work as well as any lower tier-subcontractors. The term subcontractor includes Design-Build Subcontractors.

1.45 "**Submittals**" includes Shop Drawings, Product Data, Samples and similar documentation required by the Project specifications or other Construction Documents.

1.46 "**Substantial Completion**" means completion of all Preconstruction Phase Services and Construction Phase Services in accordance with the Contract Documents, and sufficient

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

for the Owner to occupy and use the Facilities for their intended purpose; notwithstanding the foregoing, incomplete minor Punch List work that does not affect Owner's ability to occupy and use the Facilities for their intended purpose shall not prevent achievement of Substantial Completion.

1.47 "**Substantial Completion Date**" The Substantial Completion Date is set forth in Section 8.1 of the Agreement.

1.48 "**Supplemental Conditions**" means the Supplemental Conditions to the Agreement.

1.49 "**Unforeseen Site Conditions**" or "**Differing Site Conditions**" means discovery of unknown, unforeseen or differing site conditions, as defined in Public Contract Code section 7104, any unknown existing conditions in concealed spaces of the renovated portions of the Project.

1.50 "**Work**" means all work, including all services, labor, materials, equipment, tools, and appurtenances, necessary to complete the Preconstruction Phase Services and Construction Stage Services, as described in, or reasonably inferable from, the Contract Documents.

2. WORK RESTRICTIONS

2.1 Work Hours. All construction work will be performed between 7:00 a.m. and 7:00 p.m. unless further restricted by permit requirements or compliance with the US Department of Interior Department of Fish and Wildlife protective measures for construction during their breeding season. Design-Builder will provide Owner with written notice for any construction work that will need to be performed after hours. All after hour construction work requires Owner's written approval prior to commencement.

2.2 Signs. Design-Builder shall not erect any sign on the Project Site without the prior written consent of the Owner, which shall be at the sole discretion of the Owner.

2.3 Parking. Design-Builder works parking must be in Owner approved area.

2.4 Staging and Storage. Material will be stored only in the areas indicated on the Site Logistics Plan. Limited short term staging areas will be designated in the Site Logistics Plan.

3. SOILS INVESTIGATIONS AND HAZARDOUS MATERIALS

3.1 Site Inspection. The Design-Builder is required to examine the Project Site before submitting its proposal. Design-Builder may not rely exclusively on Background Documents to determine the status of soil conditions, except for issues involving Unforeseen and Differing Site Conditions.

3.2 Hazardous Materials and Substances. The Design-Builder is responsible for the proper handling, removal and disposal of the "**Hazardous Materials or Substances**" that were pre-existing at the Project Site before commencement of construction and are part of the Work. The Design-Builder will not be considered the generator of any pre-existing

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

hazardous materials on the Project Site. The Design-Builder is also responsible for all Hazardous Materials and Substances that it either requires through the Project design specifications or that are brought onto the Project Site by its employees and/or Subcontractors.

3.2.1 Unsafe or Hazardous Conditions. If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from any Hazardous Materials or Substances encountered at the Project Site, the Design-Builder will stop any part of the Work that it deems unsafe until corrective measures have been taken. If the Design-Builder fails to take corrective measures, the Owner may do so. Failure on the part of the Owner to stop unsafe practices, or the Owner's efforts to take corrective measures after the Design-Builder fails to do so, does not relieve or diminish the Design-Builder's safety responsibilities.

3.2.2 Verification. Upon discovery of any Hazardous Material or Substance that has not previously been identified in the Design-Builder's Hazardous Material Survey, the Design-Builder will immediately notify the Owner's Project Manager and stop all construction work in the area if necessary. The Design-Builder will retain the services of a licensed laboratory to verify the presence or absence of the preexisting Hazardous Material or Substance. If preexisting Hazardous Material or Substance is discovered, the Design-Builder will contact its licensed laboratory to verify that the condition has been rendered harmless before construction work recommences in the affected area. The Design-Builder may be entitled to an adjustment in the Contract Time if the Hazardous Material or Substance is deemed an Unforeseen or Differing Site Condition and impacts the Final Completion Date of the Project. If the Hazardous Material or Substance was pre-existing the Owner will pay for the services of the licensed laboratory. The Design-Builder will reimburse the Owner for the services of the licensed laboratory if the Hazardous Material or Substance was brought on-site by the Design-Builder or any of its Subcontractors or vendors.

4. SAFETY

4.1 Signs. The Design-Builder will erect and maintain, as required by existing conditions and performance of the construction work, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent sites and utilities.

4.2 Weekly Safety Meetings. The Design-Builder will hold weekly meetings with its Subcontractors to review Subcontractor compliance with the Design-Builder's Health and Safety Program.

4.3 Daily Jobsite Walks. The Design-Builder will also conduct daily jobsite inspections to verify that the construction work is being performed in a safe and workmanlike manner and in accordance with the Design-Builder's Health and Safety Program. The Design-Builder will provide written notice to its Subcontractors demanding immediate correction of any known safety violation.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5. QUALITY ASSURANCE AND QUALITY CONTROL

5.1 Quality Control Plan. The Design-Builder will prepare and submit to the Owner's Project Manager for approval a plan that describes the procedures and methods the Design-Builder will utilize to control the quality of the construction work. The Quality Control Plan must be approved before the start of construction. The Owner reserves the right to require revisions of the Quality Control Plan that are necessary to ensure the specified quality of the construction work. The Design-Builder will assign appropriate site personnel to oversee quality control. No change in the Quality Control Plan will be implemented without prior Owner approval. At a minimum the Quality Control Plan will provide information regarding the following:

5.1.1 Quality control supervision and document control.

5.1.2 Identification of personnel for required training and qualification activities.

5.1.3 Procedures for testing and inspections that identify individual inspection or testing points and acceptance criteria, and include provisions for recording results and the responsible inspection/test personnel.

5.1.4 Procedures for identifying what applicable technical and quality requirements will be required of vendors supplying materials, parts and services to ensure compliance with the Contract Documents.

5.1.5 Procedures for receiving, inspecting and accepting materials and equipment. The procedures will include, at a minimum, examination of the physical condition for compliance with the Contract Documents, purchase order and/or subcontract agreement, and identifying and processing any non-conforming goods.

5.1.6 Provisions for identifying and timely remedying non-conforming or defective construction work.

5.1.7 Documentation control to maintain records of the activities included in the Quality Control Plan. All documentation will be submitted to the Owner as part of the close-out documentation for this Project and therefore must be logically organized and indexed for reference.

5.2 Design Quality Control Plan. The Design-Builder will prepare and submit to the Owner for approval a Design-Quality Control Plan that describes the procedures and methods the Design-Builder will utilize to control the quality of the construction work. The Design Quality Control Plan must be approved before the start of construction. The Owner reserves the right to require revisions of the Design Quality Control Plan that are necessary to ensure the specified quality of the construction work. The Design-Builder will assign appropriate site personnel to oversee quality control. No change in the Design Quality Control Plan will be implemented without prior Owner approval.

5.3 Manufacturer's Field Services. To the extent required, the Design-Builder will engage in a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. All manufacturers'

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

field service reports must be in writing and included as part of the records turned over to Owner during close- out.

5.3.1 Quality Control Reports. The Design-Builder will keep daily Quality Control Reports throughout the duration of the construction process certifying that the relevant area of the construction work has been inspected. The Quality Control Reports will be prepared, signed and dated by the personnel identified as the supervisor in the Quality Control Plan and will include, at a minimum, the following information: Identification of the material, equipment or component that was inspected and indicate, if applicable, if the Submittals have been reviewed and approved by the Design- Builder.

5.3.2 Indicate that materials and/or equipment comply with the requirements of Section 5.19.9 of the Agreement and are properly stored, if not yet installed.

5.3.3 Indicate that the construction work has been coordinated under Sections 5.19.4 and 5.19.5 of the Agreement, that all required preliminary work has been inspected by Quality Control personnel, was properly performed, and that the area is ready to receive subsequent construction work. If the construction work is not acceptable, provide a written description of any rework required in the area inspected with an explanation of the cause of the re-rework (including which Subcontractors are involved), any cost involved in the required re- work, and the expected completion date of the required re-work.

5.4.4 Results of any off-site testing or quality control work and any required further actions.

5.4.5 Other necessary information including, directions received, quality control problem areas, deviations from the Quality Control Plan, construction deficiencies encountered, Quality Control meetings held, acknowledgement that as-built drawings have been updated (if applicable), corrective direction given by Quality Control personnel, and corrective action taken by the Design-Builder.

5.5 Quality Control Design Reports. The Design-Builder will keep daily Quality Control Design Reports throughout the duration of the construction process certifying that the relevant area of the construction work has been inspected. The Quality Control Design Reports will be prepared, signed and dated by the personnel identified as the supervisor in the Design Quality Control Plan. Quality Control Design Reports should be submitted as part of each design submittal.

5.6 Test and Inspection Logs. The Design-Builder will maintain an on-site inspection log that is accessible by the Owner. The log will document all tests and inspections performed at the Project during construction. In addition, the Design-Builder will prepare a sequentially numbered record of tests and inspections. The record of tests will Include the following information:

5.6.1 Request for Inspection.

5.6.2 Date test or inspection was conducted.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5.6.3 Identity of testing agency or special inspector.

5.6.4 Description of the construction work tested or inspected.

5.6.5 Identification of any drawings or applicable details on the Construction Documents or Submittals that were used during testing and inspection.

5.6.6 Date that the test or inspection was concluded and the date that the results were transmitted to Owner.

6. TEMPORARY FACILITIES

6.1 Temporary Electricity. Design-Builder will provide, maintain, and pay for temporary electrical power at the Project Site for construction purposes and trailers.

6.2 Temporary Communications. The Design-Builder will provide, maintain, and pay for all applicable communications and data service connections for field offices, including all installation and connection charges.

6.3 Temporary Water. The Design-Builder will provide, maintain, and pay for all required potable water required for construction field personnel as well as water required for and in connection with the construction operations such as dust control. Unnecessary waste of water will not be permitted. The Design-Builder must use special hydrant wrenches for opening and closing fire hydrants in lieu of pipe wrenches.

6.4 Temporary Fences. The Design-Builder will provide all necessary temporary fencing and gates required for the Project Site. Temporary fencing will be subject to restrictions in the use permit. The Design-Builder will maintain all fences through Final Completion of the Project. Gates are to remain closed and locked during off-hours.

6.5 Temporary Sanitary Facilities. Provide and maintain all required temporary toilets for use of all design and construction personnel and field labor at the Project Site through Final Completion of the Project. Location of temporary sanitary facilities will be approved by Owner's Project Manager prior to delivery. The Design-builder will provide at least 1 temporary toilet facility for every 20 persons. The Design-Builder will cause all design and construction personnel (including field labor) to use temporary sanitary facilities rather than Owner's facilities. All temporary sanitary facilities will comply with the Department of Health standards.

6.6 Temporary Barriers and Enclosures. Provide barriers to prevent unauthorized entry to construction areas, to allow for Owner's safe use of the Project premise, and to protect existing facilities and adjacent properties from damage from construction operations per Section 8.

6.7 Water Control. Design-Builder will grade the Project Site as required by the civil design included in the Construction Document. During construction, the Design-Builder will maintain all trenches and excavated areas free from water accumulation and will provide the necessary barriers to protect the Project Site from ponding, running water and soil erosion. The Design-Builder will provide for increased drainage of storm water and any

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

water that may be applied or discharged on the Project Site during performance of the construction work. All drainage facilities will be adequate to prevent damage to the construction work, Project Site, and adjacent property. Design-Builder will construct dikes, if necessary, to divert any increased runoff from entering adjacent property (except in natural channels), to protect Owner's facilities and the construction work, and to direct water to drainage channels or conduits. Design-Builder will provide ponding as necessary to prevent downstream flooding. Design-Builder shall be solely liable for any loss or damages resulting from Design-Builder's failure to comply with the provisions of the Dept. of Water Resources Best Management Practices and County requirements.

6.8 Pollution Control. The Design-Builder will provide a plan that meets the requirements of California Storm Best Management Practices (Stormwater Quality Task Force,1993) to prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris, and other substances and/or soil erosion during construction operations:

6.8.1 No sanitary wastes will be permitted to enter any drain or watercourse other than sanitary sewers. No sediment, debris, or other substance will be permitted to enter sanitary sewers without authorization of the receiving sanitary sewer service, and all possible best management practices will be taken to prevent materials from entering into any drain to watercourse.

6.8.2 In the event that dewatering of excavations is required, Design-Builder will obtain the necessary permits from local governmental authorities for discharge of the dewatering effluent. The Design-Builder will be responsible for assuring that water quality of the discharge meets the appropriate permit requirements prior to any discharge.

6.8.3 Erosion and sedimentation control practices will include installation of silt fences, straw wattle, soil stabilization, re-vegetation, and runoff control to limit increases in sediment in storm water runoff, including but not limited to, detention basins, straw bales, silt fences, check-dams, geo-fabrics, drainage swales, and sand bag dikes.

6.8.4 The construction work will be scheduled to expose areas subject to erosion for the shortest possible time, and natural vegetation will be preserved to the greatest extent practicable. Temporary storage and construction buildings will be located, and construction traffic routed, to minimize erosion. Temporary fast-growing vegetation or other suitable ground cover will be provided as necessary to control runoff.

6.9 Construction Equipment and Aids. Design-Builder will furnish, install, maintain, and operate all construction equipment required by the performance of the construction work. Construction aids include elevators and hoists, cranes, temporary enclosures, swing staging, scaffolding and temporary stairs. When sandblasting, spray painting, spraying of insulation, or other activities inconveniencing or dangerous to property or the health of design or construction personnel, Owner's staff, or the public are in progress, Design-Builder will enclose the area of activity to contain the dust, over-spray, or other hazard.

6.10 Traffic Control. The Design-Builder will provide a traffic control plan in accordance with the California Department of Transportation Traffic Manual as part of its Site Logistics

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Plan. The Design-Builder will submit its traffic control plan to the appropriate agency for approval, as necessary, before commencement of the construction work.

6.11 Removal of Temporary Facilities and Equipment. The Design-Builder will remove all temporary utilities, equipment, facilities, and materials before final inspection of the Project and clean and repair any damage caused by installation or use of temporary work restoring existing facilities to their original conditions.

7. SURVEYING

7.1 Field Engineering. The Design-Builder will coordinate with Site Improvement Contractor's and confirm acceptance of establish benchmarks and line and grade for horizontal and vertical control.

8. DEMOLITION

8.1 Demolition Plan. Prior to commencing any required demolition work, the Design-Builder will submit a plan to the Owner's Project Manager for review and approval. Under no circumstances, can demolition interrupt the Owner's operations. The Design-Builder's plan, at a minimum, will address the following:

8.1.1 Identify areas that will require demolition and provide a schedule for those demolition activities that is coordinated with the Owner's operations and the approved Project Baseline Schedule.

8.1.2 Inventory materials and equipment that will be salvaged during demolition and whether the salvaged materials and equipment will be reused, returned to the Owner, or sold at fair market value on behalf of the Owner.

8.1.3 Document procedures for protecting the existing structure and/or building materials, equipment and components that are remaining, as well as protection plans for adjacent property and persons.

8.1.4 Document procedures for proper ventilation, noise, and dust control during demolition operations and clean-up after demolition is completed.

8.1.5 Document procedures for required disruption of any utility service as a result of demolition activities and a record of any utilities that are capped during the process. Any required shut-off or interruption of service must be approved in writing by the Owner 14 business days in advance, and all necessary water, emergency power, etc., must be in place prior to shut-off or disruption.

8.1.6 Provide for all required temporary sheeting, shoring, bracing or other structural support necessary to ensure stability of the existing structure or adjacent properties and prevent movement, settlement or collapse during demolition operations. All required temporary structural support will be designed by a California licensed structural or civil engineer.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

8.1.7 Document procedures to deal with encountering Hazardous Materials or Substances that comply with the requirements of Supplemental Conditions Section 3 and procedures regarding Unforeseen or Differing Site Conditions that comply with Supplemental Conditions Section 14.14.

8.1.8 Document procedures for hauling away and disposal of any demolished materials and equipment. The procedures should include, among other things, requirements for refrigerant recovery under Environmental Protection Agency, a list of all required hauling permits, requirements for hauling and disposing of Hazardous Waste, volatile organic compounds or any other substance that is regulated by Health and Safety Code, the Bay Area Air Quality Management Owner "BAAQMD" or any other governmental agency that regulates the proper hauling and disposal of certain materials and substances.

8.1.9 Document procedures to ensure that removal and replacement of equipment will not void any existing warranties.

8.1.10 Require a survey of existing conditions and video or photographic documentation before commencement of the demolition activity to demonstrate existing conditions of adjacent areas or property.

8.2 Permits and Fees. The Design-Builder will secure all required hauling permits. The Owner will reimburse the Design-Builder at cost, for all permits and dumping fees as part of the Cost of Work.

9. PROTECTION OF WORK AND PROPERTY

9.1 Design-Builder will be responsible for providing a safe place for the performance of the construction work and for the physical conditions and safety of areas affected by the construction work. Design-Builder will take all necessary precautions to provide for the safety and protection of all persons who may come in contact with the construction work and for all property and equipment within or adjacent to the Project Site including adequate precautions to protect existing trees, equipment, materials, utilities, and other adjoining property and structures. Design-Builder will repair any damage caused by its operations at its own expense and will provide protection to prevent damage, injury or loss to:

9.1.1 Owner's employees and other persons at the Project Site.

9.1.2 Equipment, materials, and vehicles stored at the site or off-site if under the care, custody, or control of the Design-Builder or its Design Professionals or Subcontractors.

9.1.3 Existing trees, structures, roads, equipment, property and the work of others when carrying out Design-Builder's Work. Refer to Tree Protection specifications as included as part of the Criteria document includes as **Exhibit 2B**.

9.2 These precautionary measures will apply continuously and not be limited to normal working hours.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

9.3 If damage to persons or property occur as a result of the construction work, Design-Builder will be responsible for proper investigation, documentation, including video or photography, to adequately memorialize and make a record of what transpired. The Owner will be entitled to inspect and copy any documentation, video, or photographs.

10. WORKERS AND WORKERS' COMPENSATION

10.1 Design-Builder will at all times enforce strict discipline and good order among its employees. Design-Builder will not employ on the Project any unfit person or unskilled labor.

10.2 Design-Builder and its Subcontractors are required to secure the payment of compensation of its employees in accordance with Labor Code section 3700. Before commencing the Work, the Design-Builder, its Design-Build Team members, and its Subcontractors will sign and file a certification with the Owner under Labor Code section 1861 stating the following:

> I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self- insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the any work or services under the Design-Build Agreement or any subcontract or design service agreements.

11. CHANGE IN NAME OR LEGAL ENTITY

11.1 If a change in name or nature of the Design-Builder's legal entity is anticipated, the Design-Builder will notify the Owner to ensure that the change will be properly reflected on the Agreement.

12. PROHIBITED INTERESTS

12.1 No public official or representative of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, supervise, make, accept, approve, or to take part in negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with design and construction of the Project, will be or become directly or indirectly interested financially in this Agreement.

13. LAWS AND REGULATIONS

13.1 Design-Builder will give all notices and comply with all laws, ordinances, rules and regulations bearing on conduct of Work. If Design-Builder observes that the Contract Documents are at variance with any laws, ordinances, etc., Design-Builder will promptly notify the Owner's Project Manager, in writing, and any necessary changes will be adjusted. If Design-Builder performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without notice to the Owner's Project Manager, it will bear all costs associated with any required corrections or repairs.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

14. STATUTORY PUBLIC WORKS CONTRACT REQUIREMENTS

The following requirements apply to all public works construction work performed under this Agreement.

14.1 Public Works Registration. Design-Builder or its contractor, and all subcontractors, must be registered with the California Department of Industrial Relations pursuant to Labor Code Section 1725.5. This Agreement is subject to monitoring and enforcement by the DIR pursuant to Labor Code Section 1771.4. Design-Builder shall furnish the records specified in Labor Code Section 1776 directly to the Labor Commissioner on a monthly basis, and in a format prescribed by the Labor Commissioner. Design-Builder must also post notices at the work site pursuant to Title 8 California Code of Regulations Section 16451.

14.2 Use of Subcontractors. Design-Builder shall not subcontract any work to be performed by it under this Agreement without the prior written approval of Owner, which approval will not be unreasonably withheld. Design-Builder shall be solely responsible for reimbursing any subcontractors and Owner shall have no obligation to them. Attention is directed to the requirements of Section 4100 to 4113, inclusive of the California Public Contract Code which are applicable to the work covered by this Agreement.

14.3 Prohibition Against Contracting with Debarred Subcontractors. Design- Builder is prohibited from performing work on a public works project with a subcontractor who is ineligible to perform work on the public works project pursuant to Section 1777.1 or 1777.7 of the Labor Code.

14.4 Prompt Payment to Subcontractors. Design-Builder shall pay any subcontractors approved by Owner for work that has been satisfactorily performed no later than seven (7) days from the date of Design-Builder's receipt of progress payments by Owner. Within thirty (30) days of receipt of retention by Design-Builder and satisfactory completion of all work required of the subcontractor, Design-Builder shall release any retention payments withheld to the subcontractor. In the event Design-Builder does not make progress payments or release retention to the subcontractors in accordance with the time periods in this section, Design- Builder will be subject to a charge of two percent (2%) per month on the untimely or improperly withheld payment. Owner may require Design-Builder to provide documentation satisfactory to Owner of Design-Builder's compliance with this requirement as a condition of final payment and release of contract retentions, if any.

14.5 Payment Bond for Construction Work. Pursuant to Civil Code Section 9550, Design-Builder shall furnish to Owner a Payment Bond in the amount of all equipment and construction costs, to provide Owner with security for Design-Builder's full payment to workers and subcontractors for costs of materials, equipment, supplies, and labor furnished in the course of the performance of the work applicable to this section.

14.6 Labor Code Provisions. In the performance of this Contract, Design-Builder's attention is directed to the following requirements of the Labor Code:

> Hours of Labor. Eight hours labor constitutes a legal day's work. Design-Builder shall forfeit, as penalty to Owner, $25 for each worker employed in the performance of the

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Agreement by Design-Builder or by any subcontractor under it for each calendar day during which such worker is required or permitted to work more than eight hours in any one day and 40 hours in any one calendar week in violation of the provisions of the California Labor Code and in particular, Sections 1810 to 1815, inclusive. Work performed by employees of the Design- Builder in excess of eight hours per day and 40 hours during any one week shall be permitted upon compensation for all hours worked in excess of eight hours per day at not less than one- and-one-half times the basic rate of pay, as provided in Section 1815.

Prevailing Wages. Design-Builder shall comply with California Labor Code Sections 1770 to 1780, inclusive. In accordance with Section 1775, the Design-Builder shall forfeit as a penalty to Owner an amount as determined by the Labor Commissioner not to exceed $200 for each calendar day or portion thereof for each worker paid less than stipulated prevailing wage rates for such work or craft in which such worker is employed for any work done under the Agreement by him or by any subcontractor under it in violation of the revisions of the Labor Code and in particular, Labor Code Sections 1770 to 1780, inclusive. In addition to said penalty and pursuant to Section 1775, the difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by Design- Builder. Pursuant to the provisions of Section 1773 of the Labor Code, Owner has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work applicable to the work to be done from the Director of the Department of Industrial Relations. Copies of the prevailing wage rates are on file at Owner and are available for review upon request.

Payroll Records. The Design-Builder's attention is directed to the following provisions of Labor Code Section 1776. The Design-Builder shall be responsible for the compliance with these provisions by his subcontractors.

a. Each contractor and subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work.

b. The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Design-Builder on the following basis:

1. A certified copy of an employee's payroll record shall be made available for inspection or furnished to such employee or his or her authorized representative on request.

2. A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to Owner, the Division of Labor Standards Enforcement and the Division of Apprenticeship Standards of the Department of Industrial Relations.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

3. A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request to the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either Owner, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the Design-Builder, subcontractor and the entity through which the request was made. The public shall not be given access to such records at the principal office of the Design-Builder.

c. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the Division.

d. The Design-Builder shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested such records within ten (10) days after receipt of a written request.

e. Any copy of records made available for inspection as copies and furnished upon request to the public or Owner, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Design-Builder shall not be marked or obliterated.

f. The Design-Builder shall inform Owner of the location of records enumerated under subdivision (a), including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address.

g. In the event of noncompliance with the requirements of this Section, the Design- Builder shall have ten (10) days in which to comply subsequent to receipt of written notice specifying in what respects such contractor must comply with this Section. Should noncompliance still be evident after such 10-day period, the Design-Builder shall, as a penalty the State or Owner, forfeit Twenty-five Dollars ($25) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payments then due. The penalties specified in subdivision (g) of Labor Code Section 1776 for noncompliance with the provisions of said Section 1776 may be deducted from any monies due or which may become due to the Design-Builder.

h. The Design-Builder and each subcontractor shall preserve their payroll records for a period of three (3) years from the date of completion of the Contract.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Labor Non-discrimination. Attention is directed to Section 1735 of the Labor Code which provides that Design-Builder shall not discriminate against any employee or applicant for employment because of race or color, religion, physical or mental disability, national origin or ancestry, medical condition, marital status or sex of such persons, except as provided in Section 12940 of the Government Code. Design-Builder further agrees to include a similar provision in all subcontracts, except subcontracts for standard commercial supplies or raw materials.

Apprentices. The Design-Builder and all subcontractors shall comply with the requirements of California Labor Code sections 1777.5, 1777.6 and 1777.7 regarding the employment and of apprentices.

14.7 Skilled and Trained Labor Force Requirements. Design-Builder agrees to comply with all requirements related to providing a skilled and trained workforce, pursuant to Public Contract Code section 22164(c), and Public Contract Code sections 2600-2603, including but not limited to the requirement to submit monthly reports to the Owner.

14.8 Retention on Progress Payments. Owner will deduct and hold in retention five percent (5%) from each progress payment to Design-Builder for construction work, or portion thereof. The remainder, less any other deductions taken in accordance with the Agreement, will be paid to Design-Builder as progress payments.

14.9 Securities in Lieu of Retention. Pursuant to Public Contract Code Section 22300, Design-Builder may elect, in lieu of having progress payments retained by Owner, to deposit in escrow with Owner, or with a bank acceptable to Owner, securities eligible for investment under Government Code Section 16430, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Design-Builder and Owner. If Design-Builder elects to submit securities in lieu of having progress payments retained by Owner, Design-Builder shall, at the request of any subcontractor performing more than 5% of Design-Builder's total bid, make the same option available to the subcontractor.

14.10 Assignment of Claims. In entering into a public works contract or a subcontract to supply goods, services, or materials, Design-Builder or subcontractor offers and agrees to assign to Owner all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time Owner tenders final payment to Design-Builder, without further acknowledgement by the parties.

14.11 Third-Party Claims. Pursuant to Public Contracts Code Section 9201, Owner shall have full authority to compromise or otherwise settle any claim relating to the Agreement at any time. Owner shall provide for timely notification to Design-Builder of the receipt of any third- party claim, relating to the contract. Notice shall be in writing and will be provided within thirty
(30) days.

14.12 Public Contract Code Claims Procedures

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

14.12.1 Mandatory Prerequisites to Filing a Construction Claim. Prior to filing a construction claim pursuant to Public Contract Code Sections 9203 and 20104-20104.6 and this section, Design-Builder must first complete all Change Order procedures in Section 9 of the Design-Build Agreement. Any claim submitted prior to satisfaction of the Change Order procedures will be rejected as premature and untimely. A construction claim must be submitted no later than (a) 30 days after the completion of all Dispute Resolution Board procedures are completed, or (b) 30 days after the occurrence of the event giving rise to the claim.

14.12.2 Claims Procedures. In accordance with the procedures set forth in Public Contract Code sections 9204 and 20104-20104.6, Design-Builder may submit a claim by registered or certified mail with return receipt requested, for one or more of the following: (a) a time extension, including, without limitation, for relief from damages or penalties for delay assessed by the Owner; (b) payment by the Owner of money or damages arising from work done by, or on behalf of, the Design-Builder pursuant to this contract and payment for which is not otherwise expressly provided or to which the Design-Builder is not otherwise entitled; or (c) payment of an amount that is disputed by the Owner.

14.12.3 Support for Claim. The Design-Builder shall furnish reasonable documentation to support the claim, including but not limited to: 1) a clear, concise recital of the basis upon which the claim is asserted, including a designation of the provisions of the Contract Documents upon which the claim is based, 2) a statement as to the amount of time and/or compensation sought pursuant to the claim; 3) whether the Design-Builder's claim arises from an ongoing occurrence, and if so a description of the specific Work activities affected by the claim, 4) a time impact analysis in the event that Design-Builder requests a time extension, 5) full and complete cost records supporting the amount of any claim for additional compensation, and 6) a notarized certification by the Design-Builder as follows: "Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code Section 12650 et seq., the undersigned hereby certifies that the information contained herein is a true, accurate and complete statement of all features relating to the claim asserted." Failure by the Design-Builder to provide sufficient documentation will result in denial of the claim. The Owner reserves the right to request additional documentation, or clarification of the documentation provided.

14.12.4 Response to Claim. Upon receipt of a claim, the Owner will conduct a reasonable review and provide a written statement to the Design-Builder identifying what portion of the claim is disputed and what portion is undisputed within 45 days of receipt of the claim. The Owner and Design-Builder may, by mutual agreement, extend the 45 day time period. For any undisputed portion of a claim, the Owner must make payment within 60 days of its issuance of the written statement.

If the Design-Builder disputes the Owner's written statement, or if the Owner fails to respond, the Design-Builder may demand an informal conference to meet and confer for settlement of the issues in dispute. The Owner will then schedule the meet and confer conference within 30 days of the demand. Within 10 business days following

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

the meet and confer conference, the Owner will provide a written statement identifying the portion of the claim that remain in dispute. Any payment due on an undisputed portion of the claim will be made within 60 days of the meet and confer conference.

After the meet and confer conference, any disputed portion of the claim shall be submitted to non-binding mediation. Alternatively, upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable. If mediation is unsuccessful, the parts of the claim that remain in dispute shall be subject to applicable procedures set forth below.

Failure of Owner to respond to a claim within the time periods described above shall result in the claim being deemed rejected in its entirety. Additionally, amounts not paid in a timely manner shall bear interest at 7 percent per year.

In the event that the mediation is unsuccessful, Design-Builder must file a government claim pursuant to Government Code section 910 et seq. in order to initiate a civil action.

14.13 Utility Relocation. Pursuant to California Government Code Section 4215, if during the course of the work Design-Builder encounters utility installations which are not shown or indicated in the contract plans or in the specifications or which are found in a location substantially different from that shown, and such utilities are not reasonably apparent from visual examination of the work site, then it shall promptly notify Owner in writing. Where necessary for the work of the Contract, Owner will amend the Agreement to adjust the scope of work to allow Design-Builder to make such adjustment, rearrangement, repair, removal, alteration, or special handling of such utility, including repair of the damaged utility. If Design-Builder fails to give the notice specified above and thereafter acts without instructions from Owner, then it shall be liable for any or all damage to such utilities or other work of the Agreement which arises from its operations subsequent to the discovery, and it shall repair and make good suchx damage at its own cost.

14.14 Trenching, Shoring, and Differing Site Conditions.

14.14.1 Compliance. Design-Builder will comply with Labor Code sections 6500, 6705, and 6707, and Public Contract Code section 7104 regarding trenching and shoring.

14.14.2 Permit Requirements for Trenches 5'-0" or More in Depth. Design-Builder agrees to comply in full with Section 6500 of the Labor Code and to provide the required permits prior to the initiation of any work, method, operation or process that involves: (i) construction of trenches or excavations that are 5'-0" or deeper and into which a person is required to descend; (ii) the construction of any building, structure, falsework, or scaffolding more than 3 stories high or the equivalent height; (iii) the demolition of any building, structure, falsework, or scaffold more than 3 stories high or the equivalent height; or (iv) the underground use of diesel engines in work in mines and tunnels.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

14.14.2.1 Detailed Plans for Trenches 5'-0" or More in Depth. In compliance with Labor Code section 6705, the Design-Builder will submit to the Owner's Project Manager, in advance of excavation, a detailed plan showing the design of shoring,bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches 5'-0" or more in depth. If the plan varies from shoring system standards, the plan will be prepared by a registered civil or structural engineer. The plan will not be less effective than the shoring, bracing, sloping, or other provisions of the Construction Safety Orders, as defined in the California Code of Regulations.

14.14.2.2 Separate Bid Items for Sheeting, Shoring, etc. To the extent that Design-Builder's Work involves construction of a pipeline, sewer, sewage disposal system, boring and jacking pits, or similar trenches or open excavations, which are 5'-0" or deeper, Design-Builder will comply with all applicable laws, regulations, and codes and its bid and the Contract Price will contain, as a line item, adequate sheeting, shoring, and bracing, or equivalent method, for the protection of life or limb pursuant to Labor Code section 6707, which will conform to applicable safety orders. Nothing in this section will be construed to impose tort liability on the Owner or any of its employees.

14.14.3 Excavations Deeper than 4'-0". If Work under this Agreement involves digging trenches or other excavation that extends deeper than 4'-0" below the surface, Design-Builder will promptly, and before the following conditions are disturbed, notify Owner's Project Manager, in writing, in accordance with Public Contract Code section 7104, of any:

14.14.3.1 Material that the Design-Builder believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code, which is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

14.14.3.2 Subsurface or latent physical conditions at the site differing from those indicated.

14.14.3.3 Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in the construction work of the character provided for in the Bid Documents and under this Agreement.

14.14.4 Differing Site Conditions. Design-Builder's notice to Owner shall be issued by telephone or in person and followed within 24 hours thereafter by written notice, providing a brief description of why the condition encountered is considered a Differing Site Condition. Promptly upon receipt of Design-Builder's notice, Owner will investigate the site conditions. If, during construction, the Design-Builder encounters an alleged Differing Site Condition, the Design-Builder shall immediately give written notice and may

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

continue work; provided however that the following documents and information shall be submitted on a daily basis:

1. Digital photographs (paper and electronic copy) that detail the Differing Site Conditions;

2. An electronic copy of the pertinent data (e.g. settlement monitoring data, boring logs, dewatering production rates, etc.) for the previous 24 hours;

3. As applicable, sample of soil and groundwater in the alleged Differing Site Condition area.

4. Design-Builder's applicable daily reports for each day that the alleged Differing Site Condition exists; and

5. Detailed daily records (which shall include, but not be limited to, labor and equipment), describing the alleged Differing Site Conditions and the impact the Differing Site Conditions are having on the progress of the construction.

Immediate written notice shall describe the specific ground conditions encountered and the measures taken to deal with the ground conditions. The Design-Builder will provide the OR with written notice within 5 business days discovery of an Unforeseen and Differing Site Condition. The OR, in conjunction with the Owner and IOR, will promptly investigate the conditions, and if they find that the conditions do so materially differ, or do involve hazardous waste, and cause a decrease or increase in Design-Builder's Contract Price or Contract Time for any part of the Work, the OR will recommend that the Owner issue a Change Order under Section 9 of the Agreement. If it is determined that physical conditions at the site are not materially different from those indicated in Bid Documents or that no change in terms of the Contract Documents is justified, the OR will notify Design-Builder in writing, stating reasons the Design-Builder will not be entitled to an adjustment in the Contract Price or Contract Time. Such reasons may include any of the following:

1. Design-Builder knew of the existence of the conditions at the time Design-Builder submitted its proposal; or

2. Design-Builder should have known of the existence of the conditions as a result of having complied with the requirements of Contract Documents; or

3. The information or conditions claimed by Design-Builder to be latent or materially different consist of information, conclusions, opinions or deductions of the kind that precludes reliance upon; or

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

4. Design-Builder was required to give written notice of differing site conditions under the Contract Documents and failed to do so within the time required.

The Design-Builder will not be excused from the Contract Time to complete its Work and will proceed with all Work to be performed under the Agreement unless or until it is determined that Design-Builder is entitled to an adjustment under Section 9 of the Agreement. If the Design-Builder disagrees with the decision regarding an alleged Differing Site Condition, Design-Builder may pursue a claim under Section 14.12 of these Supplemental Conditions.

14.15 Design-Builder's License Requirements. Design-Builder and any approved subconsultants (for architectural design, engineering, construction project management services) or subcontractors shall hold such current and valid licenses as required by California Law, including the Department of Industrial Relations (DIR) contractor and subcontractor registration requirements articulated in part by Cal. Labor Code section 1725.5.

14.16 Examination and Audit of Records. Pursuant to Government Code Section 8546.7, Design-Builder shall retain all project-related records for a period of 3 years after final payment on this DBO Contract, which shall be subject to audit or inspection by the Owner or the State Auditor during this period.

14.17 Safety Requirements. The Design-Builder shall promptly and fully comply with and carry out, and shall without separate charge therefore to the Owner, enforce compliance with the safety and first aid requirements prescribed by applicable State and Federal laws and regulations, rules and orders and as may be necessary to ensure that all Construction Work shall be done in a safe manner and that the safety and health of the employees, agents and the people of local communities is safeguarded. Compliance with the provisions of this Section by subcontractors shall be the responsibility of the Design-Builder. All installed, dismantled, and removed material, equipment and facilities, without separate charge therefore to Owner, shall fully conform with all applicable State and Federal safety laws, rules, regulations and orders and it shall be the Design-Builder's responsibility to furnish only such material, equipment and facilities.

14.18 Notice of Third-Party Claims. Pursuant to Public Contract Code section 9201, the Owner will provide Design-Builder with timely notification of the receipt of any third-party claim relating to the Agreement.

14.19 Assignment of Anti-Trust Actions. Pursuant to Public Contract Code section 7103.5 and Government Code sections 4554 and 4553, in entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, Design-Builder, its Design Professionals and Subcontractors offer and agree to assign to the Owner all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. section 15) or under the Cartwright Act (chapter 2 (commencing with section 16700) of part 2 of division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to this Agreement or any Subcontract. This assignment will be made and become effective at

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

the time the Owner makes final payment to the Design-Builder, without further acknowledgment by the parties.

14.20 Compliance with All Applicable Laws. Design-Builder shall comply with all the applicable requirements of federal, state and local laws, statutes and ordinances relative to the execution of the Work. In the event Design-Builder fails to comply with these requirements, Owner may stop any Work until such noncompliance is remedied. No part of the time lost due to any such cessation of the Work shall be made the subject of a claim for an extension of time or increase in the compensation.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhibit 2

BRIDGING DOCUMENTS

Exibit 2A - Project Description, Schedule, and Budget (RFP Appendix A)
Exibit 2B – Project Design Criteria (RFP Appendix B)
Exibit 2C – Conceptual Site Plan (RFP Appendix C)
Exibit 2D – Geotechnical Report (RFP Appendix D)

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

APPENDIX A

Project Description, Schedule, and Budget

The County of San Mateo is developing the Stone Pine Cove Farmworker Housing Project with (47) forty-seven Manufactured HUD Homes on a 14.67 acre site located at 880 Stone Pine Road in Half Moon Bay, CA. All site work and related improvements will be provided by a separate Site Improvement Contractor. The Manufactured Home DBE will be responsible for the design, preparation of permitting set of plans, all necessary approvals and off-site construction of units, transportation, and on-site installation.

Project Description:

Provide and install (47) forty-seven Manufactured Homes complying with Housing and Urban Development (HUD) and CA Housing and Community Development (HCD) Title 25 standards. Homes will consist of 1-Bedroom/1-Bath, 2-Bedroom/1-Bath, and 3-Bedroom/2-Bath home types. Up to (7) homes will require ADA accessible features. For locations and layout of homes, a Conceptual Site Plan is attached as **APPENDIX C**.

The Manufactured Home DBE will be responsible for:

1. Design and provide options for residents to select from for exterior appearance options, flooring material options, cabinet and countertop options, exterior and interior color selections for each home.
2. Preparation of HUD permitting set of plans.
3. Obtaining all necessary local approvals/permits.
4. Off-site construction of units.
5. Transportation.
6. Setting and anchoring units.
7. Utility connections and extensions from pedestals and plumbing stubs.
8. Skirting.
9. Stairs and or ramps on ADA homes.
10. Awning at exterior doors.
11. Provide each new owner orientation of their new home inclusive of training and operation/warranty manuals.

Additional building standards, materials, and finishes are described in the Project Design Criteria and is attached as **APPENDIX B**.

Project Schedule:

Anticipated Award of Contract	5/7/24
Anticipated Notice to Proceed	5/8/24
Design Phase	5/8 to 5/31/24
County Review / Approval	6/3 to 6/7/24
Construction Document Phase	6/10 to 7/12/24
County Review / Approval	7/15 to 7/19/24
Prepare Permitting Plans and Obtain Permits	7/22 to 9/20/24
Off-Site Site Fabrication	6/10 to 12/6/24
Site Improvement Construction (By Others) Ready to Start Delivery	12/6/24

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Start Transportation / Site Installation	12/9/24
Substantial Completion	1/31/25
Punchlist/Corrective Work/Final Inspections	2/3 to 2/6/25
Ready for Occupancy	2/7/25

Project Budget:

The Project Budget for design, permitting, off-site construction, delivery, and on-site installation of the Manufactured Homes is $5.5M to $6.0M

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

mwa architects

APPENDIX B

Project Design Criteria

Following is the design criteria for the pre-qualified Design-Build Entities (DBE) to use as their basis of design for their proposal during the Request for Proposal (RFP) Phase and will be included in the final Design-Build Agreement.

Project Description:

Provide and install (47) forty-seven Manufactured Homes complying with Housing and Urban Development (HUD) and CA Housing and Community Development (HCD) Title 25 standards as follows:

Quantity	Home Type	Approx. SF	Max Size
12	1 Bedroom/1 Bath	426 SF	11'10"x 36'0"
2	1 Bedroom/1 Bath ADA Accessible	(TBD)	11'10"x (TBD)
17	2 Bedroom/1 Bath	560 SF	11'8"x 48'0"
3	2 Bedroom/1 Bath ADA Accessible	(TBD)	11'8"x (TBD)
11	3 Bedroom/2 Bath	803 SF	14'4"x 56'0"
2	3 Bedroom/2 Bath ADA Accessible	(TBD)	14'4"x (TBD)

For location and layout of project, a Conceptual Site Plan is attached as **APPENDIX C**.

General Requirements:

1. Design and provide options for residents to select from for exterior appearance options, flooring material options, cabinet and countertop options, exterior and interior color selections for each home.
2. All site work and related improvements and utility infrastructure will be provided by a separate Site Improvement Contractor.
3. Electrical, telephone, internet services will be provided on pedestal connection at rear of unit.
4. Standard domestic, fire sprinkler water and sewer connection will be provided at the front of each lot.
5. Homes will be all electric.
6. Homes will be fully equipped with fire sprinkler system.
7. Homes will be placed on engineered gravel building pads with DBE designed code complying foundation support and tie-down anchorage.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

8. Up to seven of the units per the above table are required to be ADA Accessibility.
9. Homes must be ENERGY STAR Manufactured New Homes Version 2 compliant.
10. Homes must be Wild Urban Interface (WUI) compliant with all fire-resistant construction.
11. Home must have minimum of an all-inclusive non-prorated 2-year warranty.
12. Homes shall be aesthetically pleasing, durable, and low maintenance.
13. Homes require ample natural and mechanical ventilation due to coastal environment.
14. Homes are required to have daylighting in all rooms.

Foundation Requirements:

1. Manufactured homes will be placed on engineered gravel building pads with DBE designed code complying foundation support and tie-downs.
2. Building pad will be prepared so that there will be no depressions in which surface water shall accumulate beneath the home. The site covered by the manufactured home will be graded and sloped to provide drainage from beneath the home or to property line.
3. Provide a minimum clearance of 18" beneath the lowest member of the main frame.
4. Pier: Adjustable 18" piers; Central Piers CP-Seismic Pier System or equal.
5. Pad: 24"X24" precast concrete pad at each pier.

Exterior Requirements:

1. Roof:
    a. Homes to have a minimum of 3 to 12 sloped "presidential" composition shingle roof.
    b. Roofing to have 30-year warranty.
    c. Provide 20bs PSF roof load.
    d. 24-gauge GSM rain gutter must be supported by fixed brackets at the stop ends and spaced at not more than 4' along the entire length of the gutter. Eave gutters must have a minimum fall of 1:500.
    e. 24-gauge GSM rectangular downspouts must be supported with strap anchors at top and bottom with intermediate supports at 36" max. Down spouts to have 6" angled kicker at the bottom. Provide splash blocks at each downspout.
    f. Provide 4" overhang at sides and rear. Eves shall be 16" hitch end.
2. Siding and Trim:
    a. Homes to have options for vertical, board and batten or horizontal fiber concrete siding.
    b. Flashing, furring, vapor barrier, and sheathing to be installed below siding.
    c. 0.046 is the minimum thickness siding recommended.
    d. Provide 4" fiber concrete door/window trim.
    e. Provide shutters for each window.
3. Soffit and Eaves:
    a. Provide fiber concrete fascia.
    b. Provide fiber concrete soffit and WUI compliant soffit vent.
4. Skirting Design and Construction:
    a. Skirting shall match building exterior materials.
    b. Skirting shall be attached in a waterproof and secure manner that prevents water to be trapped between the siding and trim or forced up into the wall cavities trim to which it is attached.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

   c. Provided removable access panel(s) by utility tie-in locations opening a minimum of 18" x 24" unobstructed by pipes, ducts, or other equipment that may impede access.

5. Insulation:
   a. Floor Insulation R-22.
   b. Wall Insulation R-21.
   c. Roof Insulation R-33.
   d. Comply with Energy Star requirements for CZ-2 zone.
   e. Envelope shall achieve minimum 0.065 Overall Coefficient of Heat Transmission.
   f. Solar Heat Gain Coefficient of Heat Transmission shall not exceed 0.25.
6. Windows:
   a. Each room shall be provided with exterior windows having a total glazed area of not less than 8 percent of the gross floor areas.
   b. All windows shall be operable, latching, vinyl clad with 5/8" double pane insulated, low E glazing.
   c. Provide not less than 1-1/2 sq. ft. of fully openable glazed area operable window at bathroom.
   d. Provide casement type operation on ADA units.
   e. Window U-Factor 0.30 min.
   f. Provide window perimeter seals at exterior and interior.
   g. All windows to include removable insect screen.
   h. Provide window blinds for each window.
7. Doors:
   a. All exterior doors to be solid core.
   b. Provide minimum of two exterior doors located remote from each other.
   c. Provide key-operated lock with deadlocking latch or a key-operated dead bolt with a passage latch. Locks shall not require the use of a key for operation from the inside.
   d. Main exterior door shall be 36" inswing.
   e. Rear exterior door shall be a 32" inswing with divided lites.
   f. Exterior door U-Factor 0.40.
   g. Provide door perimeter seals at exterior and interior.
8. Door Awning/Carport:
   a. Provide door hood over exterior doors.
   b. Provide structural for future lightweight awning/carport (40# roof load max.) in designated area.
9. Exterior Finish Options:
   a. Five exterior color options: Dark gray, light gray, white, light green, brown

Interior Requirements:

1. Every room, bathroom, hallway and foyer shall have a minimum ceiling height of not less than 8'-0".
2. Hallways shall have a minimum horizontal dimension of 30" [36" on ADA units] measured from the interior finished surface to the interior finished surface of the opposite wall.
3. Minor protrusions to the minimum hallway width by doorknobs, trim, smoke detectors or light fixtures are permitted.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

4. Wall Finishes/Trim:
    a. Drywall with tape, texture, and standard texture.
    b. Painting to include primer with two finish coats.
    c. Paint product to be premium quality.
    d. Kitchen and Bathroom to be gloss sheen. All other rooms to be egg shell sheen.
    e. Provide 3 ½: min. base board trim.
    f. Provide 2 ¼" door and window trim.
5. Floor Finishes:
    a. Provide Luxury Vinyl Tile (LVT) plank flooring in all rooms.
    b. Provide option for carpet in bedrooms.
6. Interior Doors:
    a. Provide 30" [34" for ADA units] passage or pocket door with 2-panel profile.
    b. Provide lever set with privacy locking or pocket hardware with satin chrome or brushed nickel finish.
7. Kitchen/Bath Cabinetry:
    a. All cabinetry is to be constructed of hardwood.
    b. Provide 36" high base cabinetry.
    c. Provide 34" high accessible base cabinetry at ADA Homes.
    d. Provide choice of Door/Drawer panel style for resident selection.
    e. Provide choice of cabinet finish for resident selection.
    f. Provide overhead cabinets adjustable shelves at Kitchen.
    g. Provide overhead cabinet above refrigerator.
    h. Provide heavy duty drawer glides with soft-close.
    i. Provide doors concealed hinges.
    j. Provide choice of drawer hardware/pulls finish for resident selection.
8. Countertops:
    a. Solid surface [Quartz or approved equal] countertop with square edge and 4" high backsplash.
9. Bathroom Accessories:
    a. Towel bars and toilet tissue holder.
    b. Mirror.
    c. Recessed medicine cabinet.
    d. Provide siding glass tub/shower enclosure.
10. Closets Shelving:
    a. Provide wood rod and shelf at closet.
    b. Provide rod and shelf above washer/dryer at side-by-side layout where applicable.
    c. Provide open closet storage and accessible shelving at ADA Homes.
11. Appliances:
    a. Electric Range with oven, 4-burner cooktop, and stainless steel finish; GE JBS60RKSS or approved equal and GE JS645SLSS or approved equal for ADA Homes.
    b. Refrigerator/Freezer with 19 CF frost-free capacity, ice maker, and stainless steel finish; GE GTE19JSNRSS or approved equal.
    c. Dishwasher with stainless steel finish; GE GDF460PSTSS or approved equal and GE GDT225SSLSS or approved equal at ADA Homes.
    d. Exhaust Hood with light and stainless steel finish; GE JVX5305DJSS or approved equal.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

e. Stackable Top or Front Loading Washer and Front Loading Dryer with white finish; GE GUD27EESNWW or approved equal.
f. Side-by-side Washer with white finish; GE GFW650SSNWW or approved equal.
g. Side-by-side Dryer with white finish; GFD55ESSNWW or approved equal.
h. Garbage Disposal: Waste King L-1001 or approved equal.

Plumbing Requirements:

1. The plumbing system shall be of durable material, free from defective workmanship, and so designed and constructed as to give satisfactory service for a reasonable life expectancy.
2. Water closets shall be selected and adjusted to use the minimum quantity of water consistent with proper performance and cleaning.
3. All design, construction, and workmanship shall be in conformance with accepted engineering practices and shall be of such character as to secure the results sought to be obtained by this standard.
4. Plumbing fixtures shall have smooth impervious surfaces, be free from defects and concealed fouling surfaces, be capable of resisting road shock and vibration, and shall conform in quality and design to listed standards.
5. Water Heater:
    a. Provide ENERGY STAR certified 30-gallon (min.) high-efficiency electric unit.
6. Plumbing Fixtures/Faucets:
    a. Provide undermount stainless steel sink with single valve faucet, pull-out spray nozzle, and disposal at Kitchen. Finish to be satin chrome or brushed nickel finish.
    b. Provide undermount porcelain sink with single valve 1.5 GPM faucet at Bath. Finish to be satin chrome or brushed nickel finish.
    c. Provide elongated toilet.
    d. 60" One-piece fiberglass tub/shower with single valve faucet, 1.5 GPM tub filler, diverter, and 2.0 GPM shower head.
    e. Provide washer connection and drain.
    f. Provide 2 exterior hose bibs. One in front and one in back.

Mechanical Requirements:

1. All rooms to have ducted central heating and ventilation.
2. All equipment shall be listed or certified by a nationally recognized testing agency for the application for which the unit is intended and installed in accordance with the terms of its listing.
3. HVAC Equipment:
    a. Provide high efficiency electric unit with digital programable thermostat.
    b. Provide insulated ductwork in floor cavity.
4. Dryer Vent:
    a. Provide ducted vent for electric dryer with exterior weatherproof vent hood cover.
5. Exhaust Fans:
    a. Provide exhaust fans at Bathroom and Laundry closet with separate control switch.
    b. Exhaust fans must exhaust directly to the outside with exterior weatherproof vent hood cover.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Electrical Requirements:

1. All electrical materials, devices, appliances, fixtures, fittings and other equipment shall be listed or labeled by a nationally recognized testing agency and shall be connected in an approved manner when in service.
2. Electrical Panel:
    a. Provide panel sized per code based on unit load and with underground service connection to electrical pedestal.
    b. Maintain code required clearances at panel.
3. Lighting:
    a. Provide LED light fixture at all locations.
    b. Provide LED light fixture above Kitchen sink.
    c. Provide porch LED Dark Sky compliant light fixture at front door and rear door.
    d. Provide rocker type switching.
4. Exterior Outlets:
    a. Provide (2) exterior GFI receptacles.
5. Smoke/Carbon Dioxide Detector:
    a. Provide smoke/carbon dioxide detectors to protect each separate bedroom area.
    b. A smoke detector shall be installed in the hallway or space communicating with the bedroom area.
    c. Specific location shall be in the hallway between the living room area and the first bedroom, except that when a door(s) separates the living area from the bedroom area, the detector shall be installed on the living area side as close to the door(s) as practicable.
    d. Mobile homes having bedrooms separated by any one or combination of common use areas such as kitchens, dining room, living room or family room (but not a bathroom or utility room), shall have at least two smoke detectors, one detector protecting each bedroom area.
    e. Where practicable, the detector shall be located between the return air intake and the living area.
6. Ceiling Fans:
    a. Provide braced ceiling fan outlet and switch in Living and Bedroom areas.
7. EV Charging:
    a. Provide 240v 30amp outlet located at front of unit near car park area for connection of a future Level 2 EV charger that will be provided by others.
    b. Provide DCC-9 EV energy management system connected to house panel.
8. Phone/Cable TV/Internet:
    a. Provide service point of connection for phone, cable TV and internet adjacent to electrical service connection at rear of home.

Accessibility Requirements for ADA Units

1. Units need to meet or be able to be modified to comply with the Americans with Disabilities Act for accessibility.
2. Required accessible features shall include but is not limited to the following components:

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

a. Accessible path from unit entrance to parking and public sidewalk.
b. Door widths and maneuvering clearances at doors.
c. Reach range and opening force.
d. Closets and Shelving
e. Switches, Electrical Outlets, and other controls.
f. Operable windows and window blinds.
g. Kitchen and bath counter heights
h. Knee space under sink and work surface.
i. ADA compliant appliances.
j. Maneuvering space at toilet, sink, tub/shower.
k. Seat at tub/shower.
l. Grab bars
m. Visual doorbell for Hearing/Visual Impairment (HVI)

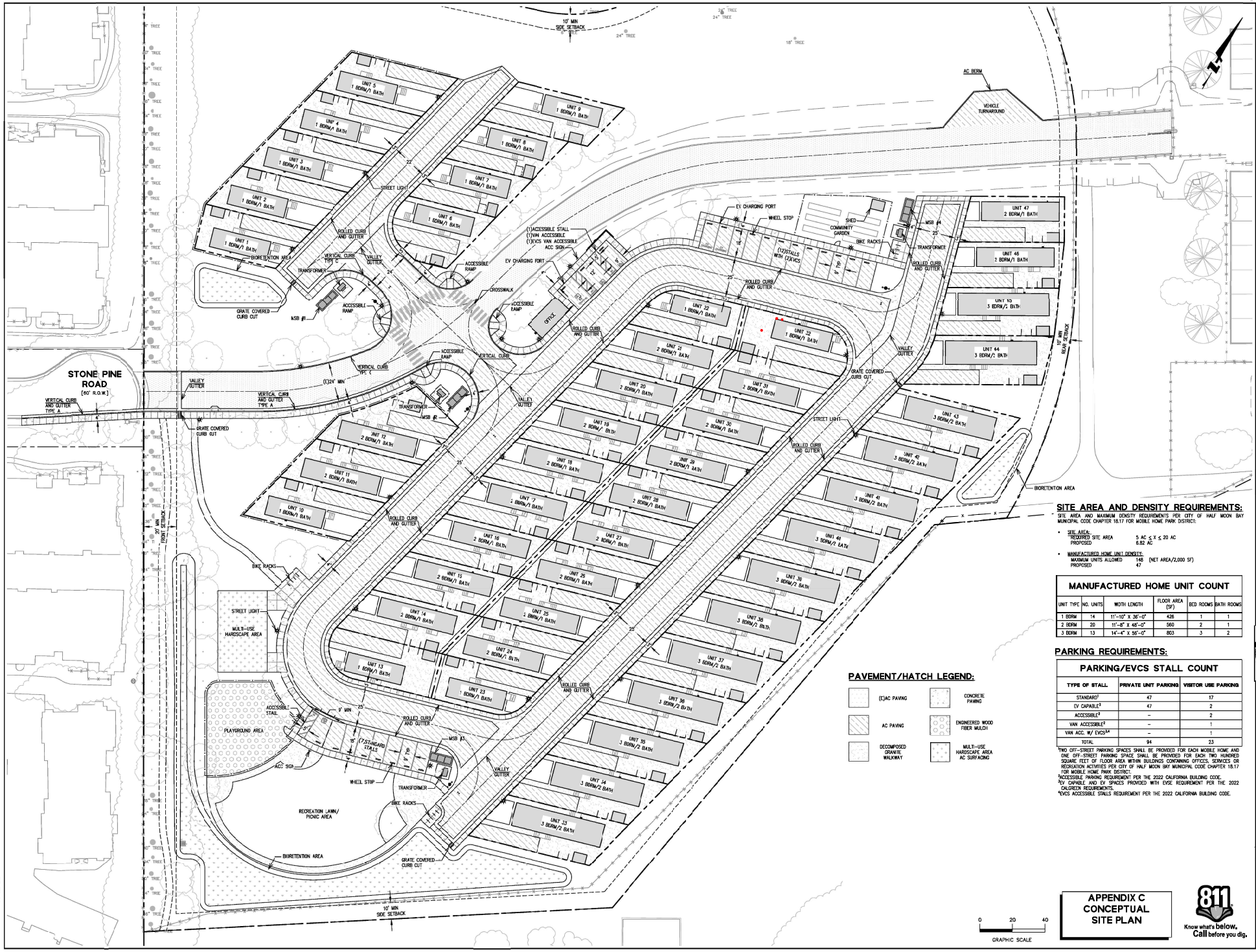
3. Refer to attached Exhibit 1 – Accessibility Code Analysis for diagrams, mounting heights, and maneuvering clearances, and components of Kitchen and Bath

Construction Requirements:

1. The home shall be installed, leveled, and anchored by qualified installation personnel who are acceptable to the authority having jurisdiction.
2. This is a Prevailing Wage Rate Project. On-site Contractor to be DIR registered and comply with all applicable laws.
3. Contractor will be response to provide any temporary facilities that may be required on site to implement the work. Job site trailer is not required. However, DBE may provide if desired and if it is in an approved location.
4. Contractor and its sub-contractors are required to comply with all City of Half Moon Bay and San Mateo County rules while onsite. Any violation will result in the immediate removal of person(s) from the project.
5. Contractor to provide notifications at least 48-hours in advanced for any planned power or water shut-offs that may affect areas beyond the building area itself.

DocuSign Envelope ID: 2751BBF2-20E0-4C0A-A251-2EA4C6B33DF2

© BKF Engineers



SITE AREA AND DENSITY REQUIREMENTS:

SITE AREA AND MAXIMUM DENSITY REQUIREMENTS PER CITY OF HALF MOON BAY MUNICIPAL CODE CHAPTER 18.17 FOR MOBILE HOME PARK DISTRICT:

- SITE AREA:
  - REQUIRED SITE AREA: 5 AC ≤ X ≤ 20 AC
  - PROPOSED: 6.82 AC
- MANUFACTURED HOME UNIT DENSITY:
  - MAXIMUM UNITS ALLOWED: 148 (NET AREA/2,000 SF)
  - PROPOSED: 47

MANUFACTURED HOME UNIT COUNT

UNIT TYPE	NO. UNITS	WIDTH LENGTH	FLOOR AREA (SF)	BED ROOMS	BATH ROOMS
1 BDRM	14	11'-10" X 36'-0"	426	1	1
2 BDRM	20	11'-8" X 48'-0"	560	2	1
3 BDRM	13	14'-4" X 56'-0"	803	3	2

PARKING REQUIREMENTS:

PARKING/EVCS STALL COUNT

TYPE OF STALL	PRIVATE UNIT PARKING	VISITOR USE PARKING
STANDARD[1]	47	17
EV CAPABLE[3]	47	2
ACCESSIBLE[2]	–	2
VAN ACCESSIBLE[2]	–	1
VAN ACC. W/ EVCS[3,4]	–	1
TOTAL	94	23

[1]TWO OFF-STREET PARKING SPACES SHALL BE PROVIDED FOR EACH MOBILE HOME AND ONE OFF-STREET PARKING SPACE SHALL BE PROVIDED FOR EACH TWO HUNDRED SQUARE FEET OF FLOOR AREA WITHIN BUILDINGS CONTAINING OFFICES, SERVICES OR RECREATION ACTIVITIES PER CITY OF HALF MOON BAY MUNICIPAL CODE CHAPTER 18.17 FOR MOBILE HOME PARK DISTRICT;
[2]ACCESSIBLE PARKING REQUIREMENT PER THE 2022 CALIFORNIA BUILDING CODE.
[3]EV CAPABLE AND EV SPACES PROVIDED WITH EVSE REQUIREMENT PER THE 2022 CALGREEN REQUIREMENTS.
[4]EVCS ACCESSIBLE STALLS REQUIREMENT PER THE 2022 CALIFORNIA BUILDING CODE.

PAVEMENT/HATCH LEGEND:

- (E)AC PAVING
- AC PAVING
- DECOMPOSED GRANITE WALKWAY
- CONCRETE PAVING
- ENGINEERED WOOD FIBER MULCH
- MULTI-USE HARDSCAPE AREA AC SURFACING

0 20 40
GRAPHIC SCALE

APPENDIX C
CONCEPTUAL SITE PLAN

811 Know what's below. Call before you dig.

BKF
255 SHORELINE DRIVE
SUITE 200
REDWOOD CITY, CA 94065
(650) 482-6300
www.bkf.com

CIVIL SITE PLAN
STONE PINE COVE
880 STONE PINE ROAD
SAN MATEO COUNTY
CALIFORNIA
HALF MOON BAY

REVIEW ONLY NOT FOR CONSTRUCTION

No.	Revisions	Date

Date: 11/29/2023
Scale: 1" = 20'
Design: DJP
Drawn: DLG
Approved: DJL
Job No: 20210367-15

Drawing Number:
C1.1
OF

DRAWING NAME: K:\2021\21367-15_MMB_Corp\cad\housing\ENG\timbsheets.dwg
PLOT DATE: 11-29-23
PLOTTED BY: gold

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

REPORT
GEOTECHNICAL ENGINEERING INVESTIGATION
SMC-HMB FARMWORKER HOUSING PROJECT
880 STONE PINE ROAD
HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA



for
County of San Mateo

August 2023

BAGG Engineers

BAGG Engineers, © August 2023

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

August 23, 2023
BAGG Job No. COUSM-23-03

County of San Mateo
Department of Public Works
555 County Center, 5th Floor
Redwood City, CA 94063

c/o: Steven McGuckin, AIA
Capital Program Management, Inc

REPORT
Geotechnical Engineering Investigation
SMC-HMB Farmworker Housing Project
880 Stone Pine Road
Half Moon Bay, San Mateo County, California

Dear Mr. McGuckin:

Transmitted herewith is our geotechnical engineering investigation report for the captioned project in the City of Half Moon Bay, County of San Mateo, California. This report presents a description of our investigative procedures and the encountered subsurface conditions, potential geologic and seismic hazards that could impact development on the site, the results of our laboratory testing, and our findings, conclusions and recommendations for the proposed site improvements. As a part of these services, we performed three (3) Cone Penetration Tests and advanced four (4) borings at the site, and collected disturbed bulk and relatively undisturbed ring samples of the site materials for visual examination and laboratory testing, as discussed later in this report.

Our investigation has indicated that the site could be subjected to lateral spreading during a major earthquake. Our best estimate indicates the lateral spreading could be on the order of 6 inches near the center of the project, and increasing to about 1½ feet adjacent to the creek.

Thank you for the opportunity to be of service on this project. Please do not hesitate to contact us should you have any questions or comments.

Very truly yours,

BAGG Engineers

Jingqi Liu
Project Engineer

Jason Van Zwol
VP/Chief Engineer

REGISTERED PROFESSIONAL ENGINEER
JASON VAN ZWOL
No.854
Exp 6/30/24
GEOTECHNICAL
STATE OF CALIFORNIA

▶www.baggengineers.com
▶phone: 650.852.9133 ▶fax: 650.852.9138 ▶info@baggengineers.com
138 Charcot Avenue, San Jose, California 95131-1101

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

REPORT
GEOTECHNICAL ENGINEERING INVESTIGATION
SMC-HMB FARMWORKER HOUSING PROJECT
880 STONE PINE ROAD
HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 SITE AND PROJECT DESCRIPTION 1

3.0 PURPOSE AND SCOPE OF SERVICES 2

4.0 GEOLOGY AND SEISMICITY 4
4.1 Site and Area Geology 4
4.2 Faulting and Seismicity 4

5.0 FIELD EXPLORATION AND LABORATORY TESTING 5

6.0 SITE CONDITIONS 7
6.1 Subsurface Conditions 7
6.2 Groundwater 8

7.0 GEO-HAZARD ANALYSIS 9
7.1 Liquefaction Potential 9
7.2 Lateral Spreading 11
7.3 Ground Shaking 12

8.0 DISCUSSION AND RECOMMENDATIONS 13
8.1 General 13
8.2 Site Grading 14
8.3 Foundations 15
8.3.1 Foundations on Ground Surface with Tie-Downs 15
8.3.2 Spread/Strip Footings 16
8.4 Settlement 17
8.5 Retaining Walls and Temporary Shoring 17
8.6 Exterior Flatwork 18
8.7 Pavement Design 18
8.7.1 Flexible Pavements 18
8.7.2 Rigid Pavements 20
8.8 Utility Trench Backfill 20
8.9 Drainage 21
8.10 Corrosion Potential 21
8.11 Plan Review 22
8.12 Observation and Testing 23

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

TABLE OF CONTENTS CONTINUED

9.0 CLOSURE 23

10.0 REFERENCES 24

Attached Plates and Appendix:

Plate 1	Vicinity Map
Plate 2	Site Plan
Plate 3	Area Geologic Map
Plate 4	Regional Fault Map
Plate 5	Cross Section A-A’
Plate 6	Unified Soil Classification System
Plate 7	Soil Terminology
Plate 8	Boring Log Notes
Plate 9	Key to Symbols
Plates 10-A through 13-B	Boring Logs
Plate 14	Plasticity Data
Plate 15	Gradation Test Data
Plate 16	R-Value Test Report
Plate 17	Corrosivity Tests Summary
Appendix A	Cone Penetration Test (CPT) Results (CPT-3 through CPT-5)
Appendix B	2021 Boring & CPT Logs (B-1 through B-5; CPT-1 & CPT-2)

ASFE document titled “Important Information about This Geotechnical Engineering Report”

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

REPORT

GEOTECHNICAL ENGINEERING INVESTIGATION
SMC-HMB FARMWORKER HOUSING PROJECT
880 STONE PINE ROAD
HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

1.0 INTRODUCTION

This report presents the results of our geotechnical engineering investigation performed to characterize the subsurface conditions at the site and assess the potential for geologic and geotechnical issues potentially affecting the design and construction of the proposed improvements. The attached Plate 1, Vicinity Map, shows the general location of the subject site, while Plate 2, Site Plan, depicts the site layout, the location of the proposed improvements, the approximate locations of the exploratory borings and Cone Penetration Tests (CPTs) advanced for the corporation yard in 2021, as well as the approximate locations of the borings (B-6 through B-9) and CPTs (CPT-3 through CPT-5) advanced for this investigation. Our services were provided in accordance with the scope outlined in our Proposal No. 23-494 dated June 30, 2023.

The following sections of this report present the result of our reviews, research, findings, and geotechnical evaluations following a site-specific subsurface exploration.

2.0 SITE AND PROJECT DESCRIPTION

The subject site is located on the east end of Stone Pine Road, approximately 2,500 feet east of the State Route 1 and 1¼ miles east of the Pacific shoreline in the City of Half Moon Bay, San Mateo County, California. It is bounded by San Mateo Road (Highway 92) on the northwest, a commercial parcel on the northeast, Pilarcitos Creek on the east and southeast, and residential parcels on the west. The site consists of an irregular-shaped, approximately 20-acre parcel that generally slopes gently to the southeast. The northeastern portion of the site is under construction for a corporation yard with a long, elevated driveway from Stone Pine Road to the new corporation yard site for the City of Half Moon Bay. An existing earth-lined agricultural pond is present on the western corner of the site at an elevation about 50 feet higher than in the project area. The remaining site area is undeveloped.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

It is our understanding that the project will consist of the construction of 47 modular houses in the western vacant portion of the parcel on both sides of the new driveway. The houses are anticipated to be constructed on graded building pads and supported on 18-inch-tall, load-bearing piers supported on either 24"x24" pressure treated plywood pad, or 24"x24" pre-cast concrete pads set on compacted base rock surface with tie-downs for seismic resistance. Home Pride earth anchors are anticipated to be used as tie-downs. Other site improvements will include paved driveway and parking lots, a sports court, and landscape areas. We note that this investigation does not address the subsurface conditions and any potential hazards associated with the existing pond.

3.0 PURPOSE AND SCOPE OF SERVICES

The purpose of our services was to conduct a subsurface investigation at the subject site to obtain information required to address the geotechnical engineering aspects of the proposed project. To this end, this report addresses the following:

- Geologic site conditions and seismicity of the project site, including a review of available published geologic maps and reports pertinent to the site area, a discussion of the site geology and seismicity with distance to the active faults in the region, as well as the probability of a major earthquake on each fault;
- Seismic design parameters for the proposed site improvements per the 2022 California Building Code and ASCE 7-16[1];
- Specific subsurface conditions discovered by the borings and CPTs, such as expansive, loose, saturated, collapsible, or soft surface and subsurface soils that may require special mitigation measures or impose restrictions on the project, including the thickness and consistency of the existing fill soils and groundwater levels, as encountered;
- Assessment of liquefaction potential, any adverse impacts it may impose on the project, and remedial measures, as deemed appropriate;
- Criteria for site grading, earthwork, preparation of subgrades and building pads, placement of fills and backfills, and trench backfill requirements, including the suitability of the excavated soils from the site for use as fill and backfill material;

[1] This report assumes the project site can be properly classified as a Site Class D (Stiff Soil) site (discussed later in this report), and that the Exception of the Supplement 3 to Section 11.4.8 of ASCE 7-16 will apply to the proposed structures. Thus, a site-specific ground response analysis in accordance with ASCE 7-16 Section 21.1, and a ground motion hazard analysis in accordance with ASCE 7-16 Section 21.2 are not included in our scope of services.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

- Estimates of the allowable bearing values for the 24"x24" plywood/concrete pad, and the resistance to pull-out loads for the anticipated anchor type (Home Pride earth anchors);

- Estimate of the lateral resistance for the proposed foundation system, including the applicable coefficient of friction between the supporting surface (gravel) and plywood/concrete pads;

- Estimate of earth pressures acting on site retaining walls, including vertical and lateral support requirements;

- Estimates of the post-construction total and differential settlements for the new structures supported on the recommended foundation system;

- Criteria for support of exterior concrete flatwork;

- Criteria for the design of rigid and flexible pavements;

- General provisions for the control of surface and subsurface drainage; and

- Preliminary screening for soil corrosivity and its impact on the buried foundation elements and underground utilities.

To fulfill the above purpose, the scope of our investigation consisted of the following specific tasks:

- Reviewed pertinent geotechnical and geological reports, as well as hazard maps and reports relevant to the site and vicinity.

- Marked the planned boring and CPT locations in the field, coordinated the field exploration with the client representatives, retained a utility locating firm to help clear the boring and CPT locations, and notified Underground Service Alert (USA) at least 72 hours in advance.

- Obtained permits for borings and CPTs from the County of San Mateo Department of Environmental Health.

- Drilled, logged, and sampled four borings to approximate depths of 20 to 30 feet using a truck-mounted drilling rig. The borings were advanced under the supervision of one of our engineers who also obtained disturbed bulk and relatively undisturbed ring samples of the subsurface materials at 3- to 5-foot-intervals for visual examination and laboratory testing. The borings were backfilled with cement grout per the permit requirements. The drilling spoils were left at the site.

- Advanced three CPTs to an approximate depth of 50 feet. The CPTs were backfilled with cement grout per the permit requirements.

- Performed a laboratory testing program on the collected soil samples to evaluate the geotechnical engineering characteristics of the subsurface soils. Tests included direct shear

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

tests, Atterberg Limits, grain-size analyses, moisture-density measurements, R-value, and soil corrosivity testing, as judged appropriate.

- Conducted engineering analyses based on the results obtained from the above tasks and oriented towards the above-stated purpose of the investigation; and

- Prepared this report presenting the results of our investigation, summarizing our findings and recommendations for the subject project, and including a vicinity map, a site plan showing the approximate boring and CPT locations, an area geologic map, a regional fault map, the boring and CPT logs, subsurface profile(s) and the laboratory test results.

4.0 GEOLOGY AND SEISMICITY

4.1 Site and Area Geology

A review of the *Geology of the Onshore Part of San Mateo County, California: Derived from the Digital Database Open-File 98-137*, prepared by Brabb et al. (1998), indicates that the northwestern portion of the site is underlain by Pleistocene age marine terrace deposits (Qmt) described as "poorly consolidated and poorly indurated well- to poorly sorted sand and gravel." The southeastern portion of the lot along Pilarcitos Creek is mapped as Holocene alluvial fan deposits (Qyf, Qyfo) generally consisting of unconsolidated sand, silt, clayey silt, and gravel.

A portion of the geologic map that includes the site area is presented on Plate 3, Area Geologic Map.

4.2 Faulting and Seismicity

No earthquake faults have been mapped crossing the site area. The distances from the site to the major faults in the area and their estimated probability of generating a major earthquake ($M_w \geq 6.7$) are listed in the Table 1 on the following page. The major active faults with respect to the subject site are also shown on the attached Plate 4, Regional Fault Map.

According to the California Geological Survey (CGS) map of *Earthquake Zones of Required Investigation, Half Moon Bay Quadrangle* (2021), the site is not situated within an Alquist-Priolo Earthquake Fault Zone (AP Zone). However, the site is situated within an area designated as an earthquake-induced liquefaction hazard zone. Evaluation of the potential of the site materials for seismically-induced liquefaction requires the upper 50 feet of soils must be explored and characterized as a minimum (per Special Publication 117A adopted by the State of California).

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Table 1
Significant Earthquake Scenarios

Fault	Approximate Distance to Site (kilometers)[1]	Location with Respect to Site (Driving Range Tee)	Probability of $M_W \geq 6.7$ within 30 Years[2]
San Gregorio	4	SW	5%
Pilarcitos	5	NE	0.5%
San Andreas (Entire)	8	NE	33%
San Andreas (Peninsula)	8	NE	9%
Monte Vista – Shannon	21	SE	1%
Hayward-Rodgers Creek	37	NE	32%
Calaveras	50	NE	25%

[1] USGS Fault Files from Google Earth, and CGS Fault Activity Map of California
2 Working Group on California Earthquake Probabilities, 2014

5.0 FIELD EXPLORATION AND LABORATORY TESTING

Conditions of the subsurface materials within the project area were explored by drilling four borings to approximate depths of 20 to 30 feet below the existing ground surface (bgs) using a truck-mounted drilling rig equipped with 6-inch diameter continuous flight augers. In order to better address the liquefaction hazards, three 50-foot-deep Cone Penetration Tests (CPTs) were advanced with a truck-mounted CPT rig. The approximate boring and CPT locations are shown on the attached Plate 2, Site Plan. Plate 5, Cross Section A-A', presents our interpretation of the subsurface conditions extrapolated from the information obtained during our site investigation.

A continuous log of the subsurface materials encountered in the boreholes was maintained by our engineer on site. Disturbed bulk and relatively undisturbed ring samples of the site materials were obtained. The subsurface materials were visually classified in the field; the classifications were then checked by visual examination, grain size analysis, and Atterberg Limits testing performed in the laboratory. In addition to sample classification, the boring logs contain interpretation of where stratum changes or gradational changes occur between samples and where subtle changes become significant enough to log. The boring logs depict BAGG's interpretations of subsurface conditions only at the locations indicated on Plate 2, Site Plan, and only on the date noted on the logs.

Cone penetrometer tests (CPT) consist of hydraulically advancing a probe into the soil strata with a truck-mounted CPT rig. The probe is fitted with transducers that read resistance at the tip of the probe, or cone,

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

friction acting between the sides of the sleeve immediately behind the cone and the surrounding soil, and pore pressure. The resulting data is then correlated to establish soil behavior types, consistencies, and shear strength data. The location of the CPTs are also shown on the attached Plate 2, Site Plan, and the CPT logs are presented in Appendix A.

The boring logs and the CPT data are intended for use only in conjunction with this report, and only for the purpose outlined by this report. The graphical representation of the materials encountered in the borings, and the results of laboratory tests, as well as explanatory/illustrative data are attached, as follows:

- Plate 6, Unified Soil Classification System; illustrates the general features of the soil classification system used on the boring logs;
- Plate 7, Soil Terminology; lists and describes the soil engineering terms used on the boring logs;
- Plate 8, Boring Log Notes; describes general and specific conditions that apply to the boring logs;
- Plate 9, Key to Symbols; describes various symbols used on the boring logs;
- Plates 10-A through 13-B, Boring Logs; describe the subsurface materials encountered, show the depths and blow counts for the samples, and summarize the results of the strength tests, Atterberg Limits, sieve analyses, and moisture-density data;
- Plate 14, Plasticity Data; presents the results of Atterberg Limits tests performed on selected samples of the site materials;
- Plate 15, Gradation Test Data; presents the result of two gradation tests performed on selected samples of the site materials;
- Plate 16, R-Value Test Report; presents the results of an R-value test performed on a sample of the near-surface soil from Boring B-9 near the proposed asphalt driveway; and
- Plate 17, Corrosivity Test Summary; presents the results of corrosivity testing performed by an outside laboratory on two selected soil samples.

Direct shear strength tests were performed on collected soil samples to evaluate the strength parameters of the site earth materials. The direct shear tests were performed at both natural (field) and artificially increased moisture contents, while under various surcharge pressures. The moisture content and dry density of several undisturbed samples were measured to aid in correlating their engineering properties. In addition, Atterberg Limits tests were performed on selected samples to aid in classification as well as obtain

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

an indication of the samples' expansion potential. Gradation and wash over the No. 200 sieve tests were also performed on selected samples of the site materials to classify the samples. Additionally, an R-value test was conducted on a bulk sample of the near-surface soil to aid in the pavement section design. Furthermore, corrosivity testing was carried out by Cooper Testing Labs on two selected soil samples. The results of the noted tests are shown on the boring logs and on the plates described above.

6.0 SITE CONDITIONS

6.1 Subsurface Conditions

Borings B-4 through B-9 encountered a 1- to 2-foot-thick layer of artificial fill consisting predominantly of stiff sandy lean clay and/or medium dense clayey sand with varying gravel content; however, relatively dry and loose/soft surficial materials were observed at Boring B-6 and B-9 locations. Atterberg Limits testing on a fill soil sample obtained at a depth of about 1 foot below the ground surface (bgs) in Boring B-9 yielded a liquid limit of 40 and a plasticity index of 17, indicating the existing fill material is moderately expansive in nature.

Native soils encountered in the borings consisted predominantly of interlayered lean clay, clayey sand, silty sand, and/or well-graded sand with silt. The upper clay deposits were generally stiff to very stiff and become medium stiff as depth increases. The sandy deposits were mostly medium dense in consistency with a few loose sand layers in the upper about 15 feet of the profile in Boring B-6. In addition, thin, less than 6-inch-thick fat clay layers were observed in the deep borings below about 27 feet bgs. Atterberg Limits testing on native clay and/or clayey sand samples in the upper about 5 feet of the boring profiles yielded liquid limits in the range of 39 to 49 and plasticity indices between 15 and 25, indicating the near-surface native materials are moderately to highly expansive in nature.

CPT-3 through CPT-5 advanced as part of this investigation also revealed interlayered clayey, silty, and/or sandy deposits within the maximum explored depth of 50 feet. The encountered fine-grained soils were medium stiff to very stiff while the granular deposits, consisting predominantly of silty sand to sandy silt and/or clean sand to silty sand, were generally medium dense to dense in consistency. However, the CPT profiles showed large variation in the depth to the first sand layer and the total thickness of the granular deposits. Excluding the surficial ½ foot of topsoil, CPT-3 first encountered sandy deposits at the approximate depth of 8½ feet bgs. CPT-4, however, revealed sandy soils down to the depth of about 12½ feet bgs. At

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

location of CPT-5, the upper approximately 2½ feet of the profile also consisted of sandy materials; however, below 2½ bgs, CPT-5 revealed mostly clayey deposits with scattered, 2-inch- to 2½-foot-thick, sandy lenses. The total thickness of the medium dense sandy deposits in CPT-5 was about 7 feet, while CPT-3 and CPT-4 encountered approximately 17 feet and 24 feet of medium dense sand, respectively.

BAGG advanced five borings (Borings B-1 through B-5) and two CPTs (CPT-1 and CPT-2) as part of the previous investigation on the northeastern half of the site for the City of Half Moon Bay Corporation Yard project in 2021. The previous Borings B-1 through B-5 revealed predominantly clayey deposits within their maximum explored depths of 5 to 25 feet bgs, except that Boring B-1 encountered medium dense clayey sand below 13 feet to its bottom at 15 feet, and Boring B-2 encountered medium dense to dense clayey sand below 15½ feet to its bottom at 20 feet. The two sand layers may, however, extend further in depth. CPT-1 and CPT-2 revealed interbedded clayey and sandy deposits within the maximum explored depth of 50 feet.

Our boring and CPT profiles indicated the site is generally underlain by interlayered clayey and sandy soils; however, the depths of the sand layers, the thickness and consistency of each sandy layer, as well as the total amount of the sandy deposits with the explored depths, are non-uniform and vary from one location to another. For more information regarding our interpretation of the subsurface materials, we refer you to Plates 10-A through 13-B, Boring Logs. The CPT data is presented in Appendix A attached to this report. The previous Boring B-1 through B-5 logs, as well as CPT-1 and CPT-2 data, are presented in the attached Appendix B.

6.2 Groundwater

Groundwater was first encountered in Borings B-6, B-7, and B-8 at the approximate depth of 17½, 19, and 15 feet bgs, respectively, and was measured upon completion of drilling and sampling at the depths of about 18 feet in B-6 and B-7 and about 9 feet bgs in Boring B-8. Groundwater was not encountered in Boring B-9 within its maximum explored depth of 20 feet. The CPTs estimated groundwater depths of about 15 feet in CPT-3 and about 12½ feet in CPT-5.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Groundwater was not encountered in the previous Borings B-1 through B-5, which were extended to the maximum depth of 25 feet bgs. CPT-1 and CPT-2 estimated groundwater depths of about 10½ and 18 feet bgs, respectively.

Groundwater levels typically fluctuate due to seasonal changes such as variations in rainfall and temperature, hydrogeological variations such as groundwater pumping or recharging, and/or other factors not evident at the time of exploration. Plate 1.3 of the California Geological Survey (CGS, 2021) Seismic Hazard Zone Report 132 (SHZR 132), *Seismic Hazard Zone Report for the Half Moon Bay 7.5-Minute Quadrangle, San Mateo County, California,* indicates the depth to historically high groundwater level in the general site area is less than 10 feet.

7.0 GEO-HAZARD ANALYSIS

7.1 Liquefaction Potential

According to the regulatory Seismic Hazard Zone Official Map prepared by the CGS (2021), the subject site is situated within a Seismic Hazard Zone associated with liquefaction. These zones are defined as "areas where historical occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required."

Soil liquefaction is a condition where saturated granular soils near the ground surface undergo a substantial loss of strength due to increased pore water pressure resulting from cyclic stress applications induced by earthquakes or other vibrations. In the process, the soil acquires mobility sufficient to permit both vertical and horizontal movements, if not confined. Soils most susceptible to liquefaction are loose, uniformly graded, fine-grained, sands, and loose silts with very low cohesion. In general, liquefaction hazards are most severe in the upper 50 feet of the soil profile. In deeper deposits, the greater overburden soils tend to isolate the ground surface from the impact of any liquefaction in deeper soils, and the overburden pressures tend to limit shear strains that occur during liquefaction.

Our boring and CPT data indicated the site is generally underlain by non-uniform, interlayered clayey and sandy deposits. Liquefaction analysis was performed using the CPT soundings and the boring data (within the maximum depths explored) following the procedures recommended by Boulanger and Idriss (2014). For

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

the purpose of this analysis, we used a groundwater level of 9 feet which was the highest groundwater level measured in our borings. Our analysis used an earthquake magnitude of 7.7 as obtained from the USGS Unified Hazard Tool (https://earthquake.usgs.gov/hazards/interactive/index.php), and a Peak Ground Acceleration of 0.89g obtained from the U.S. Seismic Design Maps by California's Office of Statewide Health Planning and Development (OSHPD, https://seismicmaps.org/).

Our analysis indicates that the loose to dense sand layers presented beneath the site are potentially liquefiable. The estimated liquefaction settlements are highly associated with the total amount of the potentially liquefiable sands at each of the exploration locations. Our analysis estimated liquefaction settlements of approximately 1½ inches in CPT-3, 2 inches in CPT-4, and ¼ inch in CPT-5. The estimated liquefaction settlements within the maximum explored depth of the borings were about 3 inches in Boring B-6 (30-foot-deep), 1⅓ inches in B-7 (21½-foot-deep), 2½ inches in B-8 (28½-foot-deep), and ⅓ inch in B-9 (20-foot-deep). Potentially liquefiable soils are also likely present beneath the explored depths in the borings.

Our analysis also estimated that the seismic compaction within the sandy deposits above the assumed groundwater level (9 feet) in Borings B-6 through B-9 ranged from less than ¼ inch to about ⅔ inch. The estimated seismic compaction in CPT-3 and CPT-5 was negligible; however, we estimated about 1⅓ inches of seismic compaction in the upper sandy deposits in CPT-4.

With a groundwater level of 9 feet (instead of 11 feet used in our 2021 analysis), we estimated liquefaction settlements of about 1 inch in the previous CPT-1 and ⅔ inch in CPT-2. The estimated seismic compaction was about ⅓ inch in CPT-1 but was negligible in CPT-2. Estimated seismic settlement was negligible in the previous Borings B-1 through B-5 as they were relatively shallow and the encountered sandy materials were either too clayey or too dense to be considered liquefiable.

We note that the empirical calculation methods, such as the one used here, for estimating expected settlements due to liquefaction are known to be conservative, especially when the soils in question contain in excess of 30 percent fines. Also, our analysis used a relatively conservative groundwater depth of 9 feet which was the groundwater depth measured in Boring B-8 near the creek, while other borings/CPTs measured/estimated groundwater depths in the range of 11 feet (2021) to more than 20 feet bgs. We

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

therefore anticipate the total seismic settlements in the project area would generally be in the range of ¼ to 1½ inches but could be as much as 3 inches or so in some localized areas such as the CPT-4 location.

Based on the estimated seismic settlements and the relative distance between the exploration points, we estimate the differential settlements due to seismic compaction and liquefaction of the granular soils would be approximately 1 inch in 50 feet across the site.

7.2 Lateral Spreading

Lateral spreading is a potential hazard commonly associated with liquefaction where extensional ground cracking and settlement occur as a response to lateral migration of subsurface liquefiable material. Lateral movement can range from a few inches to several feet and can cause significant structural damage. Lateral spreading generally arises where sloping terrain and/or a free-face condition occurs in conjunction with the presence of loose, saturated soils at shallow depths, particularly along riverbanks and shorelines.

Calculations to evaluate the potential for lateral spread toward the adjacent Pilarcitos Creek using the method suggested by Boulanger and Idriss (2014) indicates a possible 1 foot of lateral movement at CPT-3 and 1¼ feet at CPT-4, but estimated no lateral movement at CPT-5. Borings B-6 through B-9 using the method suggested by Youd, et al (2002) estimated lateral movements ranging from negligible amount to as much as 12 feet. It should be noted that the above estimates of lateral spreading assume all the liquefiable layers encountered in each boring are continuous toward the creek. As shown on Plate 5, Cross Section A-A', the sandy deposits potentially subject to lateral movement are generally non-uniform and discontinuous, with the exception of a potentially continuous sand layer between the approximate elevations of 50 to 60 feet above the mean sea level, which is about 5 feet below the bottom of Pilarcitos Creek. Assuming this layer is continuous toward the creek, for a design earthquake of Magnitude 7.7 at a distance of about 6 kilometers, we have estimated lateral spreading on the order of 6 inches in the vicinity of Boring B-7 and CPT-4, increasing to about 1½ feet at the creek bank. Because the source of the deformations in this scenario would be at some depth, we anticipate that much of the movement would consist of relatively large soil masses moving toward the creek; however, it is impossible to predict where fractures would occur at the surface.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

7.3 Ground Shaking

The site could experience very strong ground shaking from future earthquakes during the anticipated lifetime of the project. The intensity of the ground shaking will depend on the magnitude of the earthquake, distance to the epicenter, and the response characteristics of the on-site soils. While it is not possible to totally preclude damage to structures during major earthquakes, strict adherence to good engineering design and construction practices will help reduce the risk of damage. The 2022 California Building Code defines the minimum standards of good engineering practice.

As discussed above, our investigation indicated the presence of potentially liquefiable soils beneath the site. If the fundamental period of vibration of the planned structures is less than 0.5 seconds, which is likely the case for this project, the site class can be calculated with shear wave velocities, blow counts and/or soil strengths in accordance with Section 20.4 of ASCE 7-16. Based on our boring and CPT data, it is our opinion that a Site Class D may be assumed for design purposes.

Class "D" is defined as a "stiff soil profile" with an average shear wave velocity between 600 and 1,200 feet per second, and/or average undrained shear strength between 1,000 and 2,000 psf in the top 100 feet of the site.

Using the site coordinates of 37.4679° North Latitude and 122.4239° West Longitude, and the OSHPD Seismic Design Maps, earthquake ground motion parameters were computed in accordance with the 2022 California Building Code and the ASCE 7-16, and are listed in the following table. As S_1 is greater than 0.2g, Table 2 below assumes the Exception in Supplement No.3 to Section 11.4.8 of ASCE 7-16 applies. If the Exception does not apply to the design of this project, the seismic design will require a site-specific ground motion hazard analysis in accordance with Section 21.2 of ASCE 7-16. Such analysis is beyond our present scope of services.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Table 2
Parameters for Seismic Design

2022 CBC Site Parameter	Value
Site Latitude	37.4679^{o} N
Site Longitude	122.4239^{o} W
Site Class	Class D, Stiff Soil
Risk Category	III
Mapped Spectral Acceleration for Short Periods S_s	1.93
Mapped Spectral Acceleration for 1-second Period S_1	0.73
Site Coefficient F_a	1.0
Site Coefficient F_v	1.7**
Site-Modified Spectral Acceleration for short Periods S_{Ms}	1.93
Site-Modified Spectral Acceleration for 1-second Period S_{M1}	1.24*
Design Spectral Acceleration for short Periods S_{Ds}	1.29
Design Spectral Acceleration for 1-second Periods S_{D1}	0.83*

* This value has not been increased by 50% per Exception of Supplement No.3 of Section 11.4.8.
** See Table 11.4.2 - This value to be used only for calculation of T_S, for determination of Seismic Design Category and when taking the exception under Item 1 of Section 11.4.8.

8.0 DISCUSSION AND RECOMMENDATIONS

8.1 General

Based on our review of the published geologic and geotechnical documents, research of the existing soils information, and the subsurface exploration conducted at the subject site, as well as the results obtained from our laboratory testing program, we have developed the following geotechnical recommendations and design criteria for the subject project. When the final project plans become available, they should be reviewed by this office to confirm that they have been prepared in accordance with this report, as well as confirm that our recommendations properly address the proposed project in its final form.

Analysis of the boring profiles and the CPT soundings indicates the impact of liquefaction and seismic compaction from a design level earthquake on the site could be seismic settlements on the order of ¼ to 1½ inches with some localized areas potentially having as much as 3 inches of seismic settlement. Our investigation also indicated that the site could be subjected to lateral spreading during a major earthquake. Our best estimate indicates the lateral spreading could be on the order of 6 inches near the center of the project, and increasing to about 1½ feet adjacent to the creek. Despite the liquefaction and lateral spreading potential, our boring data and laboratory test results indicate the subgrade soils generally are capable of supporting the proposed modular structures and the associated improvements.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

8.2 Site Grading

Site grading is anticipated to consist of the removal of existing vegetation and debris from the construction areas, preparation of building pads and pavement subgrades, and installation of underground utilities. Site grading may also consist of foundation excavation if concrete footings are required to support site retaining walls, fence posts, etc.

As used in this report, the term 'compact' and its derivatives mean that all engineered fill material, whether imported or on-site material, should be compacted to at least 90% of maximum dry density as determined by ASTM Test Method D1557. The term also implies that immediately prior to being compacted, the fill material should be thoroughly moisture conditioned to a moisture content that is slightly above optimum for imported non-expansive fill material, and at least 2% over optimum for onsite clayey soils. The properly moisture-conditioned fill should be spread evenly in lifts not exceeding 8 inches in loose thickness, and each lift should be thoroughly moisture conditioned and compacted before subsequent lifts are placed. Class II Aggregate Base, and the upper 12 inches of subgrades within pavement and modular building areas, should be compacted to a minimum of 95% of the maximum dry density at the moisture content specified above.

The following grading procedures should be followed in building pad, pavement, and flatwork areas:

- Remove existing bushes, vegetation roots, and other debris from the proposed construction areas. Remove all organically-contaminated soils from the site and do not re-use as site fill except for use in landscaping areas only. Where trees are removed, the removal should include all major root systems down to 1 inch in size or less.

- Excavate to the proposed subgrade elevations. Scarify the exposed surfaces to a depth of 6 to 8 inches. Thoroughly moisture condition the scarified surfaces to a moisture content that is at least 2% over optimum and re-compact as specified above. Further over-excavate as necessary in any areas still containing weak, yielding, or pumping soils, as determined in the field by this office.

- Place fill on the over-excavated surfaces and in the holes/depressions created by the above actions in uniformly moisture conditioned and compacted lifts not exceeding 8 inches in loose thickness. Rocks or cobbles larger than 4 inches in maximum dimensions should not be allowed to remain within the basement area, unless they can be crushed in-place by the construction equipment.

The existing sandy fill soil and the upper native clay are generally suitable for use as structural fill, provided they are free of organic matters and rocks larger than 4 inches in size, and are approved by BAGG's field

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

representative. Imported fill soil, if any, should be predominantly granular in nature and should be free of organics, debris, or rocks over 4 inches in size, and should be approved by the Geotechnical Engineer before importing to the site. As a general guide to acceptance, imported soils should have a Plasticity Index less than 15, and R-value of at least 20, and fines content between 15 and 60 percent.

It must be the Contractor's responsibility to select equipment and procedures that will accomplish the grading as described above. The Contractor must also organize his work in such a manner that BAGG Engineers can observe and test the grading operations, including excavation, placement of fill and backfill, and compaction of subgrades.

8.3 Foundations

Based on the results of our subsurface exploration and laboratory testing, it is our opinion the proposed modular houses can be supported on surface foundations set on compacted base rock with tie-downs, as proposed. Conventional concrete spread/strip footings can be used to support structures such as retaining walls, seating, fence posts, etc., as necessary. Recommendations for each of the foundation type are presented in the following paragraphs.

8.3.1 Foundations on Ground Surface with Tie-Downs

It is our understanding that the proposed modular house foundations will consist of 18-inch-tall, load bearing piers supported on either 24"x24" pressure treated plywood pad or 24"x24" pre-cast concrete pads. Home Pride earth anchors are anticipated to be installed for seismic resistance. We also understand the housing pads will not be paved with asphaltic concrete but will be covered with compacted base rock.

We recommend the proposed 24"x24" plywood/concrete pads should be placed on minimum 12 inches of Class II aggregate base. The aggregate baserock and the top 12 inches of subgrade should be compacted to a minimum of 95 percent relative compaction while at the moisture content specified under Site Grading.

For 24-inch-wide plywood or concrete pads supported on 12 inches of compacted Class II aggregate base, we estimate the allowable bearing pressures can be taken as 2,500 pounds per square foot (psf) for dead loads and 4,000 psf for total design loads including seismic.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Helical augur tie-downs are frequently a design-build item that are installed to a specified minimum torque. Based on the soils information, we recommend the anchors should be a minimum 30 inches deep. On a preliminary basis, a 30-inch anchor with ¾-inch shaft and two 4-inch discs (Home Pride HP3) installed vertically (with stabilizer) through 12 inches of compacted Class II aggregate base, will be able to resist a pull out load on the order of 3,600 pounds.

Lateral loads may also be resisted by the friction between the bottom of the wood/concrete footings and the aggregate base surface. The friction coefficient between the plywood pad and the supporting aggregate base is estimated to be 0.50. The friction coefficient between the concrete pad and the supporting aggregate base is estimated to be 0.40.

8.3.2 Spread/Strip Footings

Spread/strip footings, if required, should be properly established a minimum of 24 inches below the lowest adjacent grade. The minimum required width for the isolated and continuous shallow footings is 24 inches and 12 inches, respectively. At this depth, the allowable bearing value should be taken as 2,500 psf for dead loads and 3,750 psf for total design loads for all footings. The latter value may be increased by one-third, when resisting transient and seismic loads.

For concrete footings, lateral loads may be resisted by passive soil pressures against the sides of the footings in conjunction with the friction between concrete footing bottom and the soil below. The allowable passive resistance to wind or seismic loads can be taken as an equivalent fluid pressure of 350 pounds per cubic foot (pcf) in compacted fill and undisturbed native materials. The top 12 inches of the passive resistance should be ignored, unless the foundation is protected by a pavement or a concrete slab. A coefficient of friction of 0.3 between compacted fill/undisturbed soil and the bottom of concrete footings may be used in conjunction with the passive pressure.

Concrete foundations must be appropriately reinforced as deemed appropriate by the project structural engineers. The bottom of the footing excavations should be relatively clean, firm, and free of any loose or yielding soils before reinforcing steel and concrete are placed. It is critical that foundation excavations are not allowed to dry out and crack before concrete is poured and that the exposed soils are at the recommended moisture content when concrete is poured. Any dried and cracked soils should be entirely removed as directed by this office, and replaced with properly compacted fill or lean concrete.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

8.4 Settlement

Total static settlements for foundations constructed as recommended are anticipated to be less than ½-inch with differential settlement of approximately half this value. The seismically induced liquefaction settlement discussed in Section 7.1, Liquefaction Potential, should be considered additional to the estimated static settlements.

8.5 Retaining Walls and Temporary Shoring

Retaining walls, if any, should be designed to resist lateral earth pressures from the adjoining soil and surcharge loads from adjacent structures. Walls that are restrained from movement at the top should be designed to resist an equivalent fluid pressure of 70 pcf for level backfill. Free standing walls should be designed to resist active lateral earth pressures taken as an equivalent fluid pressure of 50 pounds per cubic foot (pcf) for level backfill. For sloping backfill, the above pressures should be increased by 3 pcf for every 5-degree increase in the backfill slope angle up to a maximum gradient of 2H:1V (Horizontal to Vertical). Surcharge loads should be added to the above pressures at a rate of 33% and 50% of the applied surcharge load for cantilever and restrained walls, respectively.

Seismic pressures on the retaining walls may be simulated by a rectangular pressure distribution against the wall equal to 10H, where H is the height of the wall.

The above lateral pressures do not include any hydrostatic pressures resulting from groundwater, seepage water, or infiltration of natural rainfall and/or irrigation water behind the walls. Therefore, all walls over 2 feet in height should be provided with a drainage blanket behind the wall. The drainage blanket should consist of a pre-manufactured drainage panel, or a one-foot-thick blanket of Caltrans Class 2 Permeable material, or a one-foot-thick blanket of free-draining gravel encapsulated by a suitable filter fabric. A 12-inch cap of relatively impermeable soil should be placed at the top of the drainage blanket to minimize infiltration of surface water. The cap material should be compacted to a minimum of 90 percent relative compaction at a moisture content of at least 2 percent over optimum. In addition, a 4-inch diameter perforated PVC pipe should be installed holes facing down at the base of the drainage layer to facilitate removal of water collected behind the wall. The perforated pipe should drain via gravity flow to an approved discharge point.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

General backfill behind the walls, excluding drainage materials, should conform to the fill requirements included under the "Site Grading" section of this report. Retaining walls should be supported on concrete footings as recommended under Foundations.

Vertical site excavations measuring 5 feet or more in height should be properly shored as per the Cal-OSHA guidelines. Temporary shoring may consist of approved soldier-pile and wood lagging walls, soil-nail or tie-back walls with shotcrete, or other approved alternative. The temporary shoring should be designed to withstand an active earth pressure of 45 pcf. Construction equipment should not be allowed at the top of the excavation closer than a distance equal to the height of the excavation. Where a temporary sloped excavation is desired, the side slope gradient of 1H:1V should be utilized if the excavation exposes clayey soils and a gradient of 1½H:1V should be utilized if the excavation exposes silty and/or sandy soils.

8.6 Exterior Flatwork

All concrete slabs should be constructed on a well compacted and moisture conditioned soil subgrade as recommended in the "Site Grading" section of this report. Once the subgrade has been prepared, it should be maintained above optimum moisture content until the concrete slab is placed. The subgrade should be approved by the Geotechnical Engineer immediately before the slab is poured. The slab should be reinforced as per the project Structural Engineer's recommendations.

Where new exterior slabs will be constructed adjacent to irrigated landscape areas, or where natural runoff will drain toward the subgrade area, below-grade concrete curbs should be constructed at the edges of planters and landscaping areas. The intent is to minimize moisture seeping from landscaping areas into the pavement subgrade through the aggregate base. The curbs should extend 2 to 3 inches below the bottom of the aggregate base. Where trees will be located adjacent to pavement areas, a suitable root barrier will also help limit migration of irrigation water into the aggregate base.

8.7 Pavement Design

8.7.1 Flexible Pavements

An R-value test was performed on a sample of the near-surface clayey soil obtained from Boring B-9 near the proposed driveway area. The test results indicated an R-value of 9, as shown on the attached Plate 16,

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

R-Value Test Report. The two R-value tests carried out as part of our previous investigation for the corporation yard project estimated R-values of 19 and 13.

Considering the variability of the soils cross the project area, for purpose of this investigation, we used an R-value of 9 to calculate the pavement sections for Traffic Indices of 5.0, 6.0, and 7.0. Generally, a Traffic Index (TI) of 5.0 is appropriate for automobile parking stalls, whereas a Traffic Index of 6.0 would be appropriate for heavily-used automobile driveways with only occasional use by heavy trucks (such as once a week or so by garbage trucks), and Traffic Indices of 7.0 or higher are used where the pavement would be subject to more frequent truck traffic such as daily use by delivery trucks. The estimated pavement sections with aggregate base and subbase are tabulated below.

Table 3
Summary of Asphaltic Concrete Pavement Sections
(Subgrade R-value=9)

Pavement Component	TI=5.0		TI=6.0		TI=7.0	
Asphaltic Concrete (AC) in Inches	3	3	3½	3½	4	4
Class II Aggregate Base (R_{Min}=78)	9	4	12	4	14½	5
Class II Aggregate Subbase or Recycled AB (R_{Min}=50)	--	5½	--	8½	--	10½
Total Thickness in Inches	12	12½	15½	16	18½	19½

The pavement sections presented in the above table have been calculated using the design method described in the Caltrans Highway Design Manual (Topic 633, May 2012) with the added safety factors. The method characterizes the subgrade soil conditions with R-values, and characterizes the traffic loading conditions with a Traffic Index. All materials and construction procedures, including placement and compaction of pavement components, should be performed in conformance with the latest edition of the Caltrans Standard Specifications, except that compaction should be performed in accordance with ASTM Test Method D1557.

All pavement components should be compacted to at least 95 percent of the maximum dry density at moisture contents specified under the Site Grading section of this report. All over-sized rocks and cobbles larger than 4 inches should be completely removed, unless they can be crushed in place with the construction equipment.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

8.7.2 Rigid Pavements

Where Portland Cement Concrete (rigid) Pavements are to be used, they should be supported on a subgrade that has been prepared as recommended under "Site Grading". Concrete pavements exposed to regular automobiles and weekly use by a garbage truck (if applicable), should consist of 6 inches of concrete with a minimum compressive strength of 3,700 psi (MR=550 psi) supported on at least 6 inches of Class II Aggregate Base material compacted to a minimum of 95 percent relative compaction.

As a minimum, concrete pavements should be reinforced with deformed bars in both directions to control cracking, and joints should be provided in both directions within the pavement designed to prevent formation of irregular cracks.

Where traffic can drive over the edge of the concrete pavement, such as at transition to AC paving, the Portland Cement Association suggests the thickened edge should be increased by 20 percent, and tapered back to normal slab thickness over a distance of 10 times the slab thickness.

8.8 Utility Trench Backfill

Utility trenches may be backfilled with on-site soils that are free of debris, roots and other organic matter, and rocks or lumps exceeding 2 inches in greatest dimension. The fill should also be uniformly moisture conditioned to the proper moisture content and compacted as per the recommendations included above.

The utility lines should be properly bedded and shaded with granular material, such as, sand or pea gravel. As a general rule, the bedding layer should be 2 to 4 inches thick and the utility lines should be shaded with the granular materials to a minimum of 4 inches above the utility line. The bedding and shading layers should be compacted using a vibratory compactor before subsequent backfill is placed. The contractor should use extreme caution with the vibratory compactor on the shading layer, as excessive vibrations and/or imbalanced shading materials could result in dislodging the pipe and loosening the joints.

BAGG Engineers should be allowed an opportunity to observe the trench backfill operations and perform field compaction tests to evaluate the moisture content and relative compaction of the fill materials.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Alternatively, the utility trenches may be backfilled with flowable fill (a cementitious slurry consisting of a mixture of fine aggregate or filler, water, and cementitious material(s) capable of filling all voids in irregular excavations and hard to reach places). The flowable fill is self-leveling material that hardens in a matter of a few hours without the need for compaction in layers. Flowable fill is sometimes referred to as controlled density fill (CDF), controlled low strength material (CLSM), and lean concrete slurry. A 1- to 2-sack flowable fill material is usually considered to be acceptable for the subject project.

8.9 Drainage

It is recommended that a minimum 5-percent slope away from the structures for a horizontal distance of at least 5 feet be established in adjacent planter areas and a minimum 1-percent slope away from the structures for a horizontal distance of at least 5 feet be established in areas containing hardscape. Drainage should not be allowed to pond on the site or adjacent to any foundation, and should be directed towards appropriate discharge points. Surface waters should not be permitted to drain over slopes. Any area where surface run-off becomes concentrated should be provided with a catch basin that discharges the collected runoff in a manner that will not cause erosion. Surface and subsurface drainage facilities and catchment areas should be checked frequently and cleaned or maintained throughout the project life, as necessary.

8.10 Corrosion Potential

Two near-surface soil samples obtained from Borings B-6 and B-8 were submitted to Cooper Testing Laboratories for corrosivity testing. The results of chemical analyses, pH, ORP, and resistivity are tabulated in the following table, and attached on Plate 17, Corrosivity Tests Summary. The following table also presents the results of our preliminary screening of the corrosivity of the samples tested.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Table 4
Corrosion Test Results

Analysis/Test	Boring B-6 @ 2' – 5'	Boring B-8 @ 1.5' – 4'	Corrosivity Classification
Resistivity @ 100% Saturation [Ohm-Cm]	7,471	3,851	Mildly Corrosive[1]
pH	7.4	7.5	Neutral[2]
ORP (Redox) [mV]	486	492	Non-Corrosive[2]
Chloride [mg/Kg]	<2	4	Negligible[3]
Sulfate [mg/Kg]	8	3	Negligible[4]
Sulfide (Qualitative by Lead)	Negative	Negative	Not Present
Moisture Content (%)	15.0	17.7	N.A.

[1]National Association of Corrosion Engineers (NACE) Corrosion Basics, page 191.
[2]Standard Method 2580B.
[3]For metals encased in concrete, extrapolated from CTM 372.
[4]For metals encased in concrete, ACI-318, Building Code Requirements for Reinforced Concrete.

The results for pH, ORP (redox), chloride, and sulfate content as well as sulfide were essentially reported as negligible amounts in terms of corrosion. With respect to resistivity, the samples were classified as "mildly corrosive". Corrosive effects to concrete and masonry materials will be moderate, while the effects may be noticeable with metals in direct contact with the soil subgrade.

To minimize the corrosive degradation of any steel, ductile iron, or copper pipes over time, we recommend that these types of pipes be coated or polyethylene sleeved, or cathodic protection should be designed and implemented for the protection of such pipes. The soils can severely degrade copper pipes over a short period of time, as such, copper pipes should not be in contact with soil.

Subsurface conditions are not the only factors that may cause corrosion; design and construction practice may also be primary causes for failure. A review of plans and specifications for underground structures may be conducted by a qualified corrosion engineer prior to installation, if desired.

8.11 Plan Review

It is recommended that the Geotechnical Engineer (BAGG Engineers) be retained to review the final project plans. This review is intended to assess general suitability of our recommendations for the project in its final form, and to verify the appropriate implementation of our recommendations into the project plans and specifications.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

8.12 Observation and Testing

It is recommended that the Geotechnical Engineer (BAGG Engineers) be retained to provide observation and testing services during site grading, foundation construction, utility trench excavation and backfill, and subgrade preparation phases of the work. This is intended to verify that the work in the field is performed as recommended and in accordance with the approved plans and specifications, as well as verify that subsurface conditions encountered during construction are similar to those anticipated during the design phase. Unanticipated soil conditions may warrant revised recommendations. For this reason, we cannot accept responsibility for the recommendations contained in this report if we are not given the opportunity to observe and test the construction activities.

9.0 CLOSURE

This report has been prepared in accordance with generally accepted engineering practices for the strict use of County of San Mateo and other professionals associated with the specific project described in this report. The recommendations presented in this report are based on our understanding of the subject site improvement as described herein, and upon the subsurface conditions encountered in the exploratory borings and the CPTs advanced for this project.

It is not uncommon for unanticipated conditions to be encountered during site grading and/or foundation installation and it is not possible for all such variations to be found by a field exploration program appropriate for this type of project. The recommendations contained in this report are therefore contingent upon the review of the final improvement plans by this office, and upon geotechnical observation and testing by BAGG Engineers of all pertinent aspects of the project, including grading, excavation and backfilling, subgrade preparation, and installation of foundations.

Subsurface conditions and standards of practice change with time. Therefore, we should be consulted to update this report, if the construction does not commence within 18 months from the date this report is submitted. Additionally, the recommendations of this report are only valid for the proposed development as described herein. If the proposed project is modified, our recommendations should be reviewed and either approved or modified by this office in writing.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

The following plates and appendices are attached and complete this report:

Plate 1	Vicinity Map
Plate 2	Site Plan
Plate 3	Area Geologic Map
Plate 4	Regional Fault Map
Plate 5	Cross Section A-A'
Plate 6	Unified Soil Classification System
Plate 7	Soil Terminology
Plate 8	Boring Log Notes
Plate 9	Key to Symbols
Plates 10-A through 13-B	Boring Logs
Plate 14	Plasticity Data
Plate 15	Gradation Test Data
Plate 16	R-Value Test Report
Plate 17	Corrosivity Tests Summary
Appendix A	Cone Penetration Test (CPT) Results (CPT-3 through CPT-5)
Appendix B	2021 Boring & CPT Logs (B-1 through B-5; CPT-1 & CPT-2)

ASFE document titled "Important Information about This Geotechnical Engineering Report"

10.0 REFERENCES

ACI Committee 318, 2008, *ACI 318-08, Building Code Requirements for Structural Concrete and Commentary,* American Concrete Institute.

American Society of Civil Engineers, 2017, *Minimum Design Loads and Associated Criteria for Buildings and Other Structures*, ASCE Standard, ASCE/SEI 7-16.

Boulanger and Idriss, 2014, *CPT and SPT Based Liquefaction Triggering Procedures*, UC Davis, Center for Geotechnical Modeling, Report No. UCD/CGM-14/01.

Brabb, E.E., Graymer, R.W., and Jones, D.L., 1998, *Geology of the Onshore Part of the San Mateo County, California: a Digital Database*, U.S. Geological Survey Open-File Report 98-137.

California Code of Regulations, January 2023, *2022 California Building Code (CBC)*, Title 24, Part 2, Volume 2 of 2, California Building Standards Commission, Based on 2021 International Building Code.

California Department of Conservation, Division of Mines and Geology, 2000, *Digital Images of Official maps of Alquist-Priolo Earthquake Fault Zones of California, Central Coast Region.*

California Geological Survey, 2021, *Earthquake Zones of Required Investigation, Half Moon Bay Quadrangle*.

California Geological Survey, 2021, *Seismic Hazard Zone Report 132 (SHZR 132), Seismic Hazard Zone Report for the Half Moon Bay 7.5-Minute Quadrangle, San Mateo County, California*.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

California Geological Survey, 2008, *Guidelines for Evaluating and Mitigating Seismic Hazards in California*, Special Publication 117A.

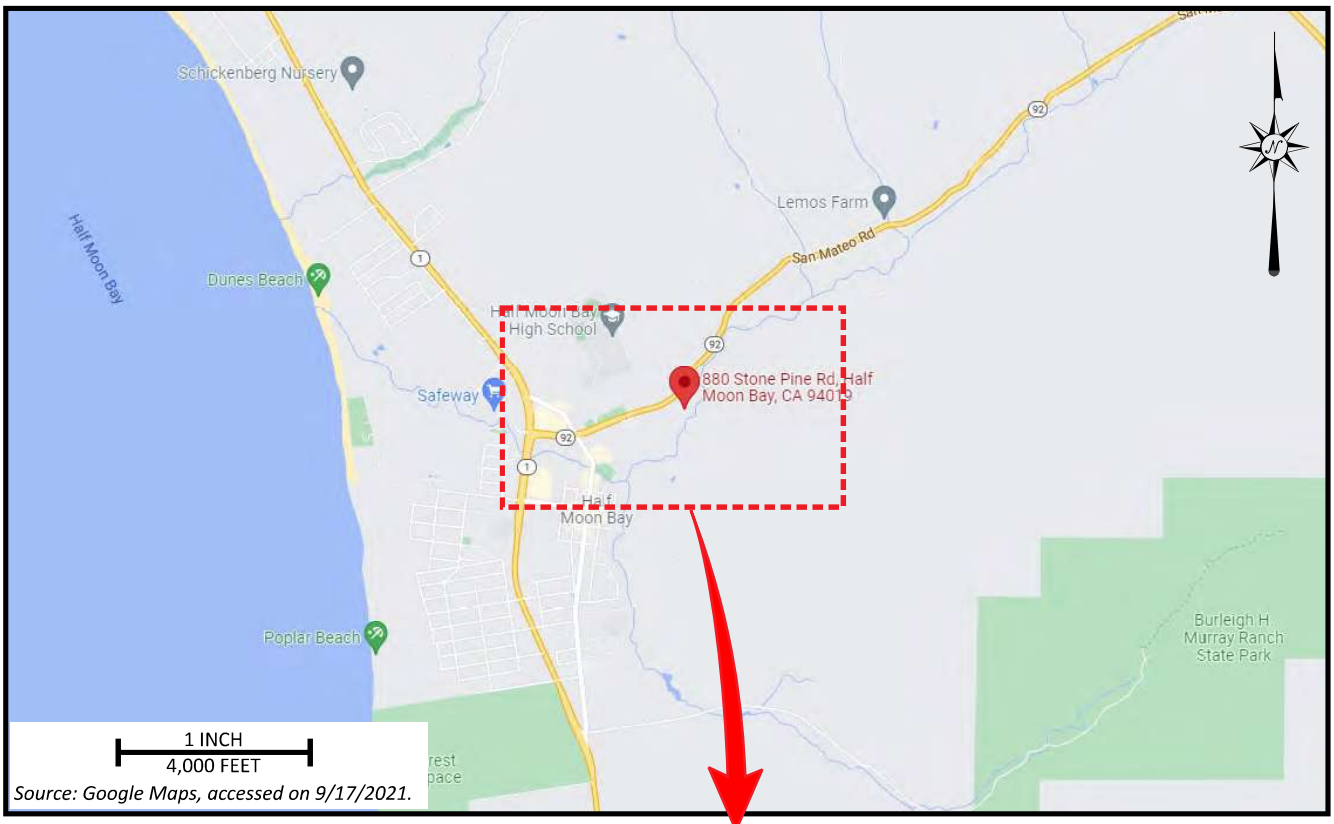
California's Office of Statewide Health Planning and Development (OSHPD), U.S. Seismic Design Maps, https://seismicmaps.org/.

U.S. Geological Survey, Unified Hazard Tool, https://earthquake.usgs.gov/hazards/interactive/.

Working Group on California Earthquake Probabilities, 2013, *The Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3)*, U. S. Geological Survey Open File Report 2013-1165.

Working Group on California Earthquake Probabilities, 2014, *Long-Term Time-Dependent Probabilities for the Third Uniform California Earthquake Rupture Forecast (UCERF3),* Bulletin of the Seismological Society of America, Vol. 105, No. 2A, April 2015.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2



Source: Google Maps, accessed on 9/17/2021.



Source: Google Earth Imagery, dated 9/27/2021.

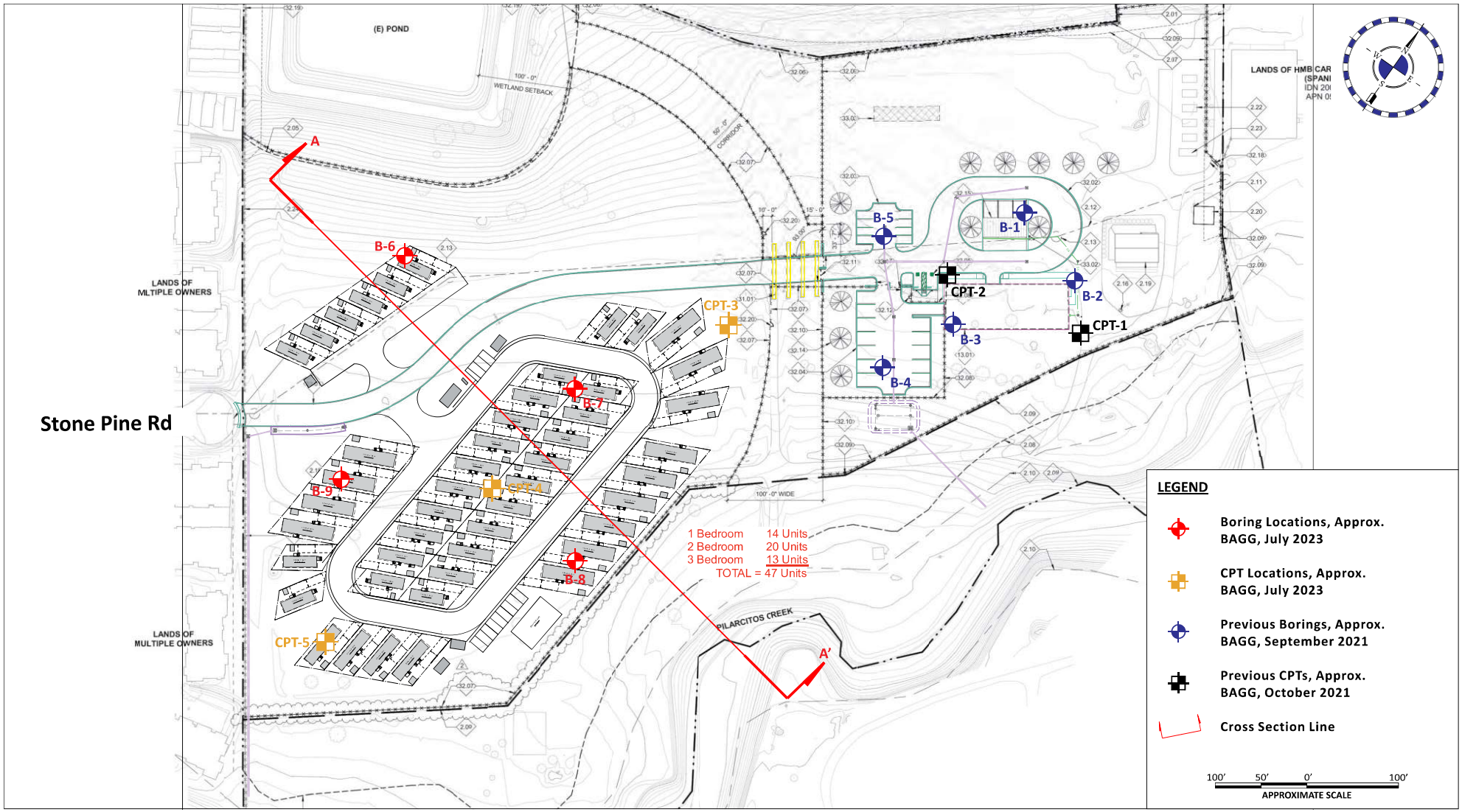
GEOTECHNICAL ENGINEERING INVESTIGATION
SMC-HMB FARMWORKER HOUSING PROJECT
880 STONE PINE ROAD
HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

VICINITY MAP

DATE:	JOB NUMBER:	PLATE
August 2023	COUSM-23-03	1

BAGG ENGINEERS

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2



Base Map:
Conceptual site plan with BKF markups, unsigned, undated.

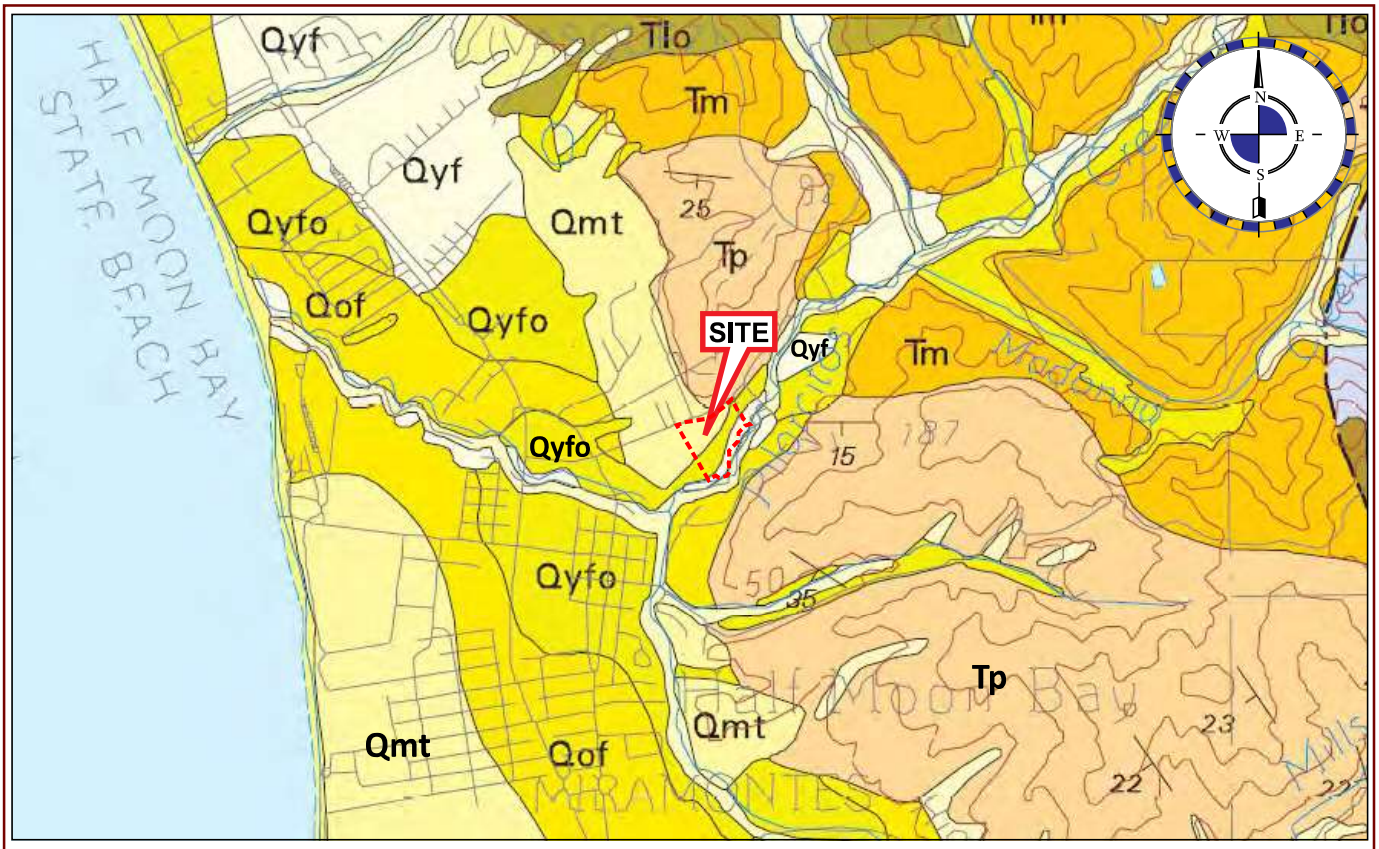
GEOTECHNICAL ENGINEERING INVESTIGATION
SMC-HMB FARMWORKER HOUSING PROJECT
880 STONE PINE ROAD
HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

BAGG ENGINEERS

SITE PLAN

PROJECT NO.:	SCALE:	DATE	PLATE
COUSM-23-03	1" ≈ 100'	August 2023	2

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2



LEGEND

Qyf	**Younger (inner) alluvial fan deposits (Holocene) –** Unconsolidated fine- to coarse-grained sand, silt, and gravel.
Qyfo	**Younger (outer) alluvial fan deposits (Holocene) –** Unconsolidated fine sand, silt, and clayey silt.
Qof	**Coarse-grained older alluvial fan and stream terrace deposits (Pleistocene) –** Poorly consolidated gravel, sand, and silt.
Qmt	**Marine terrace deposits (Pleistocene) –** Poorly consolidated and poorly indurated well- to poorly-sorted sand and gravel.
Tp	**Purisima Formation (Pliocene and upper Miocene) –** Predominantly gray and greenish-gray to buff fine-grained sandstone, siltstone, and mudstone, but also includes some porcelaneous shale and mudstone, chert, silty mudstone, and volcanic ash.
Tm	**Monterey Formation (middle Miocene) –** Grayish-brown and brownish-black to very pale orange and white, porcelaneous shale with chert, porcelaneous mudstone, impure diatomite, calcareous claystone, and with small amounts of siltstone and sandstone near base.
Tlo	**Lompico Sandstone (middle Miocene) –** Very pale orange, fine to coarse-grained, mostly well-cemented and hard arkosic sandstone.

Reference: *Geology of the Onshore Part of San Mateo County: Derived From the Digital Database Open-File 98-137,* by Brabb et al., 1998.

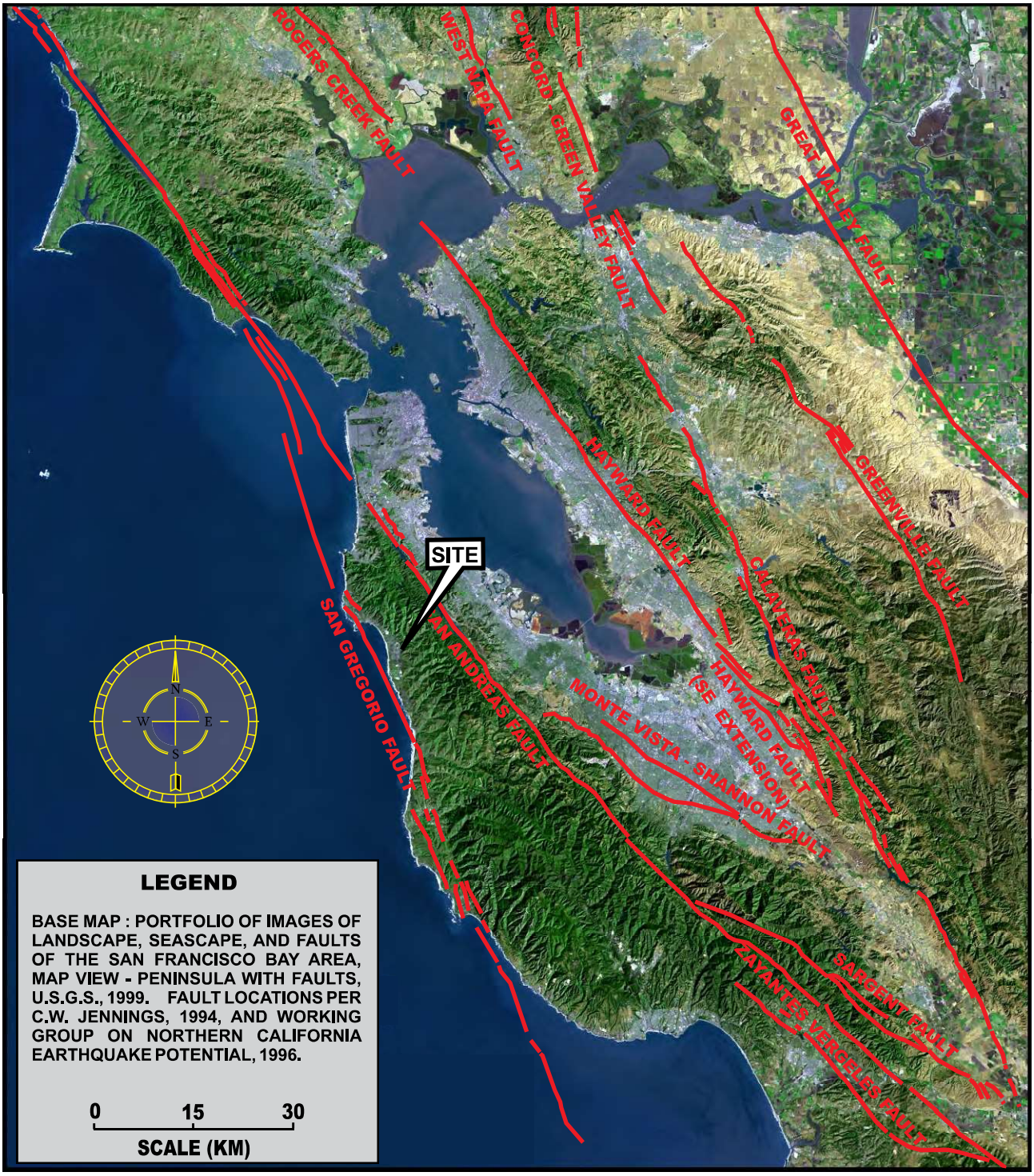
GEOTECHNICAL ENGINEERING INVESTIGATION
SMC-HMB FARMWORKER HOUSING PROJECT
880 STONE PINE ROAD
HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

AREA GEOLOGIC MAP

DATE:	JOB NUMBER:	PLATE:
August 2023	COUSM-23-03	3

BvGG ENGINEERS

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2



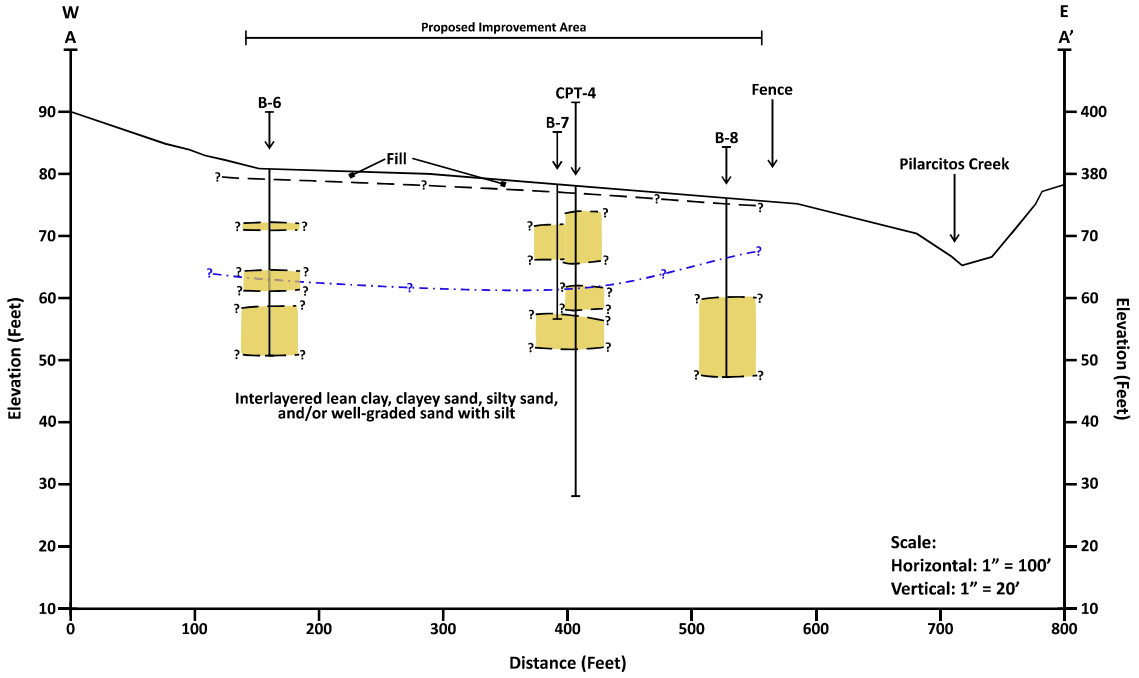
GEOTECHNICAL ENGINEERING INVESTIGATION
SMC-HMB FARMWORKER HOUSING PROJECT
880 STONE PINE ROAD
HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

REGIONAL FAULT MAP

DATE:	JOB NUMBER:	PLATE
August 2023	COUSM-23-03	4

BAGG ENGINEERS

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2



Legend

- Approximate Existing Ground Surface
- Approximate Geologic Contact
- Approximate Measured Groundwater Depth
- Potentially Liquefiable Soil
- B-4 Approximate Boring/CPT Location

Note:
Elevations based on Conceptual site plan with BKF markups, unsigned, undated.

GEOTECHNICAL ENGINEERING INVESTIGATION
SMC-HMB FARMWORKER HOUSING PROJECT
880 STONE PINE ROAD
HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

BAGG ENGINEERS

CROSS SECTION A-A'

JOB NUMBER:	SCALE:	DATE:	PLATE:
COUSM-23-03	1"=100' & 1"=20'	August 2023	5

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

COARSE-GRAINED SOILS

LESS THAN 50% FINES*

GROUP SYMBOLS	ILLUSTRATIVE GROUP NAMES	MAJOR DIVISIONS
GW	Well graded gravel Well graded gravel with sand	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size
GP	Poorly graded gravel Poorly graded gravel with sand	
GM	Silty gravel Silty gravel with sand	
GC	Clayey gravel Clayey gravel with sand	
SW	Well graded sand Well graded sand with gravel	SANDS More than half of coarse fraction is smaller than No. 4 sieve size
SP	Poorly graded sand Poorly graded sand with gravel	
SM	Silty sand Silty sand with gravel	
SC	Clayey sand Clayey sand with gravel	

NOTE: Coarse-grained soils receive dual symbols if:
(1) their fines are CL-ML (e.g. SC-SM or GC-GM) or
(2) they contain 5-12% fines (e.g. SW-SM, GP-GC, etc.)

FINE-GRAINED SOILS

MORE THAN 50% FINES*

GROUP SYMBOLS	ILLUSTRATIVE GROUP NAMES	MAJOR DIVISIONS
CL	Lean clay Sandy lean clay with gravel	SILTS AND CLAYS liquid limit less than 50
ML	Silt Sandy silt with gravel	
OL	Organic clay Sandy organic clay with gravel	
CH	Fat clay Sandy fat clay with gravel	SILTS AND CLAYS liquid limit more than 50
MH	Elastic silt Sandy elastic silt with gravel	
OH	Organic clay Sandy organic clay with gravel	
PT	Peat Highly organic silt	HIGHLY ORGANIC SOIL

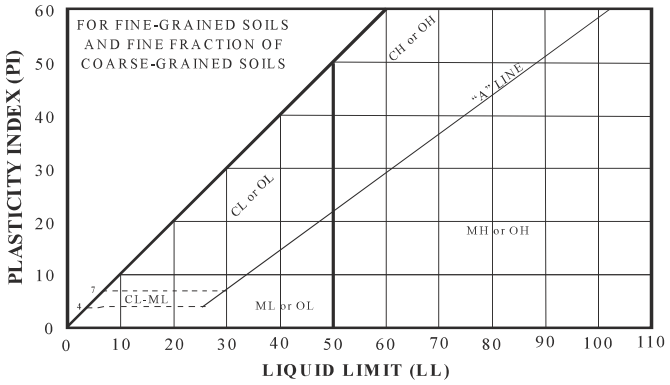
NOTE: Fine-grained soils receive dual symbols if their limits in the hatched zone on the Plasticity Chart(L-M)

SOIL SIZES

COMPONENT	SIZE RANGE
BOULDERS	ABOVE 12 in.
COBBLES	3 in. to 12 in.
GRAVEL	No. 4 to 3 in.
Coarse	¾ in to 3 in.
Fine	No. 4 to ¾ in.
SAND	No. 200 to No.4
Coarse	No. 10 to No. 4
Medium	No. 40 to No. 10
Fine	No. 200 to No. 40
*FINES:	BELOW No. 200

NOTE: Classification is based on the portion of a sample that passes the 3-inch sieve.

PLASTICITY CHART



Reference: ASTM D 2487-06, Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).

GENERAL NOTES: The tables list 30 out of a possible 110 Group Names, all of which are assigned to unique proportions of constituent soils. Flow charts in ASTM D 2487-06 aid assignment of the Group Names. Some general rules for fine grained soils are: less than 15% sand or gravel is not mentioned; 15% to 25% sand or gravel is termed "with sand" or "with gravel", and 30% to 49% sand or gravel is termed "sandy" or "gravelly". Some general rules for coarse-grained soils are: uniformly-graded or gap-graded soils are "Poorly" graded (SP or GP); 15% or more sand or gravel is termed "with sand" or "with gravel", 15% to 25% clay and silt is termed clayey and silty and any cobbles or boulders are termed "with cobbles" or "with boulders".

UNIFIED SOIL CLASSIFICATION SYSTEM

BYGG ENGINEERS

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SOIL TYPES (Ref 1)

Boulders: particles of rock that will not pass a 12-inch screen.

Cobbles: particles of rock that will pass a 12-inch screen, but not a 3-inch sieve.

Gravel: particles of rock that will pass a 3-inch sieve, but not a #4 sieve.

Sand: particles of rock that will pass a #4 sieve, but not a #200 sieve.

Silt: soil that will pass a #200 sieve, that is non-plastic or very slightly plastic, and that exhibits little or no strength when dry.

Clay: soil that will pass a #200 sieve, that can be made to exhibit plasticity (putty-like properties) within a range of water contents, and that exhibits considerable strength when dry.

MOISTURE AND DENSITY

Moisture Condition: an observational term; dry, moist, wet, or saturated.

Moisture Content: the weight of water in a sample divided by the weight of dry soil in the soil sample, expressed as a percentage.

Dry Density: the pounds of dry soil in a cubic foot of soil.

DESCRIPTORS OF CONSISTENCY (Ref 3)

Liquid Limit: the water content at which a soil that will pass a #40 sieve is on the boundary between exhibiting liquid and plastic characteristics. The consistency feels like soft butter.

Plastic Limit: the water content at which a soil that will pass a #40 sieve is on the boundary between exhibiting plastic and semi-solid characteristics. The consistency feels like stiff putty.

Plasticity Index: the difference between the liquid limit and the plastic limit, i.e. the range in water contents over which the soil is in a plastic state.

MEASURES OF CONSISTENCY OF COHESIVE SOILS (CLAYS) (Ref's 2 & 3)

Very Soft	N=0-1*	C=0-250 psf	Squeezes between fingers
Soft	N=2-4	C=250-500 psf	Easily molded by finger pressure
Medium Stiff	N=5-8	C=500-1000 psf	Molded by strong finger pressure
Stiff	N=9-15	C=1000-2000 psf	Dented by strong finger pressure
Very stiff	N=16-30	C=2000-4000 psf	Dented slightly by finger pressure
Hard	N>30	C>4000 psf	Dented slightly by a pencil point

*__N__=blows per foot in the Standard Penetration Test. In cohesive soils, with the 3-inch-diameter ring sampler, 140-pound weight, divide the blow count by 1.2 to get N (Ref 4).

MEASURES OF RELATIVE DENSITY OF GRANULAR SOILS (GRAVELS, SANDS, AND SILTS) (Ref's 2 & 3)

Very Loose	N=0-4**	RD=0-30	Easily push a ½-inch reinforcing rod by hand
Loose	N=5-10	RD=30-50	Push a ½-inch reinforcing rod by hand
Medium Dense	N=11-30	RD=50-70	Easily drive a ½-inch reinforcing rod
Dense	N=31-50	RD=70-90	Drive a ½-inch reinforcing rod 1 foot
Very Dense	N>50	RD=90-100	Drive a ½-inch reinforcing rod a few inches

**__N__=Blows per foot in the Standard Penetration Test. In granular soils, with the 3-inch-diameter ring sampler, 140-pound weight, divide the blow count by 2 to get N (Ref 4).

xxxx

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

GENERAL NOTES FOR BORING LOGS:

The boring logs are intended for use only in conjunction with the text, and for only the purposes the text outlines for our services. The Plate "Soil Terminology" defines common terms used on the boring logs.

The plate "Unified Soil Classification System," illustrates the method used to classify the soils. The soils were visually classified in the field; the classifications were modified by visual examination of samples in the laboratory, supported, where indicated on the logs, by tests of Liquid Limit, Plasticity Index, and/or gradation. In addition to the interpretations for sample classification, there are interpretations of where stratum changes occur between samples, where gradational changes substantively occur, and where minor changes within a stratum are significant enough to log.

There may be variations in subsurface conditions between borings. Soil characteristics change with variations in moisture content, with exchange of ions, with loosening and densifying, and for other reasons. Groundwater levels change with seasons, with pumping, from leaks, and for other reasons. Thus boring logs depict interpretations of subsurface conditions only at the locations indicated, and only on the date(s) noted.

SPECIAL FIELD NOTES FOR THIS REPORT:

1. The borings were advanced on July 24, 2023, using a truck-mounted drilling rig equipped with 6-inch diameter continuous flight augers. The Cone Penetration Tests (CPTs) were advanced on July 26, 2023, with a truck-mounted CPT rig. The boreholes and the CPTs were backfilled with cement grout.

2. The boring/CPT locations were approximately located using existing site features such as trees, poles, etc.

3. The soils' Group Names [e.g. LEAN CLAY] and Group Symbols [e.g. (CL)] were determined or estimated per ASTM D 2487, Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System, see Plate 6). Other engineering terms used on the boring logs are defined on Plate 7, Soil Terminology.

4. Groundwater was encountered in Borings B-6 through B-8 on the date and at the depths noted on the boring logs; however, groundwater was not encountered in Boring B-9 advanced to about 20 feet below the ground surface. The pore pressure dissipation tests performed in CPT-3 and CPT-5 estimated groundwater depths of approximately 15 and 12½ feet, respectively.

5. The soil samples were obtained using the sampler type noted on the boring logs and described on Plate 9, Key to Symbols.

6. The "Blow Count" Column on the boring logs indicates the number of blows required to drive the Modified California and/or Standard Penetration Test sampler below the bottom of the boring, with the blow counts given for each 6 inches of sampler penetration.

7. The tabulated strength values on the boring logs are peak strength values.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

KEY TO SYMBOLS

Symbol	Description
Strata symbols	
	Sandy lean clay
	Clayey sand
	Well-graded sand with silt
	Lean Clay
	Silty sand
	Lean clay with sand
	Clayey sand with gravel
Misc. Symbols	
	Water first encountered during drilling
	Water level at completion of boring
	Boring continues
Soil Samplers	
	Modified California Sampler: 18" long, 2.375" ID by 3" OD, split-barrel sampler driven w/ 140-pound hammer falling 30 inches (ASTM D3550)

Symbol	Description
	Standard Penetration Test: 18" long, 1.375" ID by 2" OD, split-spoon sampler driven w/ 140-pound hammer falling 30 inches (ASTM D 1586-11)
Line Types	
_____	Denotes a sudden, or well identified strata change
_ _ _	Denotes a gradual, or poorly identified strata change
Laboratory Data	
DS	Direct shear test performed on a sample at natural or field moisture content (ASTM D3080).
DSX	Direct shear test performed after the sample was submerged in water until volume changes ceased (ASTM D3080).
LL	Liquid Limit established per ASTM D4318 Test Method
PI	Plasticity Index established per ASTM D4318 Test Method
Gravel (%)	Percent soil particles finer than a 3" sieve and coarser than a No. 4 sieve (ASTM C136/C117)
Sand (%)	Percent soil particles finer than a No. 4 sieve and coarser than a No. 200 sieve (ASTM C136/C117)
Fines (%)	Percent soil particles finer than a No. 200 sieve (ASTM C117)
Swell (%)	Percent expansion of a submerged sample under a given surcharge pressure
Nat.	Natural or field water content
bgs	Below the ground surface

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BORING LOG

Boring No. B-6
Page 1 of 2

JOB NAME: SMC-HMB Farmworker Housing Project
CLIENT: County of San Mateo
LOCATION: 880 Stone Pine Road, Half Moon Bay, CA
DRILLER: Cenozoic Exploration
DRILL METHOD: Truck-Mounted Drilling Rig - 6" Diam. Continuous Flight Augers

JOB NO.: COUSM-23-03
DATE DRILLED: 7/24/2023
ELEVATION: 83± feet
LOGGED BY: JL

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
				8.6		0	4 12 20	CL	SANDY LEAN CLAY: dark brown, soft on the surface, stiff below, dry to moist, fine to medium sand, trace coarse sand, trace fine gravel, little organics	Fill 1% Gravel 41% Sand 58% Fines Native
DSX	320	20.3	630	13.1	105			CL		0.5% Swell
DS	400	Nat.	660	13.9	102	3	4 4 4	SC	SANDY LEAN CLAY: dark gray, very stiff, dry to moist, fine to medium sand, few coarse sand, trace fine gravel CLAYEY SAND: dark gray, medium dense, moist, mostly medium sand, few fine sand, few coarse sand ... color change to brown	29% Fines LL=39, PI=15
						6				
DS	1200	Nat.	760	11.0	99	9	6 6 5	SW-SM	WELL-GRADED SAND with SILT: brown and gray, loose, wet, well-graded sand	5% Fines
DS	2500	Nat.	1730	11.6	95			CL	LEAN CLAY: gray-brown with orange-brown mottling, medium stiff, moist, trace fine sand	
						12		SC	CLAYEY SAND: brown to orange-brown, loose, wet, fine to medium sand	
				25.1			5 7 9			40% Fines
DS	1800	Nat.	890	22.9	102	15			... approximately 6" of stiff, moist, lean clay ... medium dense clayey sand	LL=32, PI=11
								SM	SILTY SAND: brown, medium dense, wet, fine sand, contains 1" to 2" thick lean clay layers	
						18	5			48% Fines

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BYGG ENGINEERS

BORING LOG

Boring No. B-6
Page 2 of 2

JOB NAME: SMC-HMB Farmworker Housing Project *JOB NO.:* COUSM-23-03

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
DS	2300	Nat.	1530	30.0	91		6 7	CL	... gray-brown, medium dense, wet	Non-Plastic
						21			SANDY LEAN CLAY: dark gray to dark blue-gray, medium stiff, moist, fine sand	
								SM	SILTY SAND: gray-brown, medium dense, wet, fine sand	
				27.1			6			23% Fines
DS	2600	Nat.	1630	25.8	98	24	8 9			Non-Plastic
						27				
				22.4			3		... dark gray to dark blue-gray, medium dense, saturated, fine to medium sand	30% Fines
				27.2			4 8		... about 5" bluish gray fat clay	Non-Plastic
						30			The boring was terminated at approximately 30 feet bgs. Groundwater was encountered at about 17½ feet bgs and was measured at about 18 feet bgs upon completion of the boring. The borehole was backfilled with cement grout.	
						33				
						36				
						39				

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BAGG ENGINEERS

BORING LOG

Boring No. B-7
Page 1 of 2

JOB NAME: SMC-HMB Farmworker Housing Project
CLIENT: County of San Mateo
LOCATION: 880 Stone Pine Road, Half Moon Bay, CA
DRILLER: Cenozoic Exploration
DRILL METHOD: Truck-Mounted Drilling Rig - 6" Diam. Continuous Flight Augers

JOB NO.: COUSM-23-03
DATE DRILLED: 7/24/2023
ELEVATION: 80± feet
LOGGED BY: JL

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		SC	CLAYEY SAND: dark gray, medium dense, dry to moist, well-graded sand	Fill?
DS	320	Nat.	2380	21.1	97		8 13 13	CL	SANDY LEAN CLAY: dark gray, very stiff, moist, fine to medium sand, trace organics	Native LL=46, PI=20
						3		SC	CLAYEY SAND: dark brown to brown, medium dense, moist, fine to medium sand	
DSX	700	26.3	610	25.8	97		4 5 7	CL SM	SANDY LEAN CLAY: brown, medium stiff, moist, fine to medium sand	
						6			SILTY SAND: brown to dark brown, medium dense, moist, fine to medium sand	
						9				
				23.2			4		... dark brown, loose, wet, fine to medium sand	30% Fines
DS	1400	Nat.	1110	17.9	105		5			Non-Plastic
DS	3000	Nat.	2150	18.3	108		9			
						12		SW-SM SC	WELL-GRADED SAND with SILT: orange-brown and gray, medium dense, wet, well-graded sand, trace fine gravel	
									CLAYEY SAND: brown to orange-brown, medium dense, wet, fine to medium sand	
						15			... about 6" of sandy lean clay	
							7		... medium dense clayey fine sand	
DS	2000	Nat.	1580	23.0	99		9 7			
						18				

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BYGG ENGINEERS

BORING LOG

JOB NAME: SMC-HMB Farmworker Housing Project *JOB NO.:* COUSM-23-03

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
								CL	LEAN CLAY with SAND: dark gray, stiff, moist, little fine sand	
DS	2400	Nat.	1370	24.3	103	21	7 14 22	SM	SILTY SAND: brown to orange-brown, medium dense, moist, fine sand	
									The boring was terminated at approximately 21½ feet bgs. Groundwater was encountered at about 19 feet bgs and was measured at about 18 feet bgs upon completion of the boring. The borehole was backfilled with cement grout.	
						24				
						27				
						30				
						33				
						36				
						39				

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BORING LOG

JOB NAME: SMC-HMB Farmworker Housing Project
CLIENT: County of San Mateo
LOCATION: 880 Stone Pine Road, Half Moon Bay, CA
DRILLER: Cenozoic Exploration
DRILL METHOD: Truck-Mounted Drilling Rig - 6" Diam. Continuous Flight Augers

JOB NO.: COUSM-23-03
DATE DRILLED: 7/24/2023
ELEVATION: 77± feet
LOGGED BY: JL

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		SC	CLAYEY SAND: dark brown, medium dense, moist, well-graded sand, trace fine gravel, few organics	Fill
DSX	320	18.7	1110	15.6	113		8 9 10	SC		Native 0.9% Swell
DSX	1500	17.0	2410	14.5	115	3		CL	CLAYEY SAND: brown to orange-brown, medium dense, moist, well-graded sand, trace fine gravel	
DS	500	Nat.	1970	29.9	92		6 11 15		LEAN CLAY: dark brown with red-brown stains, very stiff, moist, few well-graded sand	92% Fines LL=49, PI=25
						6				
DS	1000	Nat.	1030	17.7	110	9	6 7 8	SC	CLAYEY SAND: dark brown, medium dense, moist, medium to coarse sand	
								CL	LEAN CLAY: brown to gray-brown with orange-brown stains, stiff, moist, few fine sand	
						12		CL	SANDY LEAN CLAY: brown to orange-brown, stiff, moist to wet, well-graded sand	
DS	1400	Nat.	1030	28.8	95		6 7 10			66% Fines
						15		SC	CLAYEY SAND: brown, medium dense, wet, well-graded sand	
						18	12	SW-SM	WELL-GRADED SAND with SILT: brown, medium dense, saturated, well-graded sand, few	

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BYGG ENGINEERS

BORING LOG

Boring No. B-8
Page 2 of 2

JOB NAME: SMC-HMB Farmworker Housing Project *JOB NO.:* COUSM-23-03

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
DS	1700	Nat.	1890	14.8	114		17 21		fine gravel	6% Gravel 84% Sand 10% Fines
						21				... caving
				15.3		24	8 9 10		... medium dense, saturated, mostly medium-grained sand	10% Fines
						27		SM	SILTY SAND: dark bluish gray, medium dense, saturated, fine sand, contains thin layers of dark blue-gray fat clay	... borehole collapsing, unable to sample
						30			The boring was terminated at approximately 28½ feet bgs. Groundwater was encountered at about 15 feet bgs and was measured at about 9 feet bgs upon completion of the boring. The borehole was backfilled with cement grout.	
						33				
						36				
						39				

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BORING LOG

Boring No. B-9
Page 1 of 2

JOB NAME: SMC-HMB Farmworker Housing Project
CLIENT: County of San Mateo
LOCATION: 880 Stone Pine Road, Half Moon Bay, CA
DRILLER: Cenozoic Exploration
DRILL METHOD: Truck-Mounted Drilling Rig - 6" Diam. Continuous Flight Augers

JOB NO.: COUSM-23-03
DATE DRILLED: 7/24/2023
ELEVATION: 78± feet
LOGGED BY: JL

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		SC	CLAYEY SAND with GRAVEL: brown, loose and dry on surface, medium dense and moist below, well-graded sand, little fine gravel	Fill
DS	320	Nat.	340	12.0	97		8			LL=40, PI=17
DS	1500	Nat.	1710	6.5	108		11	CL		Native R-Value=9
							10			
						3			LEAN CLAY with SAND: dark gray, stiff, moist, little fine to medium sand, trace organics	
				22.4			6			75% Fines
DSX	500	21.6	710	20.7	104		8		... brown at about 2½ feet, well-graded sand, trace fine gravel	
							9			
						6			... orange-brown, stiff, moist	
								SC	CLAYEY SAND: orange-brown, medium dense, moist, well-graded sand, trace fine gravel	
							5			
				19.3		9	9			31% Fines
DS	1200	Nat.	1400	16.4	113		13			
						12		CL	LEAN CLAY: orange-brown with dark gray stains, medium stiff, moist to wet, few fine sand	
							5			
							5			
DS	1800	Nat.	920	39.2	84		7			
						15		SC	CLAYEY SAND: orange-brown, medium dense, moist, well-graded sand	
								CL	LEAN CLAY with SAND: orange-brown o brown, medium stiff, moist to wet, few to little fine sand	
						18				
							6			

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BYGG ENGINEERS

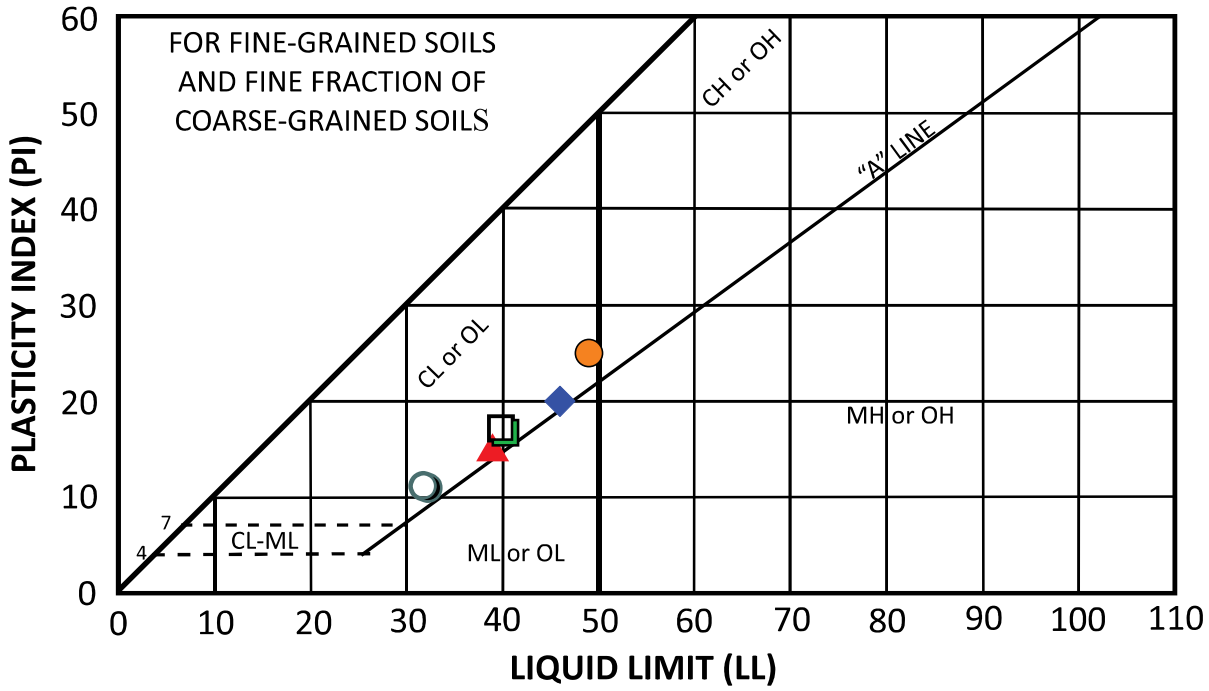
BORING LOG

JOB NAME: SMC-HMB Farmworker Housing Project *JOB NO.:* COUSM-23-03

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
				22.9	104		9 15		... about 2" of medium-grained sand lense ... increased sand content at 20' bgs	
						21			The boring was terminated at approximately 20 feet bgs. Groundwater was not encountered in the boring. The borehole was backfilled with cement grout.	
						24				
						27				
						30				
						33				
						36				
						39				

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

PLASTICITY CHART



SYMBOL	SAMPLE SOURCE	DEPTH (FEET)	NATURAL WATER CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SOIL DESCRIPTION
▲	Boring B-6	3.5	13.9	39	24	15	Dark Gray Clayey Sand (SC)
○	Boring B-6	14	25.1	32	21	11	Brown Clayey Sand (SC)
-	Boring B-6	19	30.0		Non-Plastic		Gray-Brown Silty Sand (SM)
-	Boring B-6	23.5	27.1		Non-Plastic		Gray-Brown Silty Sand (SM)
-	Boring B-6	28.5	22.4		Non-Plastic		Dark Blue-Gray Silty Sand (SM)
◆	Boring B-7	1.5	21.1	46	26	20	Dark Gray Sandy Lean Clay (CL)
-	Boring B-7	10.5	23.2		Non-Plastic		Dark Brown Silty Sand (SM)
●	Boring B-8	4	29.9	49	24	25	Dark Brown Lean Clay (CL)
□	Boring B-9	1.5	12.0	40	23	17	Brown Clayey Sand w/ Gravel (SC)

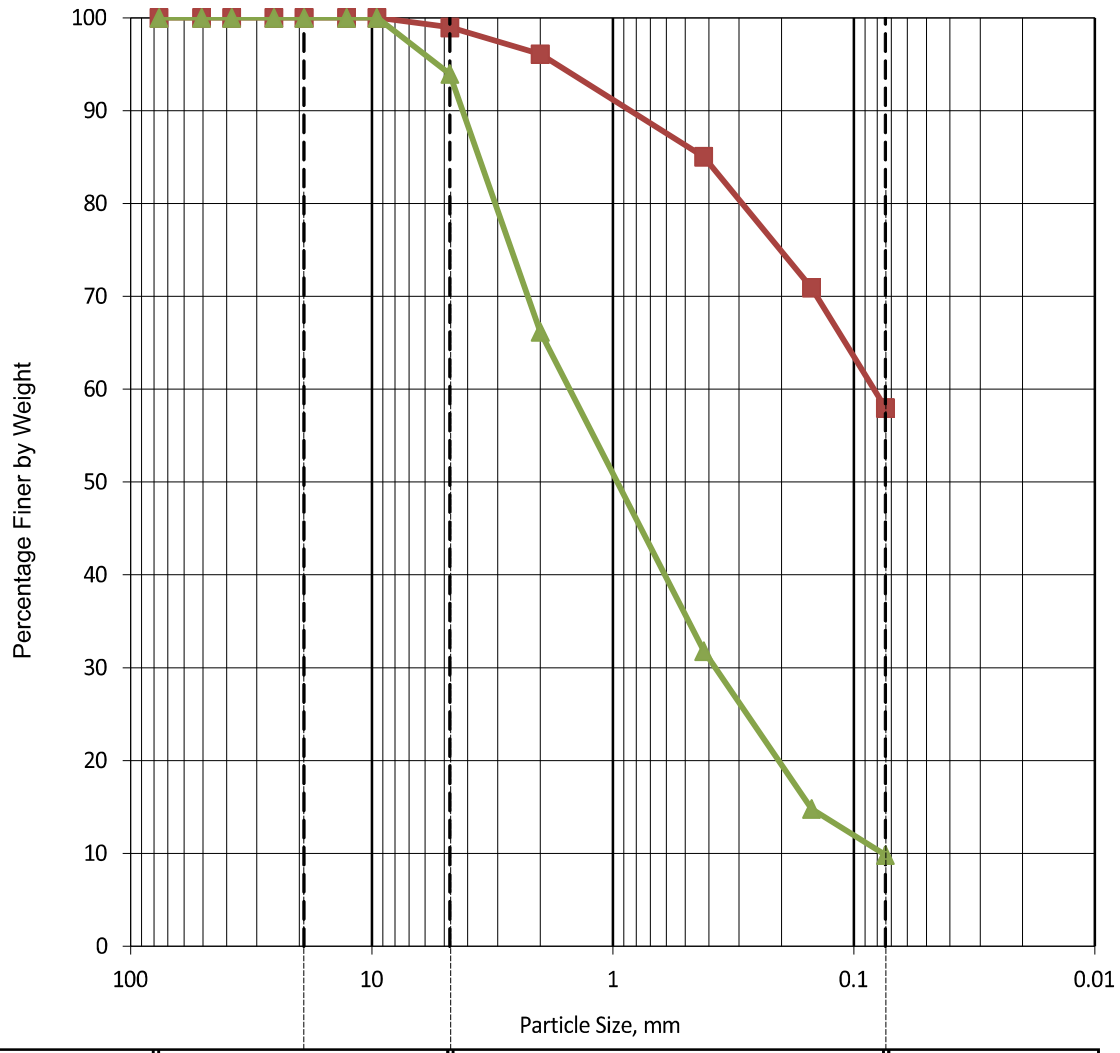
GEOTECHNICAL ENGINEERING INVESTIGATION
SMC-HMB FARMWORKER HOUSING PROJECT
880 STONE PINE ROAD
HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

PLASTICITY DATA

DATE:	JOB NUMBER:	PLATE
August 2023	COUSM-23-03	14

BAGG ENGINEERS

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

LEGEND				
BORING NUMBER	B-6	B-8		
DEPTH (FEET)	1	18.5		
SOIL DESCRIPTION	Sandy Lean Clay (CL)	Well-Graded Sand with Silt (SW-SM)		

GEOTECHNICAL ENGINEERING INVESTIGATION
SMC-HMB FARMWORKER HOUSING PROJECT
880 STONE PINE ROAD
HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

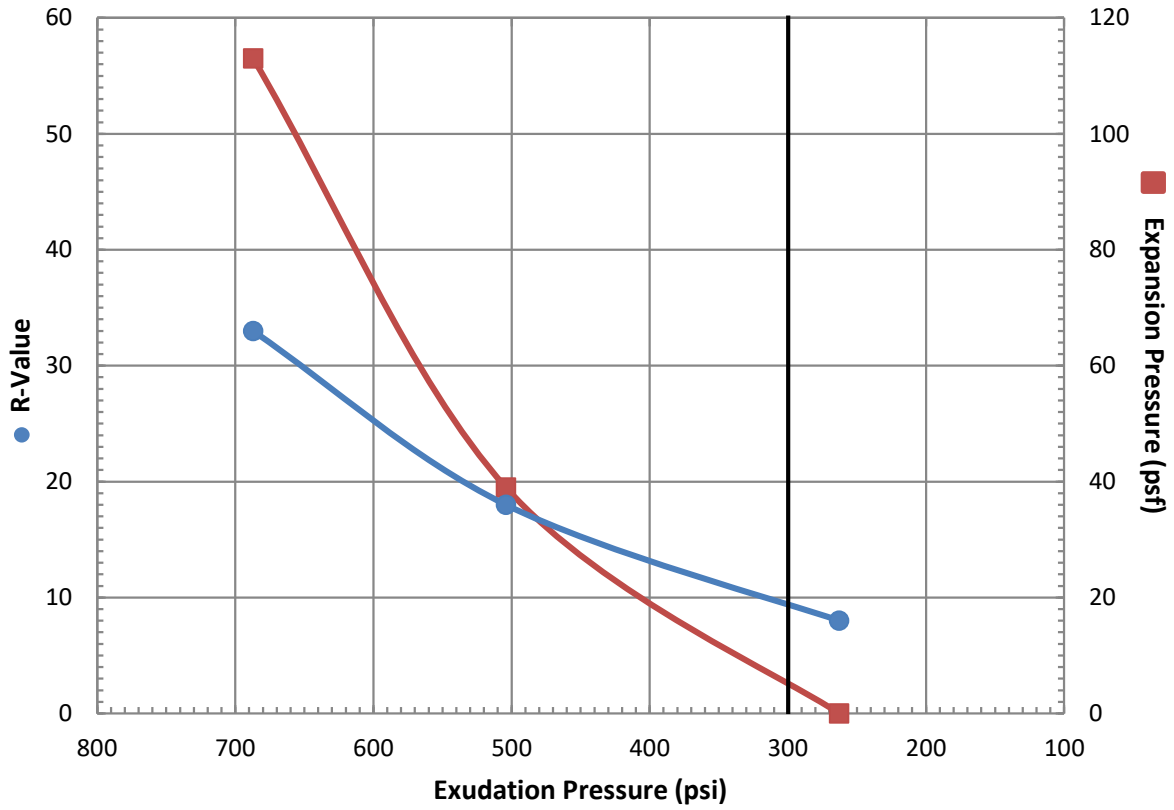
GRADATION TEST DATA

DATE:	JOB NUMBER:	PLATE:
August 2023	COUSM-23-03	15

BAGG ENGINEERS

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

B-9 Bulk Sample at Depth 1.5-3.5 FT



Resistance R-Value and Expansion Pressure - Cal Test 301

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psf	Horizontal Press. Psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	320	113.3	15.1	113	98	2.54	687	33	33
2	250	110.5	15.9	39	123	2.59	504	18	19
3	140	106.4	18.1	0	139	2.64	263	8	9

R-value at 300 psi exudation pressure = 9
Exp. Pressure at 300 psi exudation pressure = 6 psf

GEOTECHNICAL ENGINEERING INVESTIGATION
SMC-HMB FARMWORKER HOUSING PROJECT
880 STONE PINE ROAD
HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

R-VALUE TEST REPORT

DATE:	JOB NUMBER:	PLATE
August 2023	COUSM-23-03	16

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

COOPER TESTING LABORATORY

Corrosivity Tests Summary

CTL # 011-948 **Date:** 7/28/2023 **Tested By:** PJ **Checked:** PJ
Client: BAGG Engineers **Project:** Farmworkers Housing Project **Proj. No:** C00SM-23-03
Remarks:

Sample Location or ID			Resistivity @ 15.5 °C (Ohm-cm)			Chloride	Sulfate		pH	ORP (Redox)		Sulfide	Moisture	Soil Visual Description
			As Rec.	Min	Sat.	mg/kg	mg/kg	%				Qualitative	At Test	
						Dry Wt.	Dry Wt.	Dry Wt.		E_H (mv)	At Test	by Lead	%	
Boring	Sample, No.	Depth, ft.	ASTM G57	Cal 643	ASTM G57	ASTM D4327	ASTM D4327	ASTM D4327	ASTM G51	ASTM G200	Temp °C	Acetate Paper	ASTM D2216	
B-6	-	2-5	-	-	7,471	<2	8	0.0008	7.4	486	23	Negative	15.0	Black Sandy CLAY
B-8	-	1.5-4	-	-	3,851	4	3	0.0003	7.5	492	23	Negative	17.7	Dark Yellowish Brown CLAY w/ Sand, trace Gravel

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

APPENDIX A

Cone Penetration Test (CPT) Results
(CPT-3 through CPT-5)

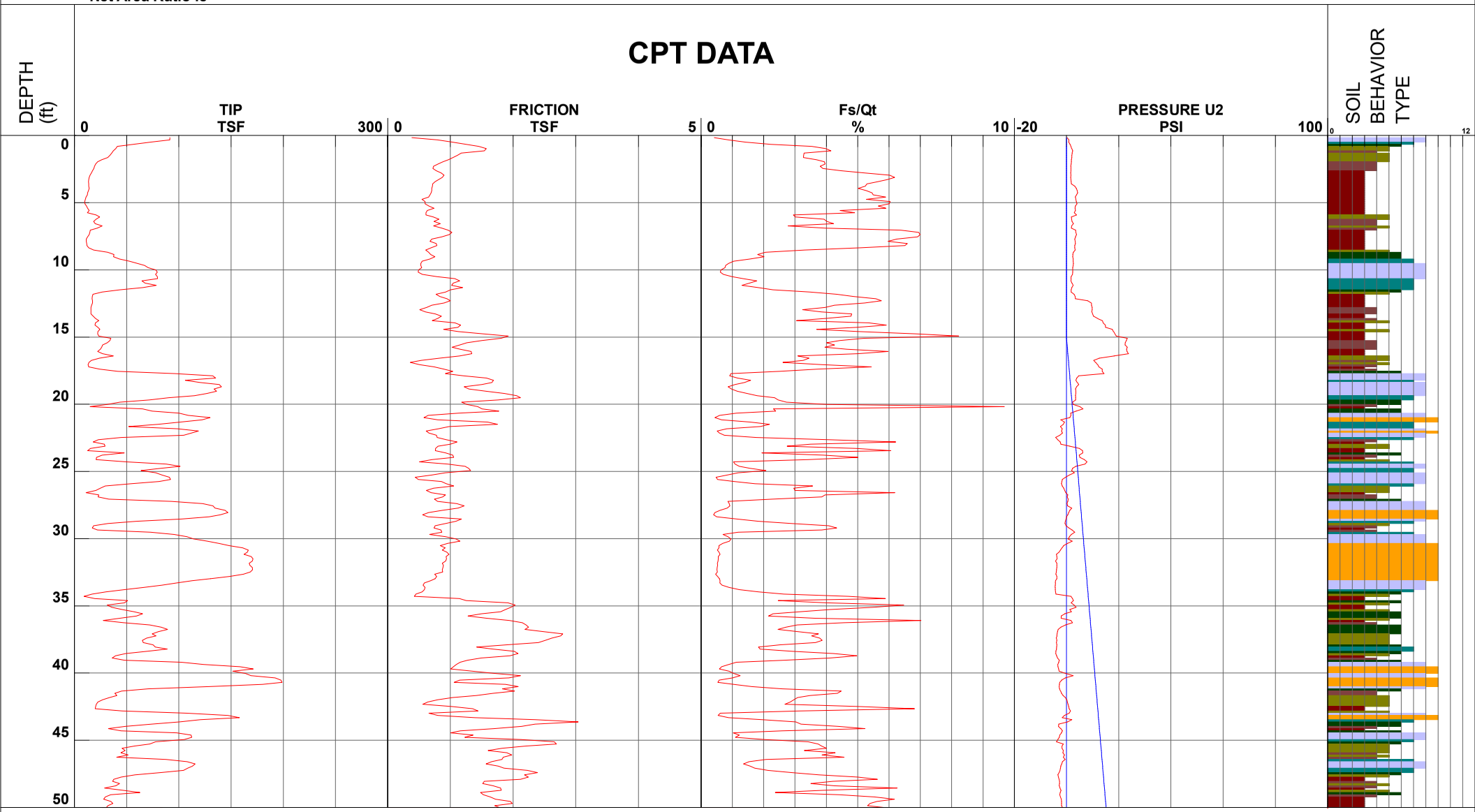
DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BAGG Engineering

Project	SMC-HMB Farmworker Housing project	Operator	AJ-ER	Filename	SDF(864).cpt
Job Number	COUSM-23-03	Cone Number	DDG1589	GPS	
Hole Number	CPT-03	Date and Time	7/26/2023 10:51:49 AM	Maximum Depth	50.52 ft
EST GW Depth During Test		15.10 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm²

*Soil behavior type and SPT based on data from UBC-1983

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SMC-HMB Farmworker Housing project

Project ID: BAGG Engineering
Data File: SDF(864).cpt
CPT Date: 7/26/2023 10:51:49 AM
GW During Test: 15 ft

Sounding ID: CPT-03
Project No: COUSM-23-03
Cone/Rig: DDG1589

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
0.33	91.3	146.4	156.5	91.3	0.8	0.9	0.9	6	clean SAND to silty SAND	125	5.0	29	18	26	80	48	-	-	7	0.350	1.75	16
0.49	73.0	117.1	146.5	73.0	1.0	0.8	1.4	6	clean SAND to silty SAND	125	5.0	23	15	23	72	48	-	-	12	0.350	1.96	16
0.66	56.3	90.3	146.1	56.3	1.3	1.3	2.2	5	silty SAND to sandy SILT	120	3.0	30	19	19	64	48	-	-	18	0.200	2.18	16
0.82	41.1	65.9	157.9	41.1	1.5	1.7	3.5	4	clayy SILT to silty CLAY	115	2.0	33	21	15	-	-	2.9	9.9	27	0.070	2.42	15
0.98	39.5	63.4	166.0	39.5	1.6	2.0	4.0	4	clayy SILT to silty CLAY	115	2.0	32	20	15	-	-	2.8	9.9	29	0.070	2.47	15
1.15	37.2	59.7	165.4	37.2	1.5	2.4	4.2	4	clayy SILT to silty CLAY	115	2.0	30	19	15	-	-	2.6	9.9	31	0.070	2.50	15
1.31	35.7	57.2	142.2	35.7	1.2	2.2	3.3	4	clayy SILT to silty CLAY	115	2.0	29	18	14	-	-	2.5	9.9	28	0.070	2.44	15
1.48	33.9	54.4	138.8	33.9	1.1	2.0	3.3	4	clayy SILT to silty CLAY	115	2.0	27	17	13	-	-	2.4	9.9	29	0.070	2.46	15
1.64	31.8	51.0	134.9	31.9	1.0	2.0	3.3	4	clayy SILT to silty CLAY	115	2.0	26	16	12	-	-	2.2	9.9	30	0.070	2.47	15
1.80	26.2	42.0	132.7	26.2	1.0	1.9	3.7	4	clayy SILT to silty CLAY	115	2.0	21	13	11	-	-	1.8	9.9	34	0.070	2.57	15
1.97	22.3	35.8	-	22.3	0.9	1.9	4.0	4	clayy SILT to silty CLAY	115	2.0	18	11	9	-	-	1.6	9.9	38	0.070	2.64	15
2.13	20.3	32.6	-	20.4	0.8	1.7	4.0	4	clayy SILT to silty CLAY	115	2.0	16	10	9	-	-	1.4	9.9	39	0.070	2.67	15
2.30	19.3	30.9	-	19.3	0.7	1.7	3.8	4	clayy SILT to silty CLAY	115	2.0	15	10	8	-	-	1.4	9.9	39	0.070	2.68	15
2.46	18.6	29.8	-	18.6	0.7	1.6	3.9	4	clayy SILT to silty CLAY	115	2.0	15	9	8	-	-	1.3	9.9	40	0.070	2.70	15
2.62	17.4	27.8	-	17.4	0.8	1.6	4.5	3	silty CLAY to CLAY	115	1.5	19	12	8	-	-	1.2	9.9	44	0.005	2.76	15
2.79	16.4	26.2	-	16.4	0.9	1.6	5.3	3	silty CLAY to CLAY	115	1.5	17	11	8	-	-	1.1	9.9	48	0.005	2.83	15
2.95	14.9	24.0	-	15.0	0.9	1.7	6.1	3	silty CLAY to CLAY	115	1.5	16	10	7	-	-	1.0	9.9	52	0.005	2.90	15
3.12	14.1	22.7	-	14.2	0.9	1.6	6.3	3	silty CLAY to CLAY	115	1.5	15	9	7	-	-	1.0	9.9	54	0.005	2.93	15
3.28	13.7	21.9	-	13.7	0.8	1.7	6.0	3	silty CLAY to CLAY	115	1.5	15	9	7	-	-	1.0	9.9	54	0.005	2.93	15
3.45	13.4	21.5	-	13.5	0.8	1.7	5.7	3	silty CLAY to CLAY	115	1.5	14	9	7	-	-	0.9	9.9	53	0.005	2.92	15
3.61	13.5	21.7	-	13.6	0.7	1.9	5.4	3	silty CLAY to CLAY	115	1.5	14	9	7	-	-	0.9	9.9	52	0.005	2.90	15
3.77	13.6	21.8	-	13.7	0.7	3.1	5.3	3	silty CLAY to CLAY	115	1.5	15	9	7	-	-	0.9	9.9	51	0.005	2.89	15
3.94	14.0	22.5	-	14.1	0.7	3.7	5.1	3	silty CLAY to CLAY	115	1.5	15	9	7	-	-	1.0	9.9	50	0.005	2.87	15
4.10	13.4	21.4	-	13.4	0.7	4.1	5.4	3	silty CLAY to CLAY	115	1.5	14	9	6	-	-	0.9	9.9	52	0.005	2.90	15
4.27	12.7	20.3	-	12.8	0.7	4.3	5.6	3	silty CLAY to CLAY	115	1.5	14	8	6	-	-	0.9	9.9	54	0.005	2.93	15
4.43	12.3	19.7	-	12.3	0.7	3.8	5.6	3	silty CLAY to CLAY	115	1.5	13	8	6	-	-	0.8	9.9	55	0.005	2.94	15
4.59	11.1	17.8	-	11.2	0.7	3.4	6.0	3	silty CLAY to CLAY	115	1.5	12	7	6	-	-	0.8	9.9	58	0.005	3.00	15
4.76	10.3	16.6	-	10.4	0.5	3.6	5.4	3	silty CLAY to CLAY	115	1.5	11	7	5	-	-	0.7	9.9	58	0.005	2.99	15
4.92	9.8	15.8	-	9.9	0.6	3.8	6.2	3	silty CLAY to CLAY	115	1.5	11	7	5	-	-	0.7	9.9	62	0.005	3.05	15
5.09	9.9	16.0	-	10.0	0.6	4.0	6.2	3	silty CLAY to CLAY	115	1.5	11	7	5	-	-	0.7	9.9	61	0.005	3.04	15
5.25	11.6	18.6	-	11.7	0.7	3.4	5.8	3	silty CLAY to CLAY	115	1.5	12	8	6	-	-	0.8	9.9	57	0.005	2.97	15
5.41	12.5	20.0	-	12.6	0.7	3.3	6.1	3	silty CLAY to CLAY	115	1.5	13	8	6	-	-	0.9	9.9	56	0.005	2.96	15
5.58	14.2	22.8	-	14.3	0.6	3.4	4.5	3	silty CLAY to CLAY	115	1.5	15	9	7	-	-	1.0	9.9	48	0.005	2.83	15
5.74	12.4	19.9	-	12.5	0.6	3.0	5.0	3	silty CLAY to CLAY	115	1.5	13	8	6	-	-	0.9	9.9	52	0.005	2.91	15
5.91	20.7	33.2	108.3	20.8	0.6	3.8	3.0	4	clayy SILT to silty CLAY	115	2.0	17	10	8	-	-	1.4	9.9	35	0.070	2.59	15
6.07	24.1	38.6	116.2	24.1	0.7	1.9	3.1	4	clayy SILT to silty CLAY	115	2.0	19	12	10	-	-	1.7	9.9	33	0.070	2.55	15
6.23	20.8	33.3	-	20.8	0.8	1.9	4.0	4	clayy SILT to silty CLAY	115	2.0	17	10	9	-	-	1.4	9.9	39	0.070	2.67	15
6.40	18.4	29.4	-	18.4	0.7	2.1	4.1	4	clayy SILT to silty CLAY	115	2.0	15	9	8	-	-	1.3	9.9	42	0.070	2.72	15
6.56	19.8	31.7	-	19.8	0.8	2.6	4.3	4	clayy SILT to silty CLAY	115	2.0	16	10	9	-	-	1.4	9.9	41	0.070	2.71	15
6.73	26.4	41.1	114.1	26.5	0.7	1.9	2.8	4	clayy SILT to silty CLAY	115	2.0	21	13	10	-	-	1.8	9.9	31	0.070	2.50	15
6.89	21.8	35.0	-	21.8	0.9	1.9	4.0	4	clayy SILT to silty CLAY	115	2.0	17	11	9	-	-	1.5	9.9	38	0.070	2.66	15
7.05	15.1	24.2	-	15.2	1.0	3.5	6.5	3	silty CLAY to CLAY	115	1.5	16	10	7	-	-	1.0	9.9	53	0.005	2.92	15
7.22	14.7	23.6	-	14.8	1.0	3.5	7.1	3	silty CLAY to CLAY	115	1.5	16	10	7	-	-	1.0	9.9	56	0.005	2.96	15
7.38	14.0	22.5	-	14.1	1.0	3.9	7.2	3	silty CLAY to CLAY	115	1.5	15	9	7	-	-	1.0	9.9	57	0.005	2.98	15
7.55	12.5	20.0	-	12.6	0.9	3.5	7.2	3	silty CLAY to CLAY	115	1.5	13	8	6	-	-	0.9	9.1	59	0.005	3.01	15
7.71	11.3	18.1	-	11.4	0.7	3.2	6.5	3	silty CLAY to CLAY	115	1.5	12	8	6	-	-	0.8	8.0	60	0.005	3.02	15
7.87	11.3	18.1	-	11.4	0.7	3.3	6.2	3	silty CLAY to CLAY	115	1.5	12	8	6	-	-	0.8	7.9	59	0.005	3.00	15
8.04	11.8	18.9	-	11.8	0.8	3.4	6.9	3	silty CLAY to CLAY	115	1.5	13	8	6	-	-	0.8	8.0	60	0.005	3.02	15
8.20	12.1	19.4	-	12.1	0.8	3.2	6.8	3	silty CLAY to CLAY	115	1.5	13	8	6	-	-	0.8	8.1	59	0.005	3.01	15
8.37	13.6	21.8	-	13.7	0.7	3.1	5.3	3	silty CLAY to CLAY	115	1.5	15	9	7	-	-	0.9	8.9	52	0.005	2.89	15
8.53	18.3	29.4	-	18.4	0.6	3.3	3.4	4	clayy SILT to silty CLAY	115	2.0	15	9	8	-	-	1.3	9.9	39	0.070	2.67	15
8.69	31.8	43.5	100.3	31.8	0.7	2.6	2.1	5	silty SAND to sandy SILT	120	3.0	15	11	10	40	38	-	-	26	0.200	2.40	16
8.86	37.9	51.4	101.1	38.0	0.7	2.4	1.8	5	silty SAND to sandy SILT	120	3.0	17	13	11	45	39	-	-	23	0.200	2.31	16
9.02	37.4	50.3	105.4	37.4	0.8	2.4	2.0	5	silty SAND to sandy SILT	120	3.0	17	12	11	44	39	-	-	24	0.200	2.34	16
9.19	42.9	57.2	99.6	43.0	0.7	2.6	1.6	5	silty SAND to sandy SILT	120	3.0	19	14	12	49	39	-	-	20	0.200	2.23	16
9.35	52.7	69.6	95.5	52.8	0.5	2.6	1.1	6	clean SAND to silty SAND	125	5.0	14	11	14	55	40	-	-	14	0.350	2.05	16
9.51	60.4	78.9	98.9	60.4	0.5	2.6	0.9	6	clean SAND to silty SAND	125	5.0	16	12	15	59	41	-	-	12	0.350	1.96	16
9.68	67.3	87.1	103.4	67.3	0.5	2.6	0.8	6	clean SAND to silty SAND	125	5.0	17	13	16	62	41	-	-	10	0.350	1.90	16
9.84	70.6	90.7	105.9	70.7	0.5	2.4	0.8	6	clean SAND to silty SAND	125	5.0	18	14	17	64	42	-	-	10	0.350	1.88	16
10.01	77.8	98.9	109.3	77.8	0.5	2.4	0.6	6	clean SAND to silty SAND	125	5.0	20	16	18	67	42	-	-	8	0.350	1.80	16
10.17	79.5	100.2	109.9	79.5	0.5	2.4	0.6	6	clean SAND to silty SAND	125	5.0	20	16	18	67	42	-	-	8	0.350	1.79	16
10.34	77.5	96.9	109.9	77.6	0.6	2.3	0.7	6	clean SAND to silty SAND	125	5.0	19	16	18	66	42	-	-	9	0.350	1.84	16
10.50	79.4	98.4	118.5	79.4	0.8	1.8	1.0	6	clean SAND to silty SAND	125	5.0	20	16	19	66	42	-	-	11	0.350	1.92	16
10.66	79.7	97.9	128.1	79.7	1.1	1.8	1.4	6	clean SAND to silty SAND	125	5.0	20	16	19	66	42	-	-	13	0.350	2.01	16
10.83	64.5	78.7	123.9	64.6	1.1	1.7	1.8	5	silty SAND to sandy SILT	120	3.0	26	22	16	59	41	-	-	18	0.200	2.16	16
10.99	67.5	81.7	119.9	67.5	1.0	2.1	1.6	5	silty SAND to sandy SILT	120	3.0	27	23	17	60	41	-	-	16	0.200	2.11	16
11.16	78.2	93.9	123.6	78.3	1.0	2.5	1.3	6	clean SAND to silty SAND	125	5.0	19	16	19	65	41	-	-	13	0.350	2.01	16
11.32	65.8	78.4	124.7	65.8	1.2	2.1	1.8	5	silty SAND to sandy SILT	120	3.0	26	22	16	59	40	-	-	18	0.200	2.17	16
11.48	43.6	51.5	113.9	43.6	1.0	1.8	2.3	5	silty SAND to sandy SILT	120	3.0	17	15	12	45	38	-	-	25	0.200	2.37	16
11.65	26.6	34.1	-	26.6	0.9	1.8	3.6	4	clayy SILT to silty CLAY	115	2.0	17	13	9	-	-	1.8	9.9	37	0.070	2.63	15
11.81	17.8	25.6	-	17.8	0.8	2.9	4.5	3	silty CLAY to CLAY	115	1.5	17	12	7	-	-	1.2	8.1	46	0.005	2.80	15
11.98	17.0	24.2	-	17.1	0.8	3.3	5.1	3	silty CLAY to CLAY	115	1.5	16	11	7	-	-	1.2	7.7	49	0.005	2.85	15
12.14	17.0	23.8	-	17.0	0.9	3.4	5.8	3	silty CLAY to CLAY	115	1.5	16	11	7	-	-	1.1	7.5	52	0.005	2.90	15
12.30	17.4	24.1	-	17.5	1.0	8.1	6.0	3	silty CLAY to CLAY	115	1.5	16	12	7	-	-	1.2	7.6	52	0.005	2.90	15
12.47	17.2	23.5	-	17.4	0.9	9.5	5.5	3	silty CLAY to CLAY	115	1.5	16	11	7	-	-	1.2	7.4	51	0.005	2.88	15
12.63	16.5	22.3	-	16.7	0.7	9.6	4.5	3	silty CLAY to CLAY	115	1.5	15	11	6	-	-	1.1	7.0	49	0.005	2.84	15
12.80	15.7	21.0	-	15.9	0.6	9.8	4.2	3	silty CLAY to CLAY	115	1.5	14	10	6	-	-	1.1	6.6	49	0.005	2.84	15
12.96	15.7	20.7	-	15.9	0.5	9.9	3.4	4	clayy SILT to silty CLAY	115	2.0	10	8	6	-	-	1.1	6.5	46	0.070	2.79	15
13.12	15.7	20.4	-	15.9	0.6	9.7	4.0	3	silty CLAY to CLAY	115	1.5	14	10	6	-	-	1.1	6.4	49	0.005	2.85	15
13.29	15.8	20.3	-	16.0	0.8	10.0	5.1	3	silty CLAY to CLAY	115	1.5	14	11	6	-	-	1.1	6.4	53	0.005	2.91	15
13.45	17.9	22.7	-	18.1	0.9	10.3	5.0	3	silty CLAY to CLAY	115	1.5	15	12	7	-	-	1.2	7.2	50	0.005	2.87	15
13.62	20.1	25.2	-	20.3	0.8	12.0	4.2	3	silty CLAY to CLAY	115	1.5	17	13	7	-	-	1.4	8.0	45	0.005	2.78	15
13.78	23.3	28.9	-	23.6	0.7	13.8	3.2	4	clayy SILT to silty CLAY	115	2.0	14	12	8	-	-	1.6	9.2	38	0.070	2.66	15
13.94	20.0	24.5	-	20.3	1.1	14.0	5.6	3	silty CLAY to CLAY	115	1.5	16	13	7	-	-	1.4	7.8	51	0.005	2.88	15
14.11	19.7	23.8	-	20.0	1.2	14.9	6.2	3	silty CLAY to CLAY	115	1.5	16	13	7	-	-	1.3	7.5	53	0.005	2.92	15
14.27	22.5	26.9	-	22.8	1.1	15.0	5.2	3	silty CLAY to CLAY	115	1.5	18	15	8	-	-	1.5	8.6	47	0.005	2.82	15
14.44	24.2	28.7	-	24.6	0.9	17.5	3.8	4	clayy SILT to silty CLAY	115	2.0	14	12	8	-	-	1.7	9.1	41	0.070	2.71	15
14.60	22.4	26.2	-	22.7	1.1	18.0	5.2	3	silty CLAY to CLAY	115	1.5	17	15	8	-	-	1.5	8.3	48	0.005	2.84	15
14.76	22.2	25.7	-	22.5	1.5	18.5	7.1	3	silty CLAY to CLAY	115	1.5	17	15	8	-	-	1.5	8.1	54	0.005	2.93	15
14.93	23.4	26.8	-	23.8	1.9	19.0	8.5	3	silty CLAY to CLAY	115	1.5	18	16	8	-	-	1.6	8.5	57	0.005	2.98	15
15.09	34.8	39.7	-	35.3	1.8	23.2	5.3	3	silty CLAY to CLAY	115	1.5	26	23	11	-	-	2.4	9.9	41	0.005	2.71	15
15.26	33.9	38.5	-	34.4	1.5	22.9	4.6	4	clayy SILT to silty CLAY	115	2.0	19	17	10	-	-	2.3	9.9	39	0.070	2.67	15
15.42	31.5	35.6	-	31.9	1.3	22.5	4.1	4	clayy SILT to silty CLAY	115	2.0	18	16	9	-	-	2.2	9.9	39	0.070	2.66	15

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SMC-HMB Farmworker Housing project

Project ID: BAGG Engineering
Data File: SDF(864).cpt
CPT Date: 7/26/2023 10:51:49 AM
GW During Test: 15 ft

Sounding ID: CPT-03
Project No: COUSM-23-03
Cone/Rig: DDG1589

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
15.58	27.0	30.3	-	27.4	1.1	22.5	4.4	3	silty CLAY to CLAY	115	1.5	20	18	8	-	-	1.8	9.7	42	0.005	2.74	15
15.75	26.0	29.1	-	26.5	1.0	23.2	4.1	4	clayy SILT to silty CLAY	115	2.0	15	13	8	-	-	1.8	9.3	42	0.070	2.73	15
15.91	24.9	27.7	-	25.3	1.2	23.0	4.8	3	silty CLAY to CLAY	115	1.5	18	17	8	-	-	1.7	8.8	46	0.005	2.79	15
16.08	22.3	24.7	-	22.8	1.3	23.2	6.2	3	silty CLAY to CLAY	115	1.5	16	15	7	-	-	1.5	7.8	52	0.005	2.91	15
16.24	26.8	29.6	-	27.3	1.3	23.8	5.2	3	silty CLAY to CLAY	115	1.5	20	18	8	-	-	1.8	9.4	46	0.005	2.79	15
16.40	37.2	37.9	118.3	37.6	1.1	18.3	3.2	4	clayy SILT to silty CLAY	115	2.0	19	19	10	-	-	2.6	9.9	34	0.070	2.57	15
16.57	24.0	26.2	-	24.2	0.8	12.6	3.6	4	clayy SILT to silty CLAY	115	2.0	13	12	7	-	-	1.6	8.3	42	0.070	2.73	15
16.73	16.3	17.7	-	16.5	0.5	10.4	3.5	3	silty CLAY to CLAY	115	1.5	12	11	5	-	-	1.1	5.5	49	0.005	2.86	15
16.90	13.8	14.9	-	14.0	0.4	11.2	2.8	3	silty CLAY to CLAY	115	1.5	10	9	4	-	-	0.9	4.6	50	0.005	2.87	15
17.06	13.1	14.1	-	13.4	0.5	11.9	4.2	3	silty CLAY to CLAY	115	1.5	9	9	4	-	-	0.9	4.3	58	0.005	2.99	15
17.23	13.6	14.6	-	13.9	0.7	12.4	5.9	3	silty CLAY to CLAY	115	1.5	10	9	5	-	-	0.9	4.5	63	0.005	3.07	15
17.39	24.0	25.6	-	24.3	0.9	13.6	3.9	4	clayy SILT to silty CLAY	115	2.0	13	12	7	-	-	1.6	8.1	44	0.070	2.76	15
17.55	41.6	41.6	109.6	41.8	1.0	13.7	2.6	4	clayy SILT to silty CLAY	115	2.0	21	21	10	-	-	2.9	9.9	29	0.070	2.47	15
17.72	96.0	95.9	115.8	96.3	0.9	14.4	1.0	6	clean SAND to silty SAND	125	5.0	19	19	18	66	41	-	-	11	0.350	1.92	16
17.88	132.5	131.9	145.8	132.5	1.2	4.7	0.9	6	clean SAND to silty SAND	125	5.0	26	26	24	76	42	-	-	8	0.350	1.80	16
18.05	135.3	134.4	155.4	135.4	1.6	3.9	1.2	6	clean SAND to silty SAND	125	5.0	27	27	25	77	42	-	-	10	0.350	1.86	16
18.21	106.2	105.2	141.9	106.3	1.7	3.6	1.6	5	silty SAND to sandy SILT	120	3.0	35	35	21	69	41	-	-	14	0.200	2.03	16
18.37	120.4	119.0	148.0	120.5	1.7	4.2	1.4	6	clean SAND to silty SAND	125	5.0	24	24	23	73	42	-	-	12	0.350	1.95	16
18.54	138.6	136.6	155.0	138.7	1.5	4.7	1.1	6	clean SAND to silty SAND	125	5.0	27	28	25	77	42	-	-	9	0.350	1.84	16
18.70	140.8	138.4	149.9	140.9	1.2	3.9	0.9	6	clean SAND to silty SAND	125	5.0	28	28	25	78	42	-	-	7	0.350	1.77	16
18.87	133.7	131.0	146.7	133.7	1.3	3.5	1.0	6	clean SAND to silty SAND	125	5.0	26	27	24	76	42	-	-	8	0.350	1.82	16
19.03	136.1	133.0	153.9	136.1	1.6	3.6	1.2	6	clean SAND to silty SAND	125	5.0	27	27	25	76	42	-	-	10	0.350	1.86	16
19.19	126.8	123.7	154.8	126.9	1.9	3.6	1.5	6	clean SAND to silty SAND	125	5.0	25	25	24	74	42	-	-	12	0.350	1.96	16
19.36	115.0	111.8	153.9	115.1	2.1	3.5	1.8	5	silty SAND to sandy SILT	120	3.0	37	38	22	71	41	-	-	14	0.200	2.05	16
19.52	90.3	87.6	148.8	90.3	2.1	3.5	2.4	5	silty SAND to sandy SILT	120	3.0	29	30	19	63	40	-	-	19	0.200	2.21	16
19.69	71.6	69.3	135.3	71.7	1.8	3.5	2.5	5	silty SAND to sandy SILT	120	3.0	23	24	15	55	39	-	-	23	0.200	2.30	16
19.85	43.3	41.8	115.5	43.3	1.2	2.3	2.8	4	clayy SILT to silty CLAY	115	2.0	21	22	10	-	-	3.0	9.9	31	0.070	2.50	15
20.01	31.5	31.0	-	31.6	1.3	2.6	4.2	4	clayy SILT to silty CLAY	115	2.0	16	16	8	-	-	2.2	9.9	41	0.070	2.71	15
20.18	14.9	14.6	-	15.0	1.4	5.1	9.9	3	silty CLAY to CLAY	115	1.5	10	10	5	-	-	1.0	4.4	75	0.005	3.22	15
20.34	65.2	62.6	125.1	65.3	1.5	6.3	2.4	5	silty SAND to sandy SILT	120	3.0	21	22	14	52	38	-	-	23	0.200	2.32	16
20.51	74.4	71.2	135.0	74.5	1.8	3.7	2.4	5	silty SAND to sandy SILT	120	3.0	24	25	16	56	39	-	-	22	0.200	2.28	16
20.67	100.1	95.6	120.5	100.1	1.1	1.6	1.1	6	clean SAND to silty SAND	125	5.0	19	20	19	66	40	-	-	12	0.350	1.97	16
20.83	108.8	103.7	112.4	108.8	0.6	1.6	0.6	6	clean SAND to silty SAND	125	5.0	21	22	19	68	41	-	-	7	0.350	1.77	16
21.00	129.9	123.4	123.4	129.9	0.6	1.3	0.4	6	clean SAND to silty SAND	125	5.0	25	26	21	74	42	-	-	5	0.350	1.63	16
21.16	122.1	115.8	124.3	122.1	0.8	-2.2	0.7	6	clean SAND to silty SAND	125	5.0	23	24	21	72	41	-	-	7	0.350	1.75	16
21.33	101.4	95.9	133.4	101.3	1.6	-0.8	1.6	5	silty SAND to sandy SILT	120	3.0	32	34	19	66	40	-	-	15	0.200	2.06	16
21.49	80.3	75.8	133.5	80.3	1.8	-1.2	2.2	5	silty SAND to sandy SILT	120	3.0	25	27	16	58	39	-	-	20	0.200	2.24	16
21.65	51.9	48.8	102.2	51.8	1.0	-2.3	1.9	5	silty SAND to sandy SILT	120	3.0	16	17	11	43	36	-	-	24	0.200	2.34	16
21.82	98.8	92.8	109.5	98.7	0.8	-1.6	0.8	6	clean SAND to silty SAND	125	5.0	19	20	17	65	40	-	-	10	0.350	1.89	16
21.98	118.7	111.3	116.2	118.7	0.6	-1.9	0.5	6	clean SAND to silty SAND	125	5.0	22	24	20	71	41	-	-	6	0.350	1.71	16
22.15	112.0	104.7	113.1	111.9	0.7	-1.6	0.6	6	clean SAND to silty SAND	125	5.0	21	22	19	69	41	-	-	7	0.350	1.76	16
22.31	104.7	97.7	111.6	104.7	0.8	-2.5	0.8	6	clean SAND to silty SAND	125	5.0	20	21	18	66	40	-	-	9	0.350	1.85	16
22.47	44.7	41.6	92.9	44.6	0.8	-4.2	1.8	5	silty SAND to sandy SILT	120	3.0	14	15	10	38	35	-	-	26	0.200	2.38	16
22.64	22.9	20.9	-	22.8	0.9	-3.4	4.3	3	silty CLAY to CLAY	115	1.5	14	15	6	-	-	1.5	6.5	50	0.005	2.86	15
22.80	17.8	16.2	-	17.8	1.1	-2.4	6.7	3	silty CLAY to CLAY	115	1.5	11	12	5	-	-	1.2	5.0	64	0.005	3.07	15
22.97	28.7	26.0	-	28.6	1.0	-2.1	3.7	4	clayy SILT to silty CLAY	115	2.0	13	14	7	-	-	1.9	8.2	42	0.070	2.74	15
23.13	29.3	26.4	-	29.3	0.8	1.2	2.9	4	clayy SILT to silty CLAY	115	2.0	13	15	7	-	-	2.0	8.3	39	0.070	2.66	15
23.30	15.4	13.9	-	15.5	0.8	5.0	5.4	3	silty CLAY to CLAY	115	1.5	9	10	5	-	-	1.0	4.2	63	0.005	3.07	15
23.46	12.5	11.2	-	12.7	0.8	6.1	6.8	3	silty CLAY to CLAY	115	1.5	7	8	4	-	-	0.8	3.3	74	0.005	3.21	15
23.62	47.6	43.7	99.1	47.7	0.9	6.2	2.0	5	silty SAND to sandy SILT	120	3.0	15	16	10	40	36	-	-	26	0.200	2.39	16
23.79	26.5	23.6	-	26.6	1.0	4.8	4.1	3	silty CLAY to CLAY	115	1.5	16	18	7	-	-	1.8	7.4	46	0.005	2.81	15
23.95	21.0	18.6	-	21.1	1.1	5.1	5.4	3	silty CLAY to CLAY	115	1.5	12	14	6	-	-	1.4	5.7	56	0.005	2.96	15
24.12	20.7	18.3	-	20.8	0.7	6.8	3.7	3	silty CLAY to CLAY	115	1.5	12	14	5	-	-	1.4	5.6	50	0.005	2.86	15
24.28	49.3	44.9	76.4	49.5	0.5	7.9	1.1	5	silty SAND to sandy SILT	120	3.0	15	16	10	41	36	-	-	19	0.200	2.21	16
24.44	87.9	79.9	105.9	88.0	1.0	7.1	1.1	6	clean SAND to silty SAND	125	5.0	16	18	16	60	39	-	-	13	0.350	2.02	16
24.61	101.2	91.8	119.7	101.3	1.2	3.6	1.2	6	clean SAND to silty SAND	125	5.0	18	20	18	64	40	-	-	13	0.350	2.00	16
24.77	82.8	74.9	115.1	82.8	1.3	2.4	1.6	5	silty SAND to sandy SILT	120	3.0	25	28	16	57	39	-	-	17	0.200	2.14	16
24.94	63.8	57.6	114.7	63.8	1.3	1.9	2.1	5	silty SAND to sandy SILT	120	3.0	19	21	13	49	37	-	-	23	0.200	2.31	16
25.10	77.8	70.1	100.5	77.9	0.9	2.9	1.2	5	silty SAND to sandy SILT	120	3.0	23	26	14	55	38	-	-	15	0.200	2.09	16
25.26	83.9	75.5	95.4	83.9	0.7	1.1	0.9	6	clean SAND to silty SAND	125	5.0	15	17	15	58	39	-	-	12	0.350	1.97	16
25.43	91.0	81.6	91.0	91.0	0.4	-0.4	0.5	6	clean SAND to silty SAND	125	5.0	16	18	15	60	39	-	-	8	0.350	1.81	16
25.59	91.9	82.3	92.9	91.9	0.5	-1.6	0.5	6	clean SAND to silty SAND	125	5.0	16	18	15	61	39	-	-	9	0.350	1.83	16
25.76	81.0	72.4	98.8	81.0	0.9	-1.8	1.1	6	clean SAND to silty SAND	125	5.0	14	16	14	56	38	-	-	14	0.350	2.05	16
25.92	54.1	48.2	97.7	54.0	0.9	-1.9	1.8	5	silty SAND to sandy SILT	120	3.0	16	18	11	43	36	-	-	23	0.200	2.32	16
26.08	29.6	24.8	-	29.5	1.1	-1.7	3.8	4	clayy SILT to silty CLAY	115	2.0	12	15	7	-	-	2.0	7.8	44	0.070	2.76	15
26.25	24.7	20.6	-	24.7	0.7	-1.0	3.2	4	clayy SILT to silty CLAY	115	2.0	10	12	6	-	-	1.7	6.4	45	0.070	2.78	15
26.41	20.6	17.2	-	20.6	0.6	-0.7	3.2	3	silty CLAY to CLAY	115	1.5	11	14	5	-	-	1.4	5.2	49	0.005	2.85	15
26.58	11.2	9.3	-	11.2	0.7	-0.3	7.2	3	silty CLAY to CLAY	115	1.5	6	7	4	-	-	0.7	2.6	81	0.005	3.30	15
26.74	23.2	19.2	-	23.2	0.9	0.5	4.3	3	silty CLAY to CLAY	115	1.5	13	15	6	-	-	1.6	5.9	51	0.005	2.89	15
26.90	22.8	18.8	-	22.8	0.9	0.3	4.1	3	silty CLAY to CLAY	115	1.5	13	15	6	-	-	1.5	5.8	51	0.005	2.89	15
27.07	33.0	27.1	-	33.0	0.7	0.7	2.4	4	clayy SILT to silty CLAY	115	2.0	14	16	7	-	-	2.2	8.5	36	0.070	2.61	15
27.23	92.8	81.6	101.1	92.8	0.8	0.5	0.9	6	clean SAND to silty SAND	125	5.0	16	19	16	60	39	-	-	12	0.350	1.95	16
27.40	122.8	107.6	124.6	122.8	1.1	0.2	0.9	6	clean SAND to silty SAND	125	5.0	22	25	20	69	41	-	-	10	0.350	1.86	16
27.56	132.7	116.1	132.4	132.7	1.2	0.4	0.9	6	clean SAND to silty SAND	125	5.0	23	27	22	72	41	-	-	9	0.350	1.84	16
27.72	134.6	117.5	131.3	134.6	1.1	2.0	0.8	6	clean SAND to silty SAND	125	5.0	24	27	22	72	41	-	-	8	0.350	1.81	16
27.89	144.2	125.7	130.9	144.3	0.9	1.3	0.6	6	clean SAND to silty SAND	125	5.0	25	29	22	75	41	-	-	6	0.350	1.70	16
28.05	147.0	127.9	127.9	147.0	0.7	0.9	0.4	6	clean SAND to silty SAND	125	5.0	26	29	22	75	41	-	-	5	0.350	1.62	16
28.22	139.7	121.3	121.3	139.7	0.6	0.5	0.4	6	clean SAND to silty SAND	125	5.0	24	28	21	73	41	-	-	5	0.350	1.62	16
28.38	129.0	111.7	116.0	129.0	0.6	0.0	0.5	6	clean SAND to silty SAND	125	5.0	22	26	20	71	41	-	-	6	0.350	1.70	16
28.54	102.3	88.4	115.0	102.3	1.2	-0.2	1.2	6	clean SAND to silty SAND	125	5.0	18	20	17	63	39	-	-	13	0.350	2.00	16
28.71	59.7	51.5	103.1	59.7	1.1	-0.5	1.9	5	silty SAND to sandy SILT	120	3.0	17	20	12	45	36	-	-	23	0.200	2.32	16
28.87	32.0	25.2	-	32.0	0.9	-0.6	3.0	4	clayy SILT to silty CLAY	115	2.0	13	16	7	-	-	2.2	7.9	40	0.070	2.70	15
29.04	18.5	14.5	-	18.5	0.8	-0.2	4.5	3	silty CLAY to CLAY	115	1.5	10	12	5	-	-	1.2	4.3	59	0.005	3.01	15
29.20	17.1	13.3	-	17.1	0.7	0.9	4.8	3	silty CLAY to CLAY	115	1.5	9	11	4	-	-	1.1	4.0	62	0.005	3.06	15
29.36	22.1	17.2	-	22.1	0.8	2.1	4.2	3	silty CLAY to CLAY	115	1.5	11	15	5	-	-	1.5	5.2	53	0.005	2.92	15
29.53	72.9	62.4	94.4	73.0	0.9	3.2	1.2	5	silty SAND to sandy SILT	120	3.0	21	24	13	51	37	-	-	17	0.200	2.13	16
29.69	95.5	81.5	96.8	95.5	0.7	1.8	0.7	6	clean SAND to silty SAND	125	5.0	16	19	15	60	39	-	-	10	0.350	1.90	16
29.86	107.6	91.7	109.6	107.6	0.9	1.2	0.9	6	clean SAND to silty SAND	125	5.0	18	22	17	64	39	-	-	11	0.350	1.91	16
30.02	114.0	96.9	116.9	114.0	1.1	0.5	1.0	6	clean SAND to silty SAND	125	5.0	19	23	18	66	40	-	-	11	0.350	1.92	16
30.19	127.2	107.9	125.0	127.2	1.2	2.2	0.9	6	clean SAND to silty SAND	125	5.0	22	25	20	70	40	-	-	10	0.350	1.87	16
30.35	138.2	117.1	126.7	138.3	1.0	0.4	0.7	6	clean SAND to silty SAND	125	5.0	23	28	21	72	41	-	-	7	0.350	1.77	16
30.51	148.2	125.2	129.1	148.1	0.8	-1.1	0.6	6	clean SAND to silty SAND	125	5.0	25	30	22	74	41	-	-	6	0.350	1.69	16
30.68	161.0	135.8	137.4	161.0	0.9	-1.7	0.6	6	clean SAND to silty SAND	125	5.0	27	32	24	77	42	-	-	5	0.350	1.66	16
30.84	166.4	140.2	140.2	166.4	0.9	-2.3	0.5	6	clean SAND to silty SAND	125	5.0	28	33	24	78	42	-	-	5	0.350	1.63	16

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SMC-HMB Farmworker Housing project

Project ID: BAGG Engineering
Data File: SDF(864).cpt
CPT Date: 7/26/2023 10:51:49 AM
GW During Test: 15 ft

Sounding ID: CPT-03
Project No: COUSM-23-03
Cone/Rig: DDG1589

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
31.01	165.5	139.1	139.9	165.4	0.9	-2.8	0.6	6	clean SAND to silty SAND	125	5.0	28	33	24	78	42	-	-	5	0.350	1.65	16
31.17	162.4	136.3	139.2	162.4	1.0	-3.9	0.6	6	clean SAND to silty SAND	125	5.0	27	32	24	77	42	-	-	6	0.350	1.68	16
31.33	169.1	141.6	141.6	169.1	0.9	-3.7	0.6	6	clean SAND to silty SAND	125	5.0	28	34	24	78	42	-	-	5	0.350	1.64	16
31.50	170.8	142.7	142.7	170.8	0.9	-3.6	0.6	6	clean SAND to silty SAND	125	5.0	29	34	25	79	42	-	-	5	0.350	1.63	16
31.66	170.4	142.1	142.1	170.3	0.9	-4.2	0.5	6	clean SAND to silty SAND	125	5.0	28	34	24	79	42	-	-	5	0.350	1.63	16
31.83	167.4	139.3	139.3	167.3	0.9	-3.8	0.5	6	clean SAND to silty SAND	125	5.0	28	33	24	78	42	-	-	5	0.350	1.63	16
31.99	168.0	139.6	139.6	168.0	0.9	-3.7	0.5	6	clean SAND to silty SAND	125	5.0	28	34	24	78	42	-	-	5	0.350	1.63	16
32.15	170.4	141.3	141.3	170.4	0.9	-3.7	0.5	6	clean SAND to silty SAND	125	5.0	28	34	24	78	42	-	-	5	0.350	1.62	16
32.32	170.6	141.2	141.2	170.5	0.9	-3.8	0.5	6	clean SAND to silty SAND	125	5.0	28	34	24	78	42	-	-	5	0.350	1.62	16
32.48	168.5	139.2	139.2	168.4	0.9	-3.9	0.5	6	clean SAND to silty SAND	125	5.0	28	34	24	78	42	-	-	5	0.350	1.63	16
32.65	161.7	133.4	133.4	161.6	0.8	-4.1	0.5	6	clean SAND to silty SAND	125	5.0	27	32	23	77	41	-	-	5	0.350	1.62	16
32.81	148.6	122.3	125.2	148.5	0.8	-3.7	0.5	6	clean SAND to silty SAND	125	5.0	24	30	21	74	41	-	-	6	0.350	1.68	16
32.97	130.4	107.1	115.1	130.3	0.8	-3.7	0.6	6	clean SAND to silty SAND	125	5.0	21	26	19	69	40	-	-	7	0.350	1.75	16
33.14	112.8	92.5	103.6	112.7	0.7	-4.2	0.6	6	clean SAND to silty SAND	125	5.0	19	23	17	64	39	-	-	9	0.350	1.82	16
33.30	98.0	80.3	93.2	98.0	0.6	-4.2	0.6	6	clean SAND to silty SAND	125	5.0	16	20	15	60	39	-	-	10	0.350	1.87	16
33.47	83.8	68.5	85.4	83.7	0.6	-4.3	0.7	6	clean SAND to silty SAND	125	5.0	14	17	13	54	38	-	-	12	0.350	1.96	16
33.63	66.5	54.2	80.1	66.4	0.6	-4.3	0.9	5	silty SAND to sandy SILT	120	3.0	18	22	11	47	36	-	-	16	0.200	2.11	16
33.79	48.0	39.1	77.8	47.9	0.6	-4.3	1.3	5	silty SAND to sandy SILT	120	3.0	13	16	9	36	34	-	-	23	0.200	2.31	16
33.96	30.0	21.0	-	30.0	0.5	-4.2	2.0	4	clayy SILT to silty CLAY	115	2.0	11	15	6	-	-	2.0	6.5	38	0.070	2.65	15
34.12	16.9	11.8	-	16.9	0.4	-4.0	3.0	3	silty CLAY to CLAY	115	1.5	8	11	4	-	-	1.1	3.4	57	0.005	2.98	15
34.29	9.1	6.3	-	9.1	0.4	1.7	6.1	3	silty CLAY to CLAY	115	1.5	4	6	3	-	-	0.5	1.6	92	0.005	3.43	15
34.45	19.5	13.5	-	19.5	1.1	2.3	6.6	3	silty CLAY to CLAY	115	1.5	9	13	5	-	-	1.3	4.0	68	0.005	3.14	15
34.61	50.8	41.1	110.4	50.9	1.3	2.7	2.6	4	clayy SILT to silty CLAY	115	2.0	21	25	10	-	-	3.5	9.9	30	0.070	2.48	15
34.78	47.9	33.0	-	47.9	1.9	1.7	4.2	4	clayy SILT to silty CLAY	115	2.0	17	24	9	-	-	3.3	9.9	40	0.070	2.70	15
34.94	31.4	21.6	-	31.5	2.0	2.8	6.9	3	silty CLAY to CLAY	115	1.5	14	21	7	-	-	2.1	6.7	58	0.005	2.99	15
35.11	35.7	24.5	-	35.8	2.0	3.7	5.8	3	silty CLAY to CLAY	115	1.5	16	24	7	-	-	2.4	7.6	52	0.005	2.90	15
35.27	45.5	31.1	-	45.5	1.9	1.3	4.3	3	silty CLAY to CLAY	115	1.5	21	30	8	-	-	3.1	9.8	42	0.005	2.73	15
35.43	57.1	45.8	131.1	57.2	1.8	1.8	3.3	4	clayy SILT to silty CLAY	115	2.0	23	29	11	-	-	3.9	9.9	31	0.070	2.52	15
35.60	65.2	52.2	116.7	65.2	1.5	-0.6	2.4	5	silty SAND to sandy SILT	120	3.0	17	22	12	46	36	-	-	26	0.200	2.38	16
35.76	59.4	47.5	108.8	59.4	1.3	-2.0	2.2	5	silty SAND to sandy SILT	120	3.0	16	20	11	42	35	-	-	26	0.200	2.39	16
35.93	43.6	29.5	-	43.6	1.6	-2.1	3.8	4	clayy SILT to silty CLAY	115	2.0	15	22	8	-	-	3.0	9.3	41	0.070	2.71	15
36.09	27.6	18.6	-	27.6	1.9	1.7	7.6	3	silty CLAY to CLAY	115	1.5	12	18	6	-	-	1.8	5.7	63	0.005	3.07	15
36.26	47.0	31.6	-	47.1	2.1	2.3	4.8	3	silty CLAY to CLAY	115	1.5	21	31	9	-	-	3.2	9.9	43	0.005	2.75	15
36.42	72.0	57.3	141.2	72.0	2.2	-0.4	3.2	4	clayy SILT to silty CLAY	115	2.0	29	36	14	-	-	5.0	9.9	28	0.070	2.44	15
36.58	82.9	65.8	140.2	82.9	2.2	-2.1	2.8	5	silty SAND to sandy SILT	120	3.0	22	28	15	53	37	-	-	25	0.200	2.35	16
36.75	89.3	70.8	137.7	89.2	2.2	-3.2	2.5	5	silty SAND to sandy SILT	120	3.0	24	30	16	56	38	-	-	22	0.200	2.30	16
36.91	80.5	63.7	148.4	80.4	2.5	-3.5	3.2	4	clayy SILT to silty CLAY	115	2.0	32	40	15	-	-	5.6	9.9	27	0.070	2.40	15
37.08	74.4	58.8	160.0	74.4	2.8	-3.6	3.9	4	clayy SILT to silty CLAY	115	2.0	29	37	14	-	-	5.2	9.9	30	0.070	2.49	15
37.24	78.1	61.6	157.8	78.0	2.8	-3.6	3.6	4	clayy SILT to silty CLAY	115	2.0	31	39	15	-	-	5.4	9.9	29	0.070	2.46	15
37.40	69.1	54.4	155.8	69.0	2.6	-3.9	3.9	4	clayy SILT to silty CLAY	115	2.0	27	35	13	-	-	4.8	9.9	32	0.070	2.52	15
37.57	65.1	51.2	153.8	65.1	2.5	-3.7	4.0	4	clayy SILT to silty CLAY	115	2.0	26	33	13	-	-	4.5	9.9	33	0.070	2.54	15
37.73	65.8	51.7	149.6	65.7	2.4	-3.8	3.8	4	clayy SILT to silty CLAY	115	2.0	26	33	13	-	-	4.5	9.9	32	0.070	2.52	15
37.90	75.3	59.0	128.9	75.2	1.9	-3.8	2.6	5	silty SAND to sandy SILT	120	3.0	20	25	13	50	36	-	-	25	0.200	2.37	16
38.06	77.4	60.6	111.6	77.3	1.4	-3.8	1.9	5	silty SAND to sandy SILT	120	3.0	20	26	13	50	37	-	-	21	0.200	2.26	16
38.22	88.8	69.5	120.5	88.8	1.7	-3.8	1.9	5	silty SAND to sandy SILT	120	3.0	23	30	15	55	37	-	-	20	0.200	2.23	16
38.39	69.4	54.2	134.3	69.4	2.0	-4.1	3.0	4	clayy SILT to silty CLAY	115	2.0	27	35	13	-	-	4.8	9.9	28	0.070	2.44	15
38.55	49.1	31.7	-	49.0	2.1	-4.1	4.4	3	silty CLAY to CLAY	115	1.5	21	33	9	-	-	3.4	9.9	42	0.005	2.73	15
38.72	39.3	25.2	-	39.2	2.0	-3.8	5.3	3	silty CLAY to CLAY	115	1.5	17	26	7	-	-	2.7	7.8	49	0.005	2.86	15
38.88	36.2	23.2	-	36.2	1.5	-3.5	4.4	3	silty CLAY to CLAY	115	1.5	15	24	7	-	-	2.5	7.2	48	0.005	2.83	15
39.04	47.8	30.6	-	47.8	1.3	-2.8	2.8	4	clayy SILT to silty CLAY	115	2.0	15	24	8	-	-	3.3	9.6	36	0.070	2.61	15
39.21	102.4	79.4	107.1	102.4	1.2	-3.0	1.2	6	clean SAND to silty SAND	125	5.0	16	20	16	59	38	-	-	14	0.350	2.03	16
39.37	123.6	95.7	114.2	123.6	1.1	-3.4	0.9	6	clean SAND to silty SAND	125	5.0	19	25	18	66	39	-	-	10	0.350	1.90	16
39.54	158.6	122.6	130.4	158.5	1.0	-3.2	0.7	6	clean SAND to silty SAND	125	5.0	25	32	22	74	41	-	-	7	0.350	1.74	16
39.70	171.1	132.1	135.4	171.1	1.0	-3.0	0.6	6	clean SAND to silty SAND	125	5.0	26	34	23	76	41	-	-	6	0.350	1.68	16
39.86	151.7	116.9	132.5	151.6	1.4	-2.8	0.9	6	clean SAND to silty SAND	125	5.0	23	30	22	72	40	-	-	9	0.350	1.84	16
40.03	163.7	126.0	144.8	163.7	1.7	-0.3	1.1	6	clean SAND to silty SAND	125	5.0	25	33	23	75	41	-	-	9	0.350	1.86	16
40.19	169.1	129.9	154.4	169.2	2.1	2.6	1.3	6	clean SAND to silty SAND	125	5.0	26	34	25	76	41	-	-	10	0.350	1.90	16
40.36	192.1	147.3	162.4	192.1	1.9	-0.5	1.0	6	clean SAND to silty SAND	125	5.0	29	38	27	80	41	-	-	8	0.350	1.79	16
40.52	197.8	151.4	151.4	197.7	1.1	-1.8	0.6	6	clean SAND to silty SAND	125	5.0	30	40	26	81	42	-	-	5	0.350	1.63	16
40.68	198.8	151.9	151.9	198.7	1.1	-2.6	0.5	6	clean SAND to silty SAND	125	5.0	30	40	26	81	42	-	-	5	0.350	1.61	16
40.85	180.2	137.5	154.9	180.1	1.9	-2.7	1.1	6	clean SAND to silty SAND	125	5.0	28	36	25	78	41	-	-	9	0.350	1.83	16
41.01	128.5	97.9	137.2	128.5	2.1	-2.8	1.7	5	silty SAND to sandy SILT	120	3.0	33	43	20	66	39	-	-	15	0.200	2.07	16
41.18	70.6	53.7	126.1	70.6	1.8	-2.7	2.7	5	silty SAND to sandy SILT	120	3.0	18	24	13	47	36	-	-	27	0.200	2.41	16
41.34	45.2	27.7	-	45.1	2.0	-2.3	4.7	3	silty CLAY to CLAY	115	1.5	18	30	8	-	-	3.1	8.6	46	0.005	2.79	15
41.50	38.7	23.6	-	38.6	1.7	-1.9	4.6	3	silty CLAY to CLAY	115	1.5	16	26	7	-	-	2.6	7.3	49	0.005	2.84	15
41.67	40.6	24.7	-	40.6	1.4	-1.3	3.7	4	clayy SILT to silty CLAY	115	2.0	12	20	7	-	-	2.8	7.7	44	0.070	2.76	15
41.83	33.6	20.4	-	33.6	1.0	-0.4	3.3	4	clayy SILT to silty CLAY	115	2.0	10	17	6	-	-	2.3	6.2	46	0.070	2.80	15
42.00	26.8	16.2	-	26.8	0.8	0.1	3.3	3	silty CLAY to CLAY	115	1.5	11	18	5	-	-	1.8	4.9	51	0.005	2.88	15
42.16	22.5	13.6	-	22.5	0.6	0.3	3.2	3	silty CLAY to CLAY	115	1.5	9	15	4	-	-	1.5	4.0	55	0.005	2.95	15
42.32	21.0	12.6	-	21.0	0.6	0.5	3.0	3	silty CLAY to CLAY	115	1.5	8	14	4	-	-	1.4	3.7	56	0.005	2.96	15
42.49	20.3	12.2	-	20.3	1.0	0.8	5.7	3	silty CLAY to CLAY	115	1.5	8	14	4	-	-	1.3	3.5	69	0.005	3.14	15
42.65	19.9	11.9	-	19.9	1.4	1.0	7.8	3	silty CLAY to CLAY	115	1.5	8	13	4	-	-	1.3	3.4	76	0.005	3.24	15
42.82	45.6	27.3	-	45.7	1.4	1.5	3.3	4	clayy SILT to silty CLAY	115	2.0	14	23	7	-	-	3.1	8.5	40	0.070	2.70	15
42.98	107.6	80.7	94.0	107.6	0.7	1.0	0.6	6	clean SAND to silty SAND	125	5.0	16	22	15	60	38	-	-	10	0.350	1.87	16
43.15	146.9	110.0	116.3	146.9	0.8	-0.8	0.6	6	clean SAND to silty SAND	125	5.0	22	29	20	70	40	-	-	7	0.350	1.73	16
43.31	157.9	118.1	133.2	157.9	1.4	-1.7	0.9	6	clean SAND to silty SAND	125	5.0	24	32	22	72	40	-	-	9	0.350	1.83	16
43.47	120.6	90.0	140.4	120.6	2.4	2.0	2.0	5	silty SAND to sandy SILT	120	3.0	30	40	19	64	39	-	-	17	0.200	2.15	16
43.64	100.5	75.0	158.2	100.5	3.0	0.4	3.1	5	silty SAND to sandy SILT	120	3.0	25	34	17	57	38	-	-	24	0.200	2.35	16
43.80	73.8	54.9	142.5	73.7	2.4	-2.9	3.3	4	clayy SILT to silty CLAY	115	2.0	27	37	13	-	-	5.1	9.9	29	0.070	2.46	15
43.97	48.7	28.6	-	48.7	2.1	-3.1	4.6	3	silty CLAY to CLAY	115	1.5	19	32	8	-	-	3.3	8.9	45	0.005	2.78	15
44.13	32.5	19.0	-	32.5	1.7	-2.2	5.7	3	silty CLAY to CLAY	115	1.5	13	22	6	-	-	2.2	5.8	57	0.005	2.98	15
44.29	44.7	26.1	-	44.7	1.2	-1.6	2.8	4	clayy SILT to silty CLAY	115	2.0	13	22	7	-	-	3.0	8.1	38	0.070	2.66	15
44.46	98.0	72.6	98.8	97.9	1.0	-1.9	1.1	6	clean SAND to silty SAND	125	5.0	15	20	14	56	37	-	-	14	0.350	2.04	16
44.62	111.7	82.6	112.6	111.6	1.4	-2.6	1.3	5	silty SAND to sandy SILT	120	3.0	28	37	16	61	38	-	-	14	0.200	2.04	16
44.79	112.3	82.9	109.3	112.2	1.2	-2.7	1.1	6	clean SAND to silty SAND	125	5.0	17	22	16	61	38	-	-	13	0.350	2.01	16
44.95	105.1	77.5	131.9	105.1	2.1	-3.3	2.1	5	silty SAND to sandy SILT	120	3.0	26	35	17	59	38	-	-	19	0.200	2.21	16
45.11	77.7	57.2	150.8	77.6	2.7	-3.9	3.5	4	clayy SILT to silty CLAY	115	2.0	29	39	14	-	-	5.4	9.9	29	0.070	2.47	15
45.28	72.1	41.3	-	72.0	2.7	-1.2	3.9	4	clayy SILT to silty CLAY	115	2.0	21	36	11	-	-	5.0	9.9	35	0.070	2.60	15
45.44	57.4	32.9	-	57.4	2.2	-1.8	4.0	4	clayy SILT to silty CLAY	115	2.0	16	29	9	-	-	3.9	9.9	40	0.070	2.69	15
45.61	45.6	26.0	-	45.5	1.8	-1.8	4.3	3	silty CLAY to CLAY	115	1.5	17	30	7	-	-	3.1	8.1	45	0.005	2.78	15
45.77	48.6	27.7	-	48.6	1.6	-1.3	3.5	4	clayy SILT to silty CLAY	115	2.0	14	24	7	-	-	3.3	8.6	41	0.070	2.71	15
45.93	44.4	25.2	-	44.4	1.9	-1.4	4.6	3	silty CLAY to CLAY	115	1.5	17	30	7	-	-	3.0	7.8	47	0.005	2.81	15
46.10	51.3	29.1	-	51.3	2.0	-0.8	4.1	4	clayy SILT to silty CLAY	115	2.0	15	26	8	-	-	3.5	9.1	42	0.070	2.73	15
46.26	40.4	22.8	-	40.4	1.8	-1.2	4.9	3	silty CLAY to CLAY	115	1.5	15	27	7	-	-	2.7	7.0	50	0.005	2.87	15

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SMC-HMB Farmworker Housing project

Project ID: BAGG Engineering
Data File: SDF(864).cpt
CPT Date: 7/26/2023 10:51:49 AM
GW During Test: 15 ft

Sounding ID: CPT-03
Project No: COUSM-23-03
Cone/Rig: DDG1589

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR - -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
46.43	87.7	64.0	121.7	87.7	1.8	-0.6	2.1	5	silty SAND to sandy SILT	120	3.0	21	29	14	52	37	-	-	22	0.200	2.28	16
46.59	107.9	78.6	118.4	107.9	1.7	-1.6	1.6	5	silty SAND to sandy SILT	120	3.0	26	36	16	59	38	-	-	17	0.200	2.13	16
46.75	115.5	84.0	117.8	115.5	1.6	-1.8	1.4	5	silty SAND to sandy SILT	120	3.0	28	39	17	61	38	-	-	15	0.200	2.07	16
46.92	112.9	82.0	122.1	112.8	1.8	-2.2	1.6	5	silty SAND to sandy SILT	120	3.0	27	38	17	60	38	-	-	16	0.200	2.12	16
47.08	108.4	78.6	123.6	108.4	1.9	-2.3	1.8	5	silty SAND to sandy SILT	120	3.0	26	36	16	59	38	-	-	18	0.200	2.16	16
47.25	104.4	75.6	133.5	104.4	2.2	-2.5	2.2	5	silty SAND to sandy SILT	120	3.0	25	35	16	58	37	-	-	20	0.200	2.24	16
47.41	82.2	59.5	140.2	82.2	2.4	-2.8	3.0	4	clayy SILT to silty CLAY	115	2.0	30	41	14	-	-	5.7	9.9	27	0.070	2.41	15
47.57	57.9	32.0	-	57.8	2.2	-3.3	4.0	4	clayy SILT to silty CLAY	115	2.0	16	29	9	-	-	4.0	9.9	40	0.070	2.69	15
47.74	44.8	24.7	-	44.8	2.2	-3.1	5.3	3	silty CLAY to CLAY	115	1.5	16	30	7	-	-	3.0	7.7	50	0.005	2.87	15
47.90	37.6	20.7	-	37.6	2.1	-2.9	6.1	3	silty CLAY to CLAY	115	1.5	14	25	6	-	-	2.5	6.3	56	0.005	2.97	15
48.07	36.6	20.1	-	36.6	1.5	-2.7	4.6	3	silty CLAY to CLAY	115	1.5	13	24	6	-	-	2.5	6.1	52	0.005	2.89	15
48.23	43.3	23.7	-	43.2	1.5	-2.7	3.8	4	clayy SILT to silty CLAY	115	2.0	12	22	7	-	-	2.9	7.3	45	0.070	2.78	15
48.39	39.5	21.6	-	39.4	1.7	-2.8	4.6	3	silty CLAY to CLAY	115	1.5	14	26	6	-	-	2.7	6.6	50	0.005	2.87	15
48.56	28.8	15.7	-	28.7	1.8	-2.5	7.0	3	silty CLAY to CLAY	115	1.5	10	19	5	-	-	1.9	4.7	66	0.005	3.10	15
48.72	46.2	25.2	-	46.2	1.8	-2.1	4.2	3	silty CLAY to CLAY	115	1.5	17	31	7	-	-	3.1	7.8	45	0.005	2.79	15
48.89	62.6	44.8	112.7	62.5	1.5	-2.5	2.5	5	silty SAND to sandy SILT	120	3.0	15	21	11	40	34	-	-	28	0.200	2.45	16
49.05	34.6	18.7	-	34.5	1.5	-2.6	4.8	3	silty CLAY to CLAY	115	1.5	12	23	6	-	-	2.3	5.7	54	0.005	2.94	15
49.22	29.5	16.0	-	29.5	1.6	-2.3	6.2	3	silty CLAY to CLAY	115	1.5	11	20	5	-	-	2.0	4.7	63	0.005	3.06	15
49.38	27.9	15.0	-	27.8	1.7	-2.0	6.9	3	silty CLAY to CLAY	115	1.5	10	19	5	-	-	1.8	4.4	67	0.005	3.12	15
49.54	34.9	18.8	-	34.8	2.0	-1.9	6.1	3	silty CLAY to CLAY	115	1.5	13	23	6	-	-	2.3	5.7	59	0.005	3.00	15
49.71	36.9	19.8	-	36.8	2.0	-1.9	5.9	3	silty CLAY to CLAY	115	1.5	13	25	6	-	-	2.5	6.0	57	0.005	2.97	15
49.87	32.1	17.2	-	32.1	1.7	-1.9	5.9	3	silty CLAY to CLAY	115	1.5	11	21	6	-	-	2.1	5.2	60	0.005	3.02	15
50.04	30.6	16.3	-	30.5	1.8	-1.6	6.5	3	silty CLAY to CLAY	115	1.5	11	20	5	-	-	2.0	4.9	63	0.005	3.07	15

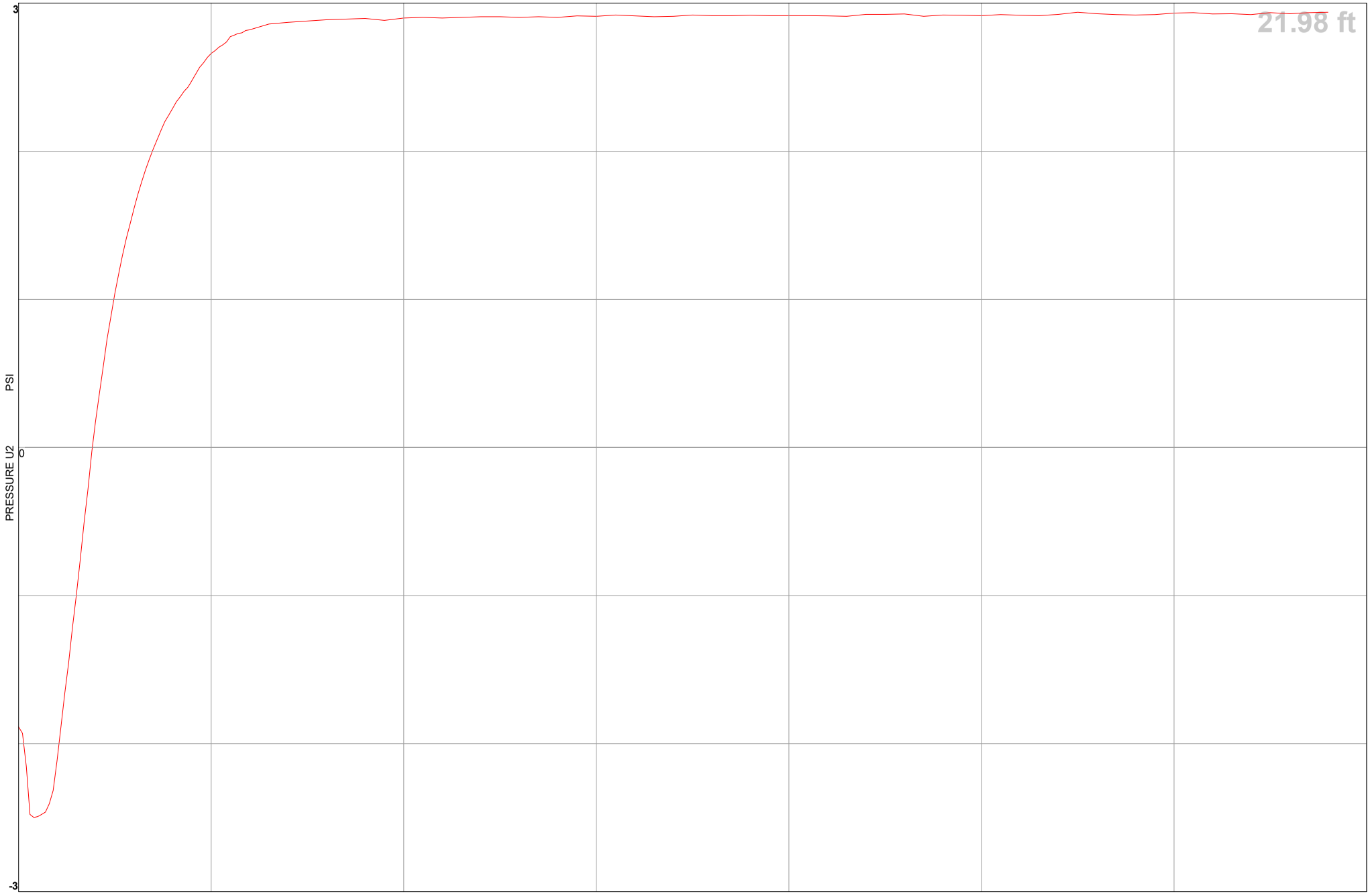
* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

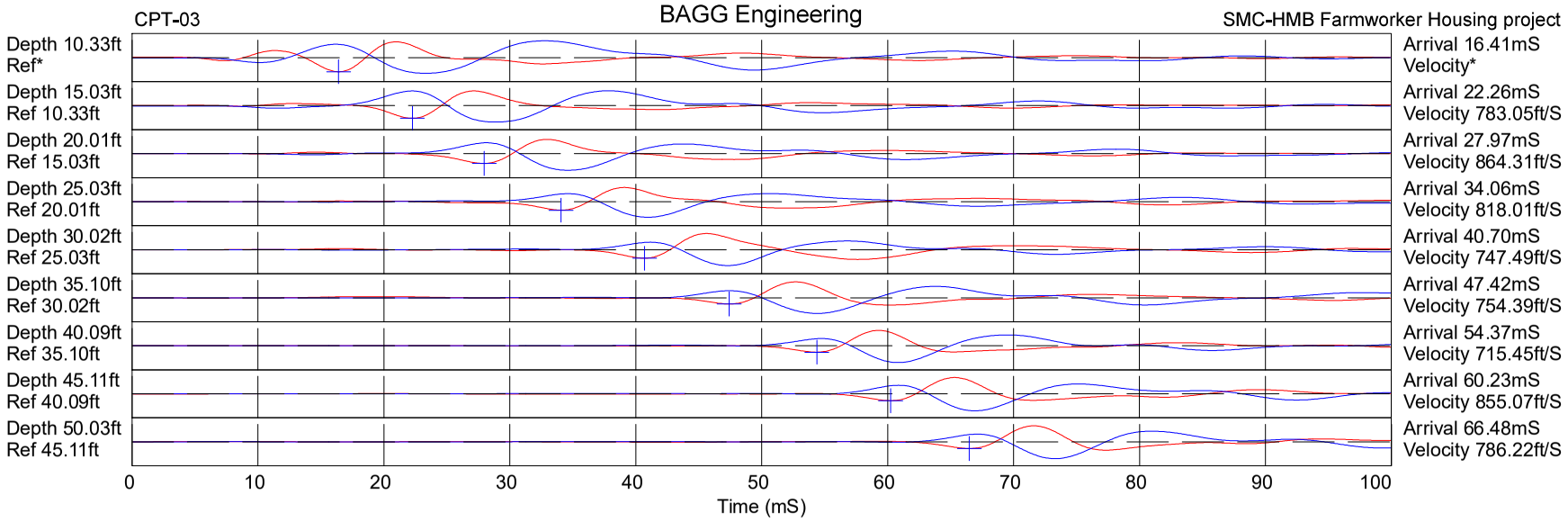
DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BAGG Engineering

Location	SMC-HMB Farmworker Housing projec	Operator	AJ-ER		
Job Number	COUSM-23-03	Cone Number	DDG1589	GPS	
Hole Number	CPT-03	Date and Time	7/26/2023 10:51:49 AM		
Equilized Pressure	2.9	EST GW Depth During Test	15.1		



DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2



Hammer to Rod String Distance (ft): 2.67
* = Not Determined

COMMENT:

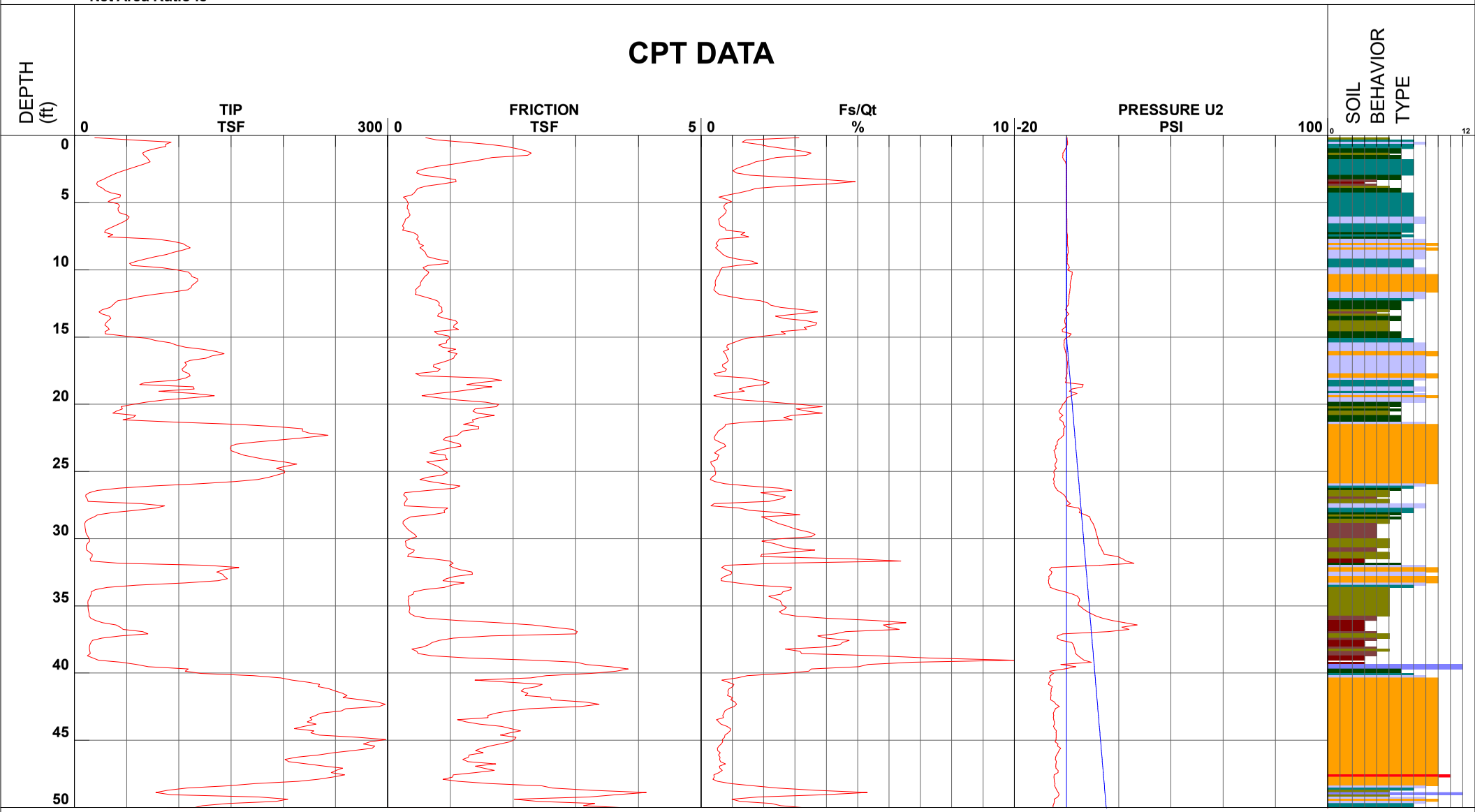
DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BAGG Engineering

Project	SMC-HMB Farmworker Housing project	Operator	AJ-ER	Filename	SDF(863).cpt
Job Number	COUSM-23-03	Cone Number	DDG1589	GPS	
Hole Number	CPT-04	Date and Time	7/26/2023 10:01:25 AM	Maximum Depth	50.52 ft
EST GW Depth During Test		15.00 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm²

*Soil behavior type and SPT based on data from UBC-1983

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SMC-HMB Farmworker Housing project

Project ID: BAGG Engineering
Data File: SDF(863).cpt
CPT Date: 7/26/2023 10:01:25 AM
GW During Test: 15 ft

Sounding ID: CPT-04
Project No: COUSM-23-03
Cone/Rig: DDG1589

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR - -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
0.33	53.8	86.3	120.2	53.8	0.8	0.2	1.4	5	silty SAND to sandy SILT	120	3.0	29	18	17	62	48	-	-	15	0.200	2.06	16
0.49	92.5	148.4	171.7	92.5	1.2	0.4	1.3	6	clean SAND to silty SAND	125	5.0	30	19	28	80	48	-	-	10	0.350	1.86	16
0.66	87.2	139.9	180.1	87.2	1.6	0.4	1.8	6	clean SAND to silty SAND	125	5.0	28	17	27	78	48	-	-	13	0.350	1.99	16
0.82	87.5	140.3	190.2	87.5	1.9	0.0	2.2	5	silty SAND to sandy SILT	120	3.0	47	29	28	78	48	-	-	14	0.200	2.04	16
0.98	77.4	124.2	191.5	77.4	2.1	-0.4	2.7	5	silty SAND to sandy SILT	120	3.0	41	26	26	74	48	-	-	17	0.200	2.14	16
1.15	69.3	111.2	195.6	69.3	2.2	-0.8	3.2	5	silty SAND to sandy SILT	120	3.0	37	23	24	71	48	-	-	20	0.200	2.24	16
1.31	65.2	104.6	199.1	65.2	2.3	-1.4	3.5	5	silty SAND to sandy SILT	120	3.0	35	22	23	68	48	-	-	22	0.200	2.29	16
1.48	66.6	106.7	196.4	66.5	2.2	-1.4	3.4	5	silty SAND to sandy SILT	120	3.0	36	22	23	69	48	-	-	21	0.200	2.26	16
1.64	69.4	111.3	171.1	69.4	1.7	-1.4	2.4	5	silty SAND to sandy SILT	120	3.0	37	23	23	71	48	-	-	17	0.200	2.14	16
1.80	71.1	114.0	164.1	71.0	1.5	-1.0	2.1	5	silty SAND to sandy SILT	120	3.0	38	24	23	71	48	-	-	16	0.200	2.09	16
1.97	72.6	116.5	155.9	72.6	1.3	-0.5	1.8	5	silty SAND to sandy SILT	120	3.0	39	24	23	72	48	-	-	14	0.200	2.03	16
2.13	66.8	107.1	142.5	66.8	1.1	-0.2	1.6	5	silty SAND to sandy SILT	120	3.0	36	22	21	69	48	-	-	14	0.200	2.02	16
2.30	60.1	96.4	126.3	60.1	0.8	-0.1	1.3	6	clean SAND to silty SAND	125	5.0	19	12	19	66	48	-	-	13	0.350	2.01	16
2.46	53.4	85.7	111.2	53.4	0.6	-0.1	1.1	6	clean SAND to silty SAND	125	5.0	17	11	17	62	47	-	-	13	0.350	2.00	16
2.62	46.8	75.0	99.1	46.8	0.5	-0.1	1.0	6	clean SAND to silty SAND	125	5.0	15	9	15	58	46	-	-	13	0.350	2.02	16
2.79	40.6	65.2	93.7	40.6	0.5	0.0	1.1	5	silty SAND to sandy SILT	120	3.0	22	14	13	53	45	-	-	16	0.200	2.09	16
2.95	35.7	57.3	98.9	35.7	0.6	0.0	1.6	5	silty SAND to sandy SILT	120	3.0	19	12	12	49	44	-	-	20	0.200	2.22	16
3.12	31.3	50.2	122.2	31.3	0.9	0.0	2.8	4	clayy SILT to silty CLAY	115	2.0	25	16	12	-	-	2.2	9.9	28	0.070	2.43	15
3.28	27.2	43.6	141.4	27.2	1.1	0.0	4.0	4	clayy SILT to silty CLAY	115	2.0	22	14	11	-	-	1.9	9.9	35	0.070	2.59	15
3.45	22.1	35.5	-	22.1	1.1	0.1	5.0	3	silty CLAY to CLAY	115	1.5	24	15	10	-	-	1.5	9.9	41	0.005	2.72	15
3.61	21.2	34.0	-	21.2	0.9	0.0	4.1	4	clayy SILT to silty CLAY	115	2.0	17	11	9	-	-	1.5	9.9	39	0.070	2.67	15
3.77	23.0	36.8	106.2	23.0	0.6	-0.2	2.7	4	clayy SILT to silty CLAY	115	2.0	18	11	9	-	-	1.6	9.9	32	0.070	2.52	15
3.94	27.4	43.9	92.6	27.4	0.5	-0.1	1.8	5	silty SAND to sandy SILT	120	3.0	15	9	10	40	41	-	-	24	0.200	2.35	16
4.10	29.5	47.3	89.7	29.5	0.4	0.0	1.5	5	silty SAND to sandy SILT	120	3.0	16	10	10	42	41	-	-	22	0.200	2.28	16
4.27	35.0	56.2	88.9	35.0	0.4	0.0	1.2	5	silty SAND to sandy SILT	120	3.0	19	12	12	48	42	-	-	18	0.200	2.16	16
4.43	44.1	70.7	91.8	44.1	0.4	0.0	0.9	6	clean SAND to silty SAND	125	5.0	14	9	14	56	43	-	-	13	0.350	2.00	16
4.59	43.7	70.1	83.3	43.7	0.3	0.0	0.6	6	clean SAND to silty SAND	125	5.0	14	9	13	55	43	-	-	10	0.350	1.90	16
4.76	36.2	58.0	79.6	36.2	0.3	0.0	0.8	6	clean SAND to silty SAND	125	5.0	12	7	12	49	42	-	-	14	0.350	2.05	16
4.92	32.2	51.7	78.9	32.2	0.3	0.0	1.0	5	silty SAND to sandy SILT	120	3.0	17	11	11	45	41	-	-	17	0.200	2.14	16
5.09	41.7	66.9	86.3	41.7	0.3	-0.1	0.8	6	clean SAND to silty SAND	125	5.0	13	8	13	54	42	-	-	13	0.350	1.99	16
5.25	43.3	69.4	86.9	43.3	0.3	-0.1	0.7	6	clean SAND to silty SAND	125	5.0	14	9	13	55	42	-	-	12	0.350	1.96	16
5.41	41.7	66.9	85.0	41.7	0.3	0.0	0.7	6	clean SAND to silty SAND	125	5.0	13	8	13	54	42	-	-	12	0.350	1.98	16
5.58	42.0	67.4	87.2	42.0	0.3	0.1	0.8	6	clean SAND to silty SAND	125	5.0	13	8	13	54	42	-	-	13	0.350	2.00	16
5.74	43.2	69.3	88.3	43.2	0.3	0.0	0.8	6	clean SAND to silty SAND	125	5.0	14	9	14	55	42	-	-	12	0.350	1.98	16
5.91	49.7	79.8	95.3	49.7	0.4	0.1	0.7	6	clean SAND to silty SAND	125	5.0	16	10	15	60	42	-	-	11	0.350	1.91	16
6.07	52.4	84.0	97.0	52.4	0.3	0.1	0.6	6	clean SAND to silty SAND	125	5.0	17	10	16	61	42	-	-	9	0.350	1.86	16
6.23	50.8	80.3	91.6	50.8	0.3	0.1	0.6	6	clean SAND to silty SAND	125	5.0	16	10	15	60	42	-	-	9	0.350	1.84	16
6.40	47.7	74.4	87.2	47.7	0.3	0.1	0.6	6	clean SAND to silty SAND	125	5.0	15	10	14	57	42	-	-	10	0.350	1.88	16
6.56	43.2	66.5	80.8	43.2	0.3	0.1	0.6	6	clean SAND to silty SAND	125	5.0	13	9	13	54	41	-	-	11	0.350	1.93	16
6.73	38.4	58.4	74.9	38.4	0.2	0.1	0.6	6	clean SAND to silty SAND	125	5.0	12	8	11	49	40	-	-	13	0.350	1.99	16
6.89	33.7	50.6	72.9	33.7	0.3	0.1	0.8	5	silty SAND to sandy SILT	120	3.0	17	11	10	45	39	-	-	16	0.200	2.09	16
7.05	29.7	44.1	68.5	29.7	0.2	0.1	0.8	5	silty SAND to sandy SILT	120	3.0	15	10	9	40	38	-	-	17	0.200	2.15	16
7.22	28.8	42.3	83.0	28.8	0.4	0.2	1.4	5	silty SAND to sandy SILT	120	3.0	14	10	9	39	38	-	-	23	0.200	2.30	16
7.38	36.7	53.3	88.4	36.7	0.5	0.3	1.3	5	silty SAND to sandy SILT	120	3.0	18	12	11	46	39	-	-	19	0.200	2.20	16
7.55	32.1	46.0	89.1	32.1	0.5	0.4	1.5	5	silty SAND to sandy SILT	120	3.0	15	11	10	41	39	-	-	22	0.200	2.30	16
7.71	78.7	111.7	118.5	78.7	0.5	0.3	0.6	6	clean SAND to silty SAND	125	5.0	22	16	20	71	43	-	-	7	0.350	1.73	16
7.87	93.9	131.8	132.4	93.9	0.5	0.3	0.5	6	clean SAND to silty SAND	125	5.0	26	19	23	76	44	-	-	5	0.350	1.65	16
8.04	103.7	144.1	144.1	103.7	0.5	0.3	0.5	6	clean SAND to silty SAND	125	5.0	29	21	24	79	44	-	-	5	0.350	1.60	16
8.20	107.0	147.2	147.2	107.0	0.6	0.4	0.5	6	clean SAND to silty SAND	125	5.0	29	21	25	80	44	-	-	5	0.350	1.61	16
8.37	110.9	150.9	150.9	110.9	0.5	0.6	0.5	6	clean SAND to silty SAND	125	5.0	30	22	25	81	44	-	-	5	0.350	1.57	16
8.53	104.0	140.2	140.2	104.0	0.6	0.6	0.5	6	clean SAND to silty SAND	125	5.0	28	21	24	78	44	-	-	5	0.350	1.63	16
8.69	95.0	126.8	132.3	95.0	0.6	0.7	0.6	6	clean SAND to silty SAND	125	5.0	25	19	22	75	43	-	-	6	0.350	1.71	16
8.86	88.2	116.6	126.1	88.2	0.6	0.4	0.7	6	clean SAND to silty SAND	125	5.0	23	18	21	72	43	-	-	7	0.350	1.76	16
9.02	77.2	101.1	116.5	77.2	0.6	0.3	0.8	6	clean SAND to silty SAND	125	5.0	20	15	19	67	42	-	-	9	0.350	1.86	16
9.19	68.0	88.3	113.9	68.0	0.8	0.3	1.1	6	clean SAND to silty SAND	125	5.0	18	14	17	63	42	-	-	13	0.350	1.99	16
9.35	59.5	76.5	117.5	59.5	1.0	0.2	1.6	5	silty SAND to sandy SILT	120	3.0	25	20	16	58	41	-	-	17	0.200	2.14	16
9.51	52.9	67.4	114.9	52.9	1.0	0.3	1.8	5	silty SAND to sandy SILT	120	3.0	22	18	14	54	40	-	-	19	0.200	2.21	16
9.68	55.1	69.6	98.9	55.1	0.6	0.8	1.2	5	silty SAND to sandy SILT	120	3.0	23	18	14	55	40	-	-	15	0.200	2.08	16
9.84	83.6	104.9	115.6	83.7	0.6	1.1	0.7	6	clean SAND to silty SAND	125	5.0	21	17	19	69	42	-	-	8	0.350	1.79	16
10.01	98.4	122.3	128.2	98.4	0.6	0.4	0.6	6	clean SAND to silty SAND	125	5.0	24	20	22	74	43	-	-	6	0.350	1.72	16
10.17	109.1	134.5	137.4	109.2	0.7	2.2	0.6	6	clean SAND to silty SAND	125	5.0	27	22	23	77	43	-	-	6	0.350	1.68	16
10.34	111.4	136.3	137.4	111.5	0.6	2.2	0.6	6	clean SAND to silty SAND	125	5.0	27	22	24	77	43	-	-	5	0.350	1.66	16
10.50	112.5	136.5	136.5	112.6	0.6	1.8	0.5	6	clean SAND to silty SAND	125	5.0	27	23	24	77	43	-	-	5	0.350	1.64	16
10.66	117.9	141.9	141.9	117.9	0.6	1.8	0.5	6	clean SAND to silty SAND	125	5.0	28	24	24	79	44	-	-	5	0.350	1.60	16
10.83	118.2	141.1	141.1	118.2	0.5	1.6	0.5	6	clean SAND to silty SAND	125	5.0	28	24	24	78	43	-	-	5	0.350	1.59	16
10.99	115.4	136.8	136.8	115.5	0.5	1.5	0.5	6	clean SAND to silty SAND	125	5.0	27	23	23	77	43	-	-	5	0.350	1.60	16
11.16	112.6	132.5	132.5	112.7	0.5	1.4	0.5	6	clean SAND to silty SAND	125	5.0	26	23	23	76	43	-	-	5	0.350	1.62	16
11.32	111.6	130.3	130.3	111.7	0.5	1.4	0.4	6	clean SAND to silty SAND	125	5.0	26	22	22	76	43	-	-	5	0.350	1.60	16
11.48	108.5	125.8	125.8	108.6	0.4	1.3	0.4	6	clean SAND to silty SAND	125	5.0	25	22	21	75	43	-	-	5	0.350	1.61	16
11.65	94.4	108.6	112.5	94.4	0.5	1.3	0.5	6	clean SAND to silty SAND	125	5.0	22	19	19	70	42	-	-	6	0.350	1.70	16
11.81	77.1	88.1	98.6	77.2	0.4	1.0	0.6	6	clean SAND to silty SAND	125	5.0	18	15	16	63	41	-	-	8	0.350	1.82	16
11.98	62.4	70.8	93.1	62.4	0.6	1.0	0.9	6	clean SAND to silty SAND	125	5.0	14	12	14	56	40	-	-	13	0.350	2.01	16
12.14	52.7	59.4	94.8	52.8	0.7	0.9	1.3	5	silty SAND to sandy SILT	120	3.0	20	18	12	50	39	-	-	18	0.200	2.17	16
12.30	41.6	46.5	99.5	41.6	0.8	0.7	1.9	5	silty SAND to sandy SILT	120	3.0	16	14	11	42	37	-	-	25	0.200	2.35	16
12.47	38.6	43.0	102.0	38.7	0.8	0.8	2.2	5	silty SAND to sandy SILT	120	3.0	14	13	10	39	37	-	-	27	0.200	2.41	16
12.63	36.5	40.3	101.7	36.5	0.8	0.6	2.3	5	silty SAND to sandy SILT	120	3.0	13	12	10	37	36	-	-	28	0.200	2.45	16
12.80	34.0	37.3	105.9	34.0	0.9	0.0	2.6	4	clayy SILT to silty CLAY	115	2.0	19	17	9	-	-	2.3	9.9	31	0.070	2.51	15
12.96	26.7	33.6	-	26.6	0.9	-0.4	3.3	4	clayy SILT to silty CLAY	115	2.0	17	13	9	-	-	1.8	9.9	36	0.070	2.62	15
13.12	23.5	29.3	-	23.5	0.9	0.2	3.9	4	clayy SILT to silty CLAY	115	2.0	15	12	8	-	-	1.6	9.3	41	0.070	2.71	15
13.29	26.3	32.4	-	26.3	0.8	0.9	3.2	4	clayy SILT to silty CLAY	115	2.0	16	13	8	-	-	1.8	9.9	36	0.070	2.62	15
13.45	33.5	35.9	100.8	33.5	0.8	0.0	2.4	4	clayy SILT to silty CLAY	115	2.0	18	17	9	-	-	2.3	9.9	31	0.070	2.51	15
13.62	34.8	37.1	107.7	34.8	0.9	-0.6	2.7	4	clayy SILT to silty CLAY	115	2.0	19	17	9	-	-	2.4	9.9	32	0.070	2.53	15
13.78	32.3	35.9	-	32.3	1.1	-0.7	3.4	4	clayy SILT to silty CLAY	115	2.0	18	16	9	-	-	2.2	9.9	36	0.070	2.61	15
13.94	30.2	35.6	-	30.2	1.1	-0.7	3.8	4	clayy SILT to silty CLAY	115	2.0	18	15	9	-	-	2.1	9.9	37	0.070	2.64	15
14.11	29.0	33.8	-	29.0	1.1	-0.2	3.8	4	clayy SILT to silty CLAY	115	2.0	17	15	9	-	-	2.0	9.9	38	0.070	2.65	15
14.27	31.8	34.6	-	31.8	1.0	-0.5	3.4	4	clayy SILT to silty CLAY	115	2.0	17	16	9	-	-	2.2	9.9	36	0.070	2.61	15
14.44	33.5	36.1	-	33.5	1.1	-1.6	3.5	4	clayy SILT to silty CLAY	115	2.0	18	17	9	-	-	2.3	9.9	36	0.070	2.61	15
14.60	29.3	30.2	98.5	29.2	0.7	-1.6	2.6	4	clayy SILT to silty CLAY	115	2.0	15	15	8	-	-	2.0	9.9	35	0.070	2.59	15
14.76	29.6	31.4	102.7	29.6	0.8	1.8	2.8	4	clayy SILT to silty CLAY	115	2.0	16	15	8	-	-	2.0	9.9	35	0.070	2.59	15
14.93	48.4	49.4	105.0	48.5	1.0	1.2	2.0	5	silty SAND to sandy SILT	120	3.0	16	16	11	44	37	-	-	24	0.200	2.35	16
15.09	69.5	70.8	107.5	69.5	1.0	-0.4	1.5	5	silty SAND to sandy SILT	120	3.0	24	23	15	56	39	-	-	17	0.200	2.13	16
15.26	77.7	78.9	108.2	77.6	0.9	-0.9	1.2	5	silty SAND to sandy SILT	120	3.0	26	26	16	59	40	-	-	14	0.200	2.05	16
15.42	91.5	92.6	114.8	91.4	0.9	-0.9	1.0	6	clean SAND to silty SAND	125	5.0	19	18	18	64	40	-	-	12	0.350	1.95	16

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SMC-HMB Farmworker Housing project

Project ID: BAGG Engineering
Data File: SDF(863).cpt
CPT Date: 7/26/2023 10:01:25 AM
GW During Test: 15 ft

Sounding ID: CPT-04
Project No: COUSM-23-03
Cone/Rig: DDG1589

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Ratio %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR - -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
15.58	97.3	98.3	114.5	97.3	0.8	-1.0	0.8	6	clean SAND to silty SAND	125	5.0	20	19	18	66	41	-	-	10	0.350	1.87	16
15.75	106.3	107.1	121.8	106.3	0.9	-0.9	0.8	6	clean SAND to silty SAND	125	5.0	21	21	20	69	41	-	-	9	0.350	1.84	16
15.91	122.5	123.0	137.3	122.5	1.1	-0.6	0.9	6	clean SAND to silty SAND	125	5.0	25	25	23	74	42	-	-	8	0.350	1.81	16
16.08	135.7	136.0	142.7	135.7	1.0	-0.4	0.7	6	clean SAND to silty SAND	125	5.0	27	27	24	77	42	-	-	6	0.350	1.72	16
16.24	143.3	143.2	150.8	143.3	1.1	-0.2	0.8	6	clean SAND to silty SAND	125	5.0	29	29	25	79	43	-	-	7	0.350	1.72	16
16.40	131.5	131.0	142.0	131.5	1.1	0.0	0.8	6	clean SAND to silty SAND	125	5.0	26	26	24	76	42	-	-	7	0.350	1.77	16
16.57	126.1	125.3	137.7	126.1	1.1	0.1	0.8	6	clean SAND to silty SAND	125	5.0	25	25	23	74	42	-	-	8	0.350	1.79	16
16.73	110.7	109.7	125.4	110.7	1.0	0.2	0.9	6	clean SAND to silty SAND	125	5.0	22	22	20	70	41	-	-	9	0.350	1.85	16
16.90	105.7	104.5	119.4	105.7	0.9	0.4	0.8	6	clean SAND to silty SAND	125	5.0	21	21	19	68	41	-	-	9	0.350	1.85	16
17.06	107.5	105.9	116.8	107.5	0.7	0.3	0.7	6	clean SAND to silty SAND	125	5.0	21	21	19	69	41	-	-	8	0.350	1.79	16
17.23	105.4	103.6	115.0	105.4	0.7	0.3	0.7	6	clean SAND to silty SAND	125	5.0	21	21	19	68	41	-	-	8	0.350	1.81	16
17.39	102.9	100.9	116.2	102.9	0.8	0.2	0.8	6	clean SAND to silty SAND	125	5.0	20	21	19	67	41	-	-	9	0.350	1.86	16
17.55	104.3	102.0	115.6	104.3	0.8	0.2	0.8	6	clean SAND to silty SAND	125	5.0	20	21	19	68	41	-	-	9	0.350	1.84	16
17.72	109.5	106.8	108.6	109.5	0.4	0.2	0.4	6	clean SAND to silty SAND	125	5.0	21	22	19	69	41	-	-	6	0.350	1.67	16
17.88	110.8	107.8	111.9	110.8	0.5	0.0	0.5	6	clean SAND to silty SAND	125	5.0	22	22	19	69	41	-	-	6	0.350	1.70	16
18.05	106.3	103.2	137.3	106.3	1.6	-0.4	1.5	5	silty SAND to sandy SILT	120	3.0	34	35	20	68	41	-	-	14	0.200	2.02	16
18.21	96.9	93.8	140.4	96.9	1.8	-0.1	1.9	5	silty SAND to sandy SILT	120	3.0	31	32	19	65	40	-	-	17	0.200	2.12	16
18.37	67.5	65.2	123.6	67.5	1.5	-0.4	2.2	5	silty SAND to sandy SILT	120	3.0	22	23	14	53	38	-	-	22	0.200	2.28	16
18.54	62.4	60.2	115.2	62.6	1.3	6.4	2.1	5	silty SAND to sandy SILT	120	3.0	20	21	13	50	38	-	-	22	0.200	2.29	16
18.70	113.8	109.4	141.8	113.9	1.7	6.0	1.5	6	clean SAND to silty SAND	125	5.0	22	23	21	70	41	-	-	13	0.350	2.00	16
18.87	114.6	109.9	135.2	114.7	1.4	2.1	1.2	6	clean SAND to silty SAND	125	5.0	22	23	21	70	41	-	-	11	0.350	1.94	16
19.03	80.8	77.3	111.9	80.8	1.1	1.1	1.4	5	silty SAND to sandy SILT	120	3.0	26	27	16	58	39	-	-	16	0.200	2.10	16
19.19	114.6	109.4	119.9	114.7	0.8	4.0	0.7	6	clean SAND to silty SAND	125	5.0	22	23	20	70	41	-	-	8	0.350	1.79	16
19.36	133.9	127.5	127.5	133.9	0.5	1.8	0.4	6	clean SAND to silty SAND	125	5.0	25	27	22	75	42	-	-	5	0.350	1.60	16
19.52	113.4	107.7	118.8	113.4	0.8	0.3	0.7	6	clean SAND to silty SAND	125	5.0	22	23	20	69	41	-	-	8	0.350	1.80	16
19.69	85.9	81.4	112.6	85.9	1.1	-0.1	1.3	5	silty SAND to sandy SILT	120	3.0	27	29	16	60	39	-	-	15	0.200	2.06	16
19.85	68.4	64.6	126.3	68.4	1.6	-0.6	2.3	5	silty SAND to sandy SILT	120	3.0	22	23	14	53	38	-	-	23	0.200	2.30	16
20.01	55.5	52.3	137.3	55.4	1.8	-1.5	3.3	4	clayy SILT to silty CLAY	115	2.0	26	28	13	-	-	3.8	9.9	29	0.070	2.47	15
20.18	44.8	42.0	-	44.7	1.7	-1.7	4.0	4	clayy SILT to silty CLAY	115	2.0	21	22	11	-	-	3.1	9.9	35	0.070	2.60	15
20.34	45.9	43.1	123.9	45.9	1.4	-2.3	3.1	4	clayy SILT to silty CLAY	115	2.0	22	23	11	-	-	3.2	9.9	32	0.070	2.52	15
20.51	40.2	37.6	124.7	40.1	1.4	-2.9	3.5	4	clayy SILT to silty CLAY	115	2.0	19	20	10	-	-	2.8	9.9	35	0.070	2.60	15
20.67	36.9	34.2	-	36.8	1.4	-2.5	4.0	4	clayy SILT to silty CLAY	115	2.0	17	18	9	-	-	2.5	9.9	39	0.070	2.67	15
20.83	58.7	54.8	133.0	58.7	1.7	-1.4	3.0	4	clayy SILT to silty CLAY	115	2.0	27	29	13	-	-	4.1	9.9	28	0.070	2.43	15
21.00	56.0	52.2	124.1	55.9	1.5	-2.5	2.7	5	silty SAND to sandy SILT	120	3.0	17	19	12	46	37	-	-	27	0.200	2.42	16
21.16	46.4	43.1	121.2	46.3	1.4	-2.5	3.0	4	clayy SILT to silty CLAY	115	2.0	22	23	11	-	-	3.2	9.9	31	0.070	2.51	15
21.33	95.2	88.4	122.8	95.2	1.4	-1.3	1.5	5	silty SAND to sandy SILT	120	3.0	29	32	18	63	40	-	-	15	0.200	2.06	16
21.49	154.5	143.1	151.2	154.5	1.2	-1.2	0.8	6	clean SAND to silty SAND	125	5.0	29	31	25	79	42	-	-	7	0.350	1.73	16
21.65	192.3	177.7	177.8	192.3	1.5	-0.5	0.8	6	clean SAND to silty SAND	125	5.0	36	38	31	86	43	-	-	5	0.350	1.65	16
21.82	218.5	201.4	201.4	218.5	1.5	-1.1	0.7	6	clean SAND to silty SAND	125	5.0	40	44	34	90	44	-	-	5	0.350	1.57	16
21.98	218.3	200.7	200.7	218.2	1.2	-1.0	0.6	6	clean SAND to silty SAND	125	5.0	40	44	33	90	44	-	-	5	0.350	1.51	16
22.15	224.4	205.9	205.9	224.4	1.2	-1.1	0.5	6	clean SAND to silty SAND	125	5.0	41	45	34	91	44	-	-	5	0.350	1.49	16
22.31	243.0	222.4	222.4	242.9	1.1	-1.2	0.5	6	clean SAND to silty SAND	125	5.0	44	49	36	93	44	-	-	5	0.350	1.43	16
22.47	222.4	203.1	203.1	222.3	0.9	-2.0	0.4	6	clean SAND to silty SAND	125	5.0	41	44	33	90	44	-	-	5	0.350	1.44	16
22.64	199.3	181.6	181.6	199.2	0.9	-3.1	0.4	6	clean SAND to silty SAND	125	5.0	36	40	30	87	43	-	-	5	0.350	1.49	16
22.80	174.7	158.8	158.8	174.6	1.0	-3.6	0.6	6	clean SAND to silty SAND	125	5.0	32	35	27	82	43	-	-	5	0.350	1.61	16
22.97	154.7	140.3	147.7	154.7	1.2	-3.5	0.8	6	clean SAND to silty SAND	125	5.0	28	31	25	78	42	-	-	7	0.350	1.72	16
23.13	149.8	135.6	144.9	149.7	1.2	-4.2	0.8	6	clean SAND to silty SAND	125	5.0	27	30	24	77	42	-	-	7	0.350	1.75	16
23.30	149.4	134.9	139.5	149.3	1.0	-4.0	0.6	6	clean SAND to silty SAND	125	5.0	27	30	24	77	42	-	-	6	0.350	1.69	16
23.46	149.9	135.1	134.9	149.8	0.8	-4.8	0.5	6	clean SAND to silty SAND	125	5.0	27	30	23	77	42	-	-	5	0.350	1.64	16
23.62	155.7	140.0	140.0	155.6	0.7	-4.5	0.4	6	clean SAND to silty SAND	125	5.0	28	31	24	78	42	-	-	5	0.350	1.58	16
23.79	162.0	145.4	145.4	161.9	0.9	-4.3	0.6	6	clean SAND to silty SAND	125	5.0	29	32	25	79	42	-	-	5	0.350	1.64	16
23.95	172.5	154.4	154.4	172.4	0.9	-4.2	0.5	6	clean SAND to silty SAND	125	5.0	31	34	26	81	42	-	-	5	0.350	1.60	16
24.12	183.9	164.2	164.2	183.8	1.0	-3.7	0.5	6	clean SAND to silty SAND	125	5.0	33	37	28	83	43	-	-	5	0.350	1.57	16
24.28	200.4	178.6	178.6	200.3	0.6	-3.9	0.3	6	clean SAND to silty SAND	125	5.0	36	40	29	86	43	-	-	5	0.350	1.41	16
24.44	212.9	189.3	189.3	212.8	0.7	-4.4	0.3	6	clean SAND to silty SAND	125	5.0	38	43	30	88	43	-	-	5	0.350	1.41	16
24.61	202.1	179.4	179.4	202.1	0.8	-4.4	0.4	6	clean SAND to silty SAND	125	5.0	36	40	29	86	43	-	-	5	0.350	1.47	16
24.77	193.4	171.3	171.3	193.3	0.9	-3.8	0.4	6	clean SAND to silty SAND	125	5.0	34	39	28	85	43	-	-	5	0.350	1.51	16
24.94	201.0	177.6	177.6	200.9	0.9	-4.7	0.4	6	clean SAND to silty SAND	125	5.0	36	40	29	86	43	-	-	5	0.350	1.50	16
25.10	201.4	177.6	177.6	201.3	1.0	-4.8	0.5	6	clean SAND to silty SAND	125	5.0	36	40	29	86	43	-	-	5	0.350	1.52	16
25.26	193.8	170.5	170.5	193.7	0.9	-4.6	0.5	6	clean SAND to silty SAND	125	5.0	34	39	28	85	43	-	-	5	0.350	1.52	16
25.43	186.2	163.5	163.5	186.1	0.6	-4.7	0.3	6	clean SAND to silty SAND	125	5.0	33	37	27	83	43	-	-	5	0.350	1.47	16
25.59	175.7	153.9	153.9	175.6	0.5	-5.0	0.3	6	clean SAND to silty SAND	125	5.0	31	35	25	81	42	-	-	5	0.350	1.46	16
25.76	154.2	134.9	134.9	154.1	0.7	-4.8	0.4	6	clean SAND to silty SAND	125	5.0	27	31	23	77	42	-	-	5	0.350	1.60	16
25.92	119.7	104.5	117.8	119.6	0.9	-4.8	0.8	6	clean SAND to silty SAND	125	5.0	21	24	19	68	40	-	-	9	0.350	1.83	16
26.08	75.1	65.4	106.5	75.0	1.2	-4.6	1.6	5	silty SAND to sandy SILT	120	3.0	22	25	14	53	38	-	-	18	0.200	2.18	16
26.25	42.4	36.8	106.4	42.3	1.1	-4.0	2.6	4	clayy SILT to silty CLAY	115	2.0	18	21	9	-	-	2.9	9.9	32	0.070	2.52	15
26.41	22.1	17.6	-	22.0	0.6	-3.5	3.1	3	silty CLAY to CLAY	115	1.5	12	15	5	-	-	1.5	5.4	48	0.005	2.83	15
26.58	14.3	11.4	-	14.3	0.3	-2.1	2.2	3	silty CLAY to CLAY	115	1.5	8	10	3	-	-	0.9	3.3	53	0.005	2.91	15
26.74	10.9	8.6	-	10.9	0.3	-1.0	2.7	3	silty CLAY to CLAY	115	1.5	6	7	3	-	-	0.7	2.4	64	0.005	3.09	15
26.90	10.8	8.5	-	10.8	0.3	-0.3	3.2	3	silty CLAY to CLAY	115	1.5	6	7	3	-	-	0.7	2.4	68	0.005	3.13	15
27.07	12.4	9.8	-	12.4	0.3	0.0	2.9	3	silty CLAY to CLAY	115	1.5	7	8	3	-	-	0.8	2.8	62	0.005	3.05	15
27.23	13.1	10.2	-	13.1	0.3	0.4	2.5	3	silty CLAY to CLAY	115	1.5	7	9	3	-	-	0.8	2.9	58	0.005	2.99	15
27.40	63.2	54.3	67.0	63.3	0.3	1.5	0.4	6	clean SAND to silty SAND	125	5.0	11	13	10	47	37	-	-	11	0.350	1.94	16
27.56	86.3	74.0	80.0	86.3	0.3	0.0	0.3	6	clean SAND to silty SAND	125	5.0	15	17	13	57	38	-	-	7	0.350	1.76	16
27.72	77.6	66.4	98.9	77.7	1.0	4.7	1.3	5	silty SAND to sandy SILT	120	3.0	22	26	14	53	38	-	-	16	0.200	2.12	16
27.89	58.3	49.8	94.3	58.4	0.9	5.2	1.6	5	silty SAND to sandy SILT	120	3.0	17	19	11	44	36	-	-	22	0.200	2.28	16
28.05	36.5	28.1	-	36.6	0.9	4.8	2.6	4	clayy SILT to silty CLAY	115	2.0	14	18	7	-	-	2.5	8.9	36	0.070	2.62	15
28.22	22.1	17.0	-	22.3	0.7	7.1	3.4	3	silty CLAY to CLAY	115	1.5	11	15	5	-	-	1.5	5.2	50	0.005	2.87	15
28.38	19.0	14.5	-	19.2	0.4	8.9	2.1	4	clayy SILT to silty CLAY	115	2.0	7	10	4	-	-	1.3	4.4	47	0.070	2.81	15
28.54	14.0	10.7	-	14.2	0.3	9.1	2.4	3	silty CLAY to CLAY	115	1.5	7	9	3	-	-	0.9	3.1	57	0.005	2.97	15
28.71	10.8	8.2	-	10.9	0.2	9.5	2.7	3	silty CLAY to CLAY	115	1.5	5	7	3	-	-	0.7	2.3	66	0.005	3.11	15
28.87	9.8	7.5	-	10.0	0.2	10.1	3.0	3	silty CLAY to CLAY	115	1.5	5	7	3	-	-	0.6	2.0	71	0.005	3.18	15
29.04	10.0	7.6	-	10.2	0.3	10.5	3.3	3	silty CLAY to CLAY	115	1.5	5	7	3	-	-	0.6	2.1	72	0.005	3.19	15
29.20	10.3	7.7	-	10.5	0.3	10.8	3.5	3	silty CLAY to CLAY	115	1.5	5	7	3	-	-	0.6	2.1	73	0.005	3.20	15
29.36	10.6	7.9	-	10.8	0.3	11.1	3.8	3	silty CLAY to CLAY	115	1.5	5	7	3	-	-	0.7	2.2	73	0.005	3.20	15
29.53	11.0	8.2	-	11.2	0.4	11.3	4.1	3	silty CLAY to CLAY	115	1.5	5	7	3	-	-	0.7	2.3	74	0.005	3.21	15
29.69	11.8	8.8	-	12.0	0.4	11.6	4.3	3	silty CLAY to CLAY	115	1.5	6	8	3	-	-	0.7	2.5	72	0.005	3.19	15
29.86	13.1	9.7	-	13.3	0.5	11.8	4.1	3	silty CLAY to CLAY	115	1.5	6	9	3	-	-	0.8	2.8	68	0.005	3.14	15
30.02	14.4	10.6	-	14.6	0.4	12.0	2.8	3	silty CLAY to CLAY	115	1.5	7	10	3	-	-	0.9	3.1	59	0.005	3.01	15
30.19	14.4	10.6	-	14.7	0.3	12.1	2.2	3	silty CLAY to CLAY	115	1.5	7	10	3	-	-	0.9	3.1	55	0.005	2.95	15
30.35	12.5	9.2	-	12.7	0.3	12.3	2.7	3	silty CLAY to CLAY	115	1.5	6	8	3	-	-	0.8	2.6	63	0.005	3.06	15
30.51	11.3	8.3	-	11.6	0.3	12.7	3.0	3	silty CLAY to CLAY	115	1.5	6	8	3	-	-	0.7	2.3	68	0.005	3.13	15
30.68	11.3	8.3	-	11.6	0.3	13.2	3.3	3	silty CLAY to CLAY	115	1.5	6	8	3	-	-	0.7	2.3	70	0.005	3.16	15
30.84	11.7	8.6	-	12.0	0.4	13.5	4.3	3	silty CLAY to CLAY	115	1.5	6	8	3	-	-	0.7	2.4	73	0.005	3.20	15

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SMC-HMB Farmworker Housing project

Project ID: BAGG Engineering
Data File: SDF(863).cpt
CPT Date: 7/26/2023 10:01:25 AM
GW During Test: 15 ft

Sounding ID: CPT-04
Project No: COUSM-23-03
Cone/Rig: DDG1589

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR - -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk - -
31.01	14.3	10.4	-	14.5	0.4	14.0	3.3	3	silty CLAY to CLAY	115	1.5	7	10	3	-	-	0.9	3.0	62	0.005	3.06	15
31.17	17.1	12.4	-	17.4	0.3	14.4	2.2	4	clayy SILT to silty CLAY	115	2.0	6	9	4	-	-	1.1	3.6	51	0.070	2.88	15
31.33	16.8	12.1	-	17.2	0.3	19.6	2.1	4	clayy SILT to silty CLAY	115	2.0	6	8	4	-	-	1.1	3.6	51	0.070	2.89	15
31.50	15.0	10.8	-	15.4	0.7	21.4	5.5	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	3.1	71	0.005	3.17	15
31.66	15.6	11.2	-	16.0	1.0	22.8	7.3	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	3.2	76	0.005	3.24	15
31.83	43.3	35.6	103.6	43.8	1.0	25.9	2.5	4	clayy SILT to silty CLAY	115	2.0	18	22	9	-	-	3.0	9.8	32	0.070	2.53	15
31.99	126.4	103.7	117.9	126.7	1.0	12.7	0.8	6	clean SAND to silty SAND	125	5.0	21	25	19	68	40	-	-	9	0.350	1.84	16
32.15	157.5	129.0	135.5	157.4	1.0	-5.8	0.7	6	clean SAND to silty SAND	125	5.0	26	32	23	75	41	-	-	6	0.350	1.72	16
32.32	143.2	117.0	130.2	143.1	1.2	-6.5	0.8	6	clean SAND to silty SAND	125	5.0	23	29	21	72	41	-	-	8	0.350	1.81	16
32.48	136.4	111.2	130.2	136.2	1.3	-5.6	1.0	6	clean SAND to silty SAND	125	5.0	22	27	21	71	40	-	-	10	0.350	1.88	16
32.65	141.8	115.5	133.0	141.7	1.4	-5.9	1.0	6	clean SAND to silty SAND	125	5.0	23	28	22	72	40	-	-	9	0.350	1.86	16
32.81	143.5	116.6	127.9	143.3	1.1	-6.8	0.8	6	clean SAND to silty SAND	125	5.0	23	29	21	72	41	-	-	8	0.350	1.79	16
32.97	146.4	118.7	126.5	146.2	0.9	-6.7	0.6	6	clean SAND to silty SAND	125	5.0	24	29	21	73	41	-	-	7	0.350	1.74	16
33.14	137.5	111.4	120.4	137.4	0.9	-6.9	0.6	6	clean SAND to silty SAND	125	5.0	22	27	20	71	40	-	-	7	0.350	1.76	16
33.30	105.7	85.5	112.8	105.6	1.2	-6.9	1.2	6	clean SAND to silty SAND	125	5.0	17	21	17	62	39	-	-	13	0.350	2.01	16
33.47	59.5	48.0	98.0	59.3	1.0	-6.5	1.8	5	silty SAND to sandy SILT	120	3.0	16	20	11	43	35	-	-	24	0.200	2.33	16
33.63	31.4	21.6	-	31.2	0.9	-6.2	3.1	4	clayy SILT to silty CLAY	115	2.0	11	16	6	-	-	2.1	6.7	44	0.070	2.76	15
33.79	20.1	13.8	-	20.0	0.6	-4.0	3.2	3	silty CLAY to CLAY	115	1.5	9	13	4	-	-	1.3	4.1	54	0.005	2.94	15
33.96	16.1	11.0	-	16.0	0.4	-0.5	3.0	3	silty CLAY to CLAY	115	1.5	7	11	4	-	-	1.0	3.2	59	0.005	3.01	15
34.12	15.9	10.9	-	16.0	0.4	2.4	2.9	3	silty CLAY to CLAY	115	1.5	7	11	3	-	-	1.0	3.1	59	0.005	3.01	15
34.29	15.2	10.3	-	15.3	0.3	4.3	2.5	3	silty CLAY to CLAY	115	1.5	7	10	3	-	-	1.0	2.9	58	0.005	3.00	15
34.45	14.4	9.8	-	14.5	0.3	4.9	2.8	3	silty CLAY to CLAY	115	1.5	7	10	3	-	-	0.9	2.8	61	0.005	3.04	15
34.61	12.9	8.7	-	13.0	0.3	5.0	3.0	3	silty CLAY to CLAY	115	1.5	6	9	3	-	-	0.8	2.4	66	0.005	3.11	15
34.78	12.9	8.7	-	13.0	0.3	4.6	3.1	3	silty CLAY to CLAY	115	1.5	6	9	3	-	-	0.8	2.4	67	0.005	3.12	15
34.94	12.9	8.7	-	13.0	0.3	4.5	3.1	3	silty CLAY to CLAY	115	1.5	6	9	3	-	-	0.8	2.4	67	0.005	3.12	15
35.11	12.9	8.7	-	13.0	0.4	5.7	3.3	3	silty CLAY to CLAY	115	1.5	6	9	3	-	-	0.8	2.4	68	0.005	3.13	15
35.27	13.2	8.8	-	13.3	0.4	6.7	3.2	3	silty CLAY to CLAY	115	1.5	6	9	3	-	-	0.8	2.4	67	0.005	3.12	15
35.43	13.6	9.0	-	13.7	0.3	8.0	3.0	3	silty CLAY to CLAY	115	1.5	6	9	3	-	-	0.9	2.5	65	0.005	3.09	15
35.60	14.0	9.3	-	14.2	0.4	9.5	3.1	3	silty CLAY to CLAY	115	1.5	6	9	3	-	-	0.9	2.6	65	0.005	3.09	15
35.76	14.2	9.4	-	14.4	0.4	11.3	3.6	3	silty CLAY to CLAY	115	1.5	6	9	3	-	-	0.9	2.6	67	0.005	3.12	15
35.93	15.5	10.3	-	15.8	0.6	13.9	4.6	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	2.9	69	0.005	3.15	15
36.09	20.2	13.3	-	20.5	1.1	17.5	6.2	3	silty CLAY to CLAY	115	1.5	9	13	5	-	-	1.3	3.9	68	0.005	3.13	15
36.26	27.0	17.7	-	27.5	1.8	22.3	7.1	3	silty CLAY to CLAY	115	1.5	12	18	6	-	-	1.8	5.4	63	0.005	3.06	15
36.42	39.7	26.0	-	40.2	2.3	27.0	6.2	3	silty CLAY to CLAY	115	1.5	17	26	8	-	-	2.7	8.1	52	0.005	2.89	15
36.58	43.9	28.7	-	44.3	2.6	21.2	6.3	3	silty CLAY to CLAY	115	1.5	19	29	8	-	-	3.0	9.0	50	0.005	2.87	15
36.75	46.7	30.4	-	47.2	3.0	23.9	6.6	3	silty CLAY to CLAY	115	1.5	20	31	9	-	-	3.2	9.6	50	0.005	2.86	15
36.91	65.4	42.5	-	65.8	3.0	16.0	4.8	4	clayy SILT to silty CLAY	115	2.0	21	33	11	-	-	4.5	9.9	38	0.070	2.66	15
37.08	70.3	45.5	-	70.2	3.0	-1.4	4.4	4	clayy SILT to silty CLAY	115	2.0	23	35	12	-	-	4.9	9.9	36	0.070	2.61	15
37.24	44.3	28.6	-	44.3	1.7	-3.5	3.9	4	clayy SILT to silty CLAY	115	2.0	14	22	8	-	-	3.0	9.0	42	0.070	2.73	15
37.40	26.3	17.0	-	26.3	1.1	-3.6	4.4	3	silty CLAY to CLAY	115	1.5	11	18	5	-	-	1.8	5.1	55	0.005	2.94	15
37.57	17.4	11.2	-	17.4	0.8	-2.0	5.4	3	silty CLAY to CLAY	115	1.5	7	12	4	-	-	1.1	3.2	70	0.005	3.16	15
37.73	15.7	10.0	-	15.7	0.7	2.0	5.3	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	2.8	73	0.005	3.19	15
37.90	14.7	9.4	-	14.8	0.7	2.6	5.2	3	silty CLAY to CLAY	115	1.5	6	10	3	-	-	0.9	2.6	75	0.005	3.22	15
38.06	14.3	9.1	-	14.4	0.6	2.9	4.7	3	silty CLAY to CLAY	115	1.5	6	10	3	-	-	0.9	2.5	73	0.005	3.20	15
38.22	14.3	9.1	-	14.3	0.4	3.1	3.2	3	silty CLAY to CLAY	115	1.5	6	10	3	-	-	0.9	2.5	66	0.005	3.11	15
38.39	14.7	9.3	-	14.7	0.5	3.3	3.7	3	silty CLAY to CLAY	115	1.5	6	10	3	-	-	0.9	2.6	68	0.005	3.14	15
38.55	15.1	9.5	-	15.2	0.5	3.5	3.8	3	silty CLAY to CLAY	115	1.5	6	10	3	-	-	1.0	2.7	68	0.005	3.13	15
38.72	12.4	7.8	-	12.5	0.7	4.4	7.0	3	silty CLAY to CLAY	115	1.5	5	8	3	-	-	0.8	2.1	87	0.005	3.37	15
38.88	17.8	11.2	-	17.9	1.3	5.5	8.4	3	silty CLAY to CLAY	115	1.5	7	12	4	-	-	1.1	3.2	79	0.005	3.28	15
39.04	23.1	14.5	-	23.3	2.4	6.7	9.9	3	silty CLAY to CLAY	115	1.5	10	15	5	-	-	1.5	4.3	76	0.005	3.23	15
39.21	44.8	28.0	-	45.0	3.0	9.5	7.1	3	silty CLAY to CLAY	115	1.5	19	30	8	-	-	3.1	8.8	53	0.005	2.91	15
39.37	59.4	37.0	-	59.3	3.2	-2.2	5.6	3	silty CLAY to CLAY	115	1.5	25	40	10	-	-	4.1	9.9	43	0.005	2.75	15
39.54	70.9	44.1	-	71.0	3.6	3.5	5.2	3	silty CLAY to CLAY	115	1.5	29	47	12	-	-	4.9	9.9	39	0.005	2.67	15
39.70	109.0	83.4	180.7	109.0	3.8	-0.8	3.6	4	clayy SILT to silty CLAY	115	2.0	42	54	19	-	-	7.6	9.9	25	0.070	2.36	15
39.86	106.0	81.0	175.9	105.9	3.6	-6.4	3.5	4	clayy SILT to silty CLAY	115	2.0	40	53	18	-	-	7.4	9.9	25	0.070	2.36	15
40.03	121.0	92.3	164.5	120.9	3.2	-5.0	2.7	5	silty SAND to sandy SILT	120	3.0	31	40	20	64	39	-	-	21	0.200	2.24	16
40.19	171.2	130.4	161.5	171.1	2.5	-6.2	1.5	6	clean SAND to silty SAND	125	5.0	26	34	25	76	41	-	-	12	0.350	1.95	16
40.36	197.6	150.2	169.5	197.4	2.3	-6.5	1.2	6	clean SAND to silty SAND	125	5.0	30	40	28	80	42	-	-	9	0.350	1.83	16
40.52	208.5	158.3	159.1	208.4	1.4	-6.0	0.7	6	clean SAND to silty SAND	125	5.0	32	42	27	82	42	-	-	5	0.350	1.65	16
40.68	224.5	170.2	177.5	224.4	2.0	-6.7	0.9	6	clean SAND to silty SAND	125	5.0	34	45	30	85	42	-	-	6	0.350	1.71	16
40.85	234.8	177.7	190.1	234.7	2.5	-6.9	1.1	6	clean SAND to silty SAND	125	5.0	36	47	32	86	42	-	-	7	0.350	1.75	16
41.01	233.5	176.4	187.9	233.4	2.4	-5.5	1.0	6	clean SAND to silty SAND	125	5.0	35	47	31	86	42	-	-	7	0.350	1.74	16
41.18	244.0	184.1	189.2	243.9	2.2	-5.8	0.9	6	clean SAND to silty SAND	125	5.0	37	49	32	87	43	-	-	6	0.350	1.69	16
41.34	250.0	188.3	190.9	249.9	2.1	-5.9	0.9	6	clean SAND to silty SAND	125	5.0	38	50	33	88	43	-	-	5	0.350	1.66	16
41.50	256.9	193.2	195.7	256.8	2.2	-6.0	0.9	6	clean SAND to silty SAND	125	5.0	39	51	34	89	43	-	-	5	0.350	1.66	16
41.67	261.1	196.1	196.5	261.0	2.2	-6.0	0.8	6	clean SAND to silty SAND	125	5.0	39	52	34	89	43	-	-	5	0.350	1.65	16
41.83	257.3	193.0	201.5	257.2	2.6	-6.0	1.0	6	clean SAND to silty SAND	125	5.0	39	51	34	89	43	-	-	6	0.350	1.71	16
42.00	274.7	205.7	209.4	274.6	2.6	-6.1	1.0	6	clean SAND to silty SAND	125	5.0	41	55	36	91	43	-	-	6	0.350	1.67	16
42.16	290.3	217.0	224.8	290.2	3.1	-4.6	1.1	6	clean SAND to silty SAND	125	5.0	43	58	38	93	43	-	-	6	0.350	1.70	16
42.32	297.7	222.2	231.2	297.6	3.4	-4.0	1.1	6	clean SAND to silty SAND	125	5.0	44	60	39	93	43	-	-	6	0.350	1.70	16
42.49	291.9	217.6	224.0	291.8	3.1	-2.7	1.1	6	clean SAND to silty SAND	125	5.0	44	58	38	93	43	-	-	6	0.350	1.69	16
42.65	259.8	193.4	195.8	259.8	2.3	-4.2	0.9	6	clean SAND to silty SAND	125	5.0	39	52	34	89	43	-	-	5	0.350	1.66	16
42.82	255.4	189.8	189.8	255.3	1.9	-4.6	0.8	6	clean SAND to silty SAND	125	5.0	38	51	33	88	43	-	-	5	0.350	1.63	16
42.98	235.7	174.9	174.7	235.6	1.7	-5.0	0.7	6	clean SAND to silty SAND	125	5.0	35	47	30	85	42	-	-	5	0.350	1.64	16
43.15	231.1	171.2	171.2	231.0	1.6	-4.9	0.7	6	clean SAND to silty SAND	125	5.0	34	46	29	85	42	-	-	5	0.350	1.64	16
43.31	225.5	166.8	167.6	225.4	1.6	-5.0	0.7	6	clean SAND to silty SAND	125	5.0	33	45	29	84	42	-	-	5	0.350	1.65	16
43.47	227.5	168.1	168.1	227.4	1.1	-4.9	0.5	6	clean SAND to silty SAND	125	5.0	34	46	28	84	42	-	-	5	0.350	1.55	16
43.64	223.1	164.5	164.5	223.0	1.3	-4.6	0.6	6	clean SAND to silty SAND	125	5.0	33	45	28	83	42	-	-	5	0.350	1.59	16
43.80	231.2	170.3	170.3	231.1	1.5	-4.6	0.6	6	clean SAND to silty SAND	125	5.0	34	46	29	85	42	-	-	5	0.350	1.61	16
43.97	219.8	161.6	168.3	219.7	1.8	-5.0	0.8	6	clean SAND to silty SAND	125	5.0	32	44	29	83	42	-	-	6	0.350	1.71	16
44.13	210.4	154.5	166.3	210.4	2.0	-4.5	0.9	6	clean SAND to silty SAND	125	5.0	31	42	28	81	41	-	-	7	0.350	1.76	16
44.29	229.1	168.0	177.4	229.0	2.1	-3.9	0.9	6	clean SAND to silty SAND	125	5.0	34	46	30	84	42	-	-	7	0.350	1.73	16
44.46	226.4	165.8	173.1	226.3	2.0	-4.0	0.9	6	clean SAND to silty SAND	125	5.0	33	45	29	84	42	-	-	6	0.350	1.71	16
44.62	234.2	171.3	173.7	234.2	1.8	-4.0	0.8	6	clean SAND to silty SAND	125	5.0	34	47	30	85	42	-	-	5	0.350	1.67	16
44.79	271.6	198.3	198.3	271.5	2.0	-4.0	0.8	6	clean SAND to silty SAND	125	5.0	40	54	34	90	43	-	-	5	0.350	1.61	16
44.95	298.2	217.4	217.4	298.1	2.0	-4.0	0.7	6	clean SAND to silty SAND	125	5.0	43	60	36	93	43	-	-	5	0.350	1.55	16
45.11	283.1	206.1	206.1	283.0	1.9	-4.4	0.7	6	clean SAND to silty SAND	125	5.0	41	57	35	91	43	-	-	5	0.350	1.57	16
45.28	276.6	201.1	201.1	276.6	1.8	-3.3	0.7	6	clean SAND to silty SAND	125	5.0	40	55	34	90	43	-	-	5	0.350	1.56	16
45.44	287.6	208.7	208.7	287.5	1.6	-3.4	0.6	6	clean SAND to silty SAND	125	5.0	42	58	35	91	43	-	-	5	0.350	1.51	16
45.61	285.0	206.6	206.6	285.0	1.5	-2.3	0.5	6	clean SAND to silty SAND	125	5.0	41	57	34	91	43	-	-	5	0.350	1.49	16
45.77	267.3	193.4	193.4	267.2	1.4	-2.8	0.5	6	clean SAND to silty SAND	125	5.0	39	53	32	89	43	-	-	5	0.350	1.52	16
45.93	248.1	179.3	179.3	248.0	1.5	-3.3	0.6	6	clean SAND to silty SAND	125	5.0	36	50	30	86	42	-	-	5	0.350	1.59	16
46.10	233.8	168.7	168.7	233.7	1.3	-3.8	0.6	6	clean SAND to silty SAND	125	5.0	34	47	29	84	42	-	-	5	0.350	1.58	16
46.26	212.7	153.3	153.3	212.6	1.3	-4.2	0.6	6	clean SAND to silty SAND	125	5.0	31	43	26	81	41	-	-	5	0.350	1.64	16

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SMC-HMB Farmworker Housing project

Project ID: BAGG Engineering
Data File: SDF(863).cpt
CPT Date: 7/26/2023 10:01:25 AM
GW During Test: 15 ft

Sounding ID: CPT-04
Project No: COUSM-23-03
Cone/Rig: DDG1589

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR - -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
46.43	201.5	145.0	145.7	201.4	1.2	-4.2	0.6	6	clean SAND to silty SAND	125	5.0	29	40	25	79	41	-	-	5	0.350	1.65	16
46.59	205.2	147.5	148.9	205.1	1.3	-3.8	0.6	6	clean SAND to silty SAND	125	5.0	29	41	26	80	41	-	-	5	0.350	1.66	16
46.75	222.6	159.7	164.9	222.5	1.7	-4.0	0.8	6	clean SAND to silty SAND	125	5.0	32	45	28	82	42	-	-	6	0.350	1.69	16
46.92	239.5	171.6	171.6	239.4	1.4	-4.1	0.6	6	clean SAND to silty SAND	125	5.0	34	48	29	85	42	-	-	5	0.350	1.59	16
47.08	256.7	183.7	183.7	256.6	1.5	-4.0	0.6	6	clean SAND to silty SAND	125	5.0	37	51	31	87	42	-	-	5	0.350	1.57	16
47.25	250.5	179.0	179.0	250.5	1.7	-3.2	0.7	6	clean SAND to silty SAND	125	5.0	36	50	31	86	42	-	-	5	0.350	1.62	16
47.41	245.8	175.4	175.4	245.7	1.4	-3.2	0.6	6	clean SAND to silty SAND	125	5.0	35	49	30	86	42	-	-	5	0.350	1.57	16
47.57	258.6	184.3	184.3	258.6	1.0	-4.7	0.4	6	clean SAND to silty SAND	125	5.0	37	52	30	87	42	-	-	5	0.350	1.47	16
47.74	247.3	176.0	176.0	247.2	1.0	-4.8	0.4	6	clean SAND to silty SAND	125	5.0	35	49	29	86	42	-	-	5	0.350	1.49	16
47.90	233.1	165.7	165.7	233.0	0.9	-4.8	0.4	6	clean SAND to silty SAND	125	5.0	33	47	27	84	42	-	-	5	0.350	1.49	16
48.07	214.3	152.1	152.1	214.2	1.1	-4.7	0.5	6	clean SAND to silty SAND	125	5.0	30	43	26	81	41	-	-	5	0.350	1.60	16
48.23	173.1	122.7	139.1	173.0	1.6	-4.4	1.0	6	clean SAND to silty SAND	125	5.0	25	35	23	74	40	-	-	9	0.350	1.84	16
48.39	147.2	104.2	144.4	147.1	2.5	-4.5	1.7	5	silty SAND to sandy SILT	120	3.0	35	49	21	68	39	-	-	15	0.200	2.06	16
48.56	107.6	76.1	142.8	107.5	2.6	-4.1	2.5	5	silty SAND to sandy SILT	120	3.0	25	36	17	58	37	-	-	22	0.200	2.28	16
48.72	89.2	63.0	162.9	89.2	3.2	-3.7	3.8	4	clayy SILT to silty CLAY	115	2.0	32	45	15	-	-	6.2	9.9	29	0.070	2.46	15
48.89	77.8	41.0	-	77.7	4.1	-3.1	5.5	3	silty CLAY to CLAY	115	1.5	27	52	11	-	-	5.4	9.9	41	0.005	2.71	15
49.05	92.7	65.3	172.9	92.6	3.6	-2.8	4.1	4	clayy SILT to silty CLAY	115	2.0	33	46	16	-	-	6.4	9.9	30	0.070	2.48	15
49.22	176.4	124.2	166.9	176.4	3.2	-3.4	1.9	5	silty SAND to sandy SILT	120	3.0	41	59	25	74	40	-	-	14	0.200	2.03	16
49.38	204.4	143.7	158.7	204.3	2.0	-4.7	1.0	6	clean SAND to silty SAND	125	5.0	29	41	26	79	41	-	-	8	0.350	1.80	16
49.54	192.9	135.4	159.3	192.8	2.4	-4.7	1.3	6	clean SAND to silty SAND	125	5.0	27	39	25	77	41	-	-	10	0.350	1.89	16
49.71	147.3	103.2	161.3	147.2	3.3	-4.8	2.3	5	silty SAND to sandy SILT	120	3.0	34	49	22	68	39	-	-	18	0.200	2.15	16
49.87	122.6	85.8	155.0	122.5	3.1	-5.1	2.6	5	silty SAND to sandy SILT	120	3.0	29	41	19	62	38	-	-	21	0.200	2.25	16
50.04	115.3	80.6	169.7	115.2	3.7	-5.1	3.3	5	silty SAND to sandy SILT	120	3.0	27	38	18	60	38	-	-	24	0.200	2.35	16

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

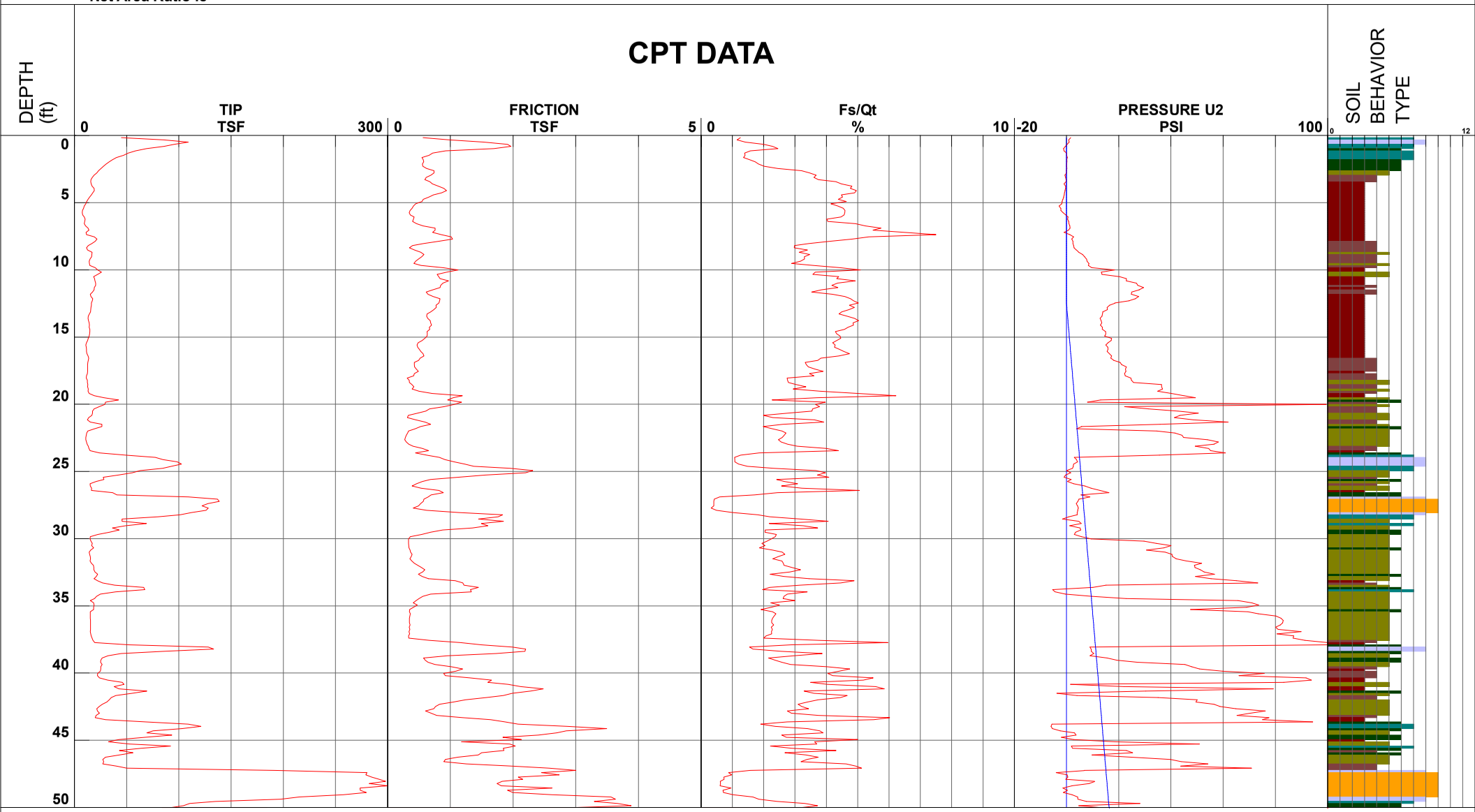
DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BAGG Engineering

Project	SMC-HMB Farmworker Housing project	Operator	AJ-ER	Filename	SDF(865).cpt
Job Number	COUSM-23-03	Cone Number	DDG1589	GPS	
Hole Number	CPT-05	Date and Time	7/26/2023 1:04:56 PM	Maximum Depth	50.52 ft
EST GW Depth During Test		12.50 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm²

*Soil behavior type and SPT based on data from UBC-1983

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SMC-HMB Farmworker Housing project

Project ID: BAGG Engineering
Data File: SDF(865).cpt
CPT Date: 7/26/2023 1:04:56 PM
GW During Test: 13 ft

Sounding ID: CPT-05
Project No: COUSM-23-03
Cone/Rig: DDG1589

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
0.33	85.5	137.2	156.9	85.5	1.0	0.8	1.2	6	clean SAND to silty SAND	125	5.0	27	17	25	77	48	-	-	9	0.350	1.85	16
0.49	108.8	174.4	198.4	108.8	1.5	1.0	1.4	6	clean SAND to silty SAND	125	5.0	35	22	32	85	48	-	-	9	0.350	1.84	16
0.66	95.4	152.9	197.4	95.4	1.9	0.2	2.0	5	silty SAND to sandy SILT	120	3.0	51	32	30	81	48	-	-	13	0.200	1.99	16
0.82	85.9	137.8	192.3	85.9	2.0	-0.5	2.3	5	silty SAND to sandy SILT	120	3.0	46	29	28	78	48	-	-	15	0.200	2.07	16
0.98	69.0	110.7	172.2	69.0	1.7	-1.1	2.5	5	silty SAND to sandy SILT	120	3.0	37	23	23	70	48	-	-	17	0.200	2.15	16
1.15	58.6	94.0	130.7	58.6	0.9	-0.9	1.6	5	silty SAND to sandy SILT	120	3.0	31	20	19	65	48	-	-	15	0.200	2.06	16
1.31	51.6	82.7	115.6	51.6	0.7	0.1	1.4	5	silty SAND to sandy SILT	120	3.0	28	17	17	61	48	-	-	15	0.200	2.07	16
1.48	47.0	75.4	109.7	47.0	0.7	0.1	1.4	5	silty SAND to sandy SILT	120	3.0	25	16	15	58	48	-	-	16	0.200	2.10	16
1.64	40.2	64.5	99.2	40.2	0.5	0.3	1.4	5	silty SAND to sandy SILT	120	3.0	21	13	13	53	47	-	-	17	0.200	2.14	16
1.80	36.4	58.3	99.4	36.4	0.6	0.1	1.6	5	silty SAND to sandy SILT	120	3.0	19	12	12	49	46	-	-	20	0.200	2.22	16
1.97	33.3	53.4	99.6	33.3	0.6	0.1	1.7	5	silty SAND to sandy SILT	120	3.0	18	11	12	46	46	-	-	22	0.200	2.27	16
2.13	30.3	48.6	98.2	30.3	0.6	0.1	1.8	5	silty SAND to sandy SILT	120	3.0	16	10	11	43	45	-	-	23	0.200	2.32	16
2.30	27.8	44.6	99.1	27.8	0.6	0.0	2.0	5	silty SAND to sandy SILT	120	3.0	15	9	10	40	44	-	-	25	0.200	2.38	16
2.46	25.3	40.6	105.3	25.3	0.6	0.1	2.5	5	silty SAND to sandy SILT	120	3.0	14	8	10	37	43	-	-	29	0.200	2.46	16
2.62	23.0	36.9	117.0	23.0	0.7	0.0	3.2	4	clayy SILT to silty CLAY	115	2.0	18	11	9	-	-	1.6	9.9	34	0.070	2.57	15
2.79	21.3	34.1	-	21.3	0.7	0.0	3.5	4	clayy SILT to silty CLAY	115	2.0	17	11	9	-	-	1.5	9.9	36	0.070	2.62	15
2.95	18.7	30.0	-	18.7	0.7	-0.6	3.7	4	clayy SILT to silty CLAY	115	2.0	15	9	8	-	-	1.3	9.9	39	0.070	2.68	15
3.12	17.0	27.3	-	17.0	0.6	-0.4	3.6	4	clayy SILT to silty CLAY	115	2.0	14	8	7	-	-	1.2	9.9	41	0.070	2.71	15
3.28	15.8	25.3	-	15.8	0.6	-0.1	3.8	4	clayy SILT to silty CLAY	115	2.0	13	8	7	-	-	1.1	9.9	43	0.070	2.74	15
3.45	15.6	24.9	-	15.6	0.7	-0.2	4.4	3	silty CLAY to CLAY	115	1.5	17	10	7	-	-	1.1	9.9	45	0.005	2.79	15
3.61	15.9	25.6	-	15.9	0.7	-1.0	4.5	3	silty CLAY to CLAY	115	1.5	17	11	7	-	-	1.1	9.9	46	0.005	2.79	15
3.77	16.7	26.8	-	16.7	0.8	-0.4	4.9	3	silty CLAY to CLAY	115	1.5	18	11	8	-	-	1.2	9.9	46	0.005	2.80	15
3.94	18.8	30.1	-	18.8	0.9	-0.3	4.8	3	silty CLAY to CLAY	115	1.5	20	13	8	-	-	1.3	9.9	44	0.005	2.76	15
4.10	19.0	30.4	-	18.9	0.9	-0.6	5.0	3	silty CLAY to CLAY	115	1.5	20	13	8	-	-	1.3	9.9	44	0.005	2.77	15
4.27	17.5	28.1	-	17.5	0.9	-0.8	5.0	3	silty CLAY to CLAY	115	1.5	19	12	8	-	-	1.2	9.9	45	0.005	2.79	15
4.43	16.3	26.2	-	16.3	0.7	-0.8	4.6	3	silty CLAY to CLAY	115	1.5	17	11	7	-	-	1.1	9.9	45	0.005	2.79	15
4.59	14.6	23.3	-	14.5	0.7	-1.0	4.6	3	silty CLAY to CLAY	115	1.5	16	10	7	-	-	1.0	9.9	48	0.005	2.83	15
4.76	13.0	20.8	-	12.9	0.6	-1.4	4.5	3	silty CLAY to CLAY	115	1.5	14	9	6	-	-	0.9	9.9	49	0.005	2.86	15
4.92	11.8	18.9	-	11.7	0.5	-1.7	4.8	3	silty CLAY to CLAY	115	1.5	13	8	6	-	-	0.8	9.9	53	0.005	2.91	15
5.09	10.7	17.2	-	10.7	0.4	-1.8	4.3	3	silty CLAY to CLAY	115	1.5	11	7	5	-	-	0.7	9.9	53	0.005	2.91	15
5.25	9.4	15.1	-	9.3	0.4	-2.8	4.5	3	silty CLAY to CLAY	115	1.5	10	6	5	-	-	0.6	9.7	57	0.005	2.97	15
5.41	8.6	13.8	-	8.6	0.4	-2.2	4.7	3	silty CLAY to CLAY	115	1.5	9	6	4	-	-	0.6	8.6	59	0.005	3.01	15
5.58	7.8	12.5	-	7.7	0.4	-2.2	4.8	3	silty CLAY to CLAY	115	1.5	8	5	4	-	-	0.5	7.5	62	0.005	3.06	15
5.74	7.5	12.0	-	7.4	0.3	-1.3	4.8	3	silty CLAY to CLAY	115	1.5	8	5	4	-	-	0.5	7.0	63	0.005	3.07	15
5.91	7.9	12.7	-	7.9	0.4	-0.3	4.8	3	silty CLAY to CLAY	115	1.5	8	5	4	-	-	0.5	7.2	62	0.005	3.05	15
6.07	9.5	15.2	-	9.5	0.4	0.5	4.6	3	silty CLAY to CLAY	115	1.5	10	6	5	-	-	0.6	8.4	57	0.005	2.98	15
6.23	10.2	16.4	-	10.2	0.4	0.4	4.2	3	silty CLAY to CLAY	115	1.5	11	7	5	-	-	0.7	8.9	53	0.005	2.92	15
6.40	9.8	15.7	-	9.8	0.4	0.8	4.2	3	silty CLAY to CLAY	115	1.5	10	7	5	-	-	0.7	8.3	55	0.005	2.94	15
6.56	9.3	15.0	-	9.4	0.5	0.9	5.1	3	silty CLAY to CLAY	115	1.5	10	6	5	-	-	0.6	7.7	59	0.005	3.01	15
6.73	10.7	17.2	-	10.8	0.6	1.2	5.4	3	silty CLAY to CLAY	115	1.5	11	7	5	-	-	0.7	8.7	57	0.005	2.98	15
6.89	13.1	21.1	-	13.2	0.8	1.4	5.9	3	silty CLAY to CLAY	115	1.5	14	9	6	-	-	0.9	9.9	54	0.005	2.94	15
7.05	13.8	22.1	-	13.8	0.8	0.7	5.7	3	silty CLAY to CLAY	115	1.5	15	9	7	-	-	0.9	9.9	53	0.005	2.91	15
7.22	11.0	17.7	-	11.0	0.7	-0.9	6.8	3	silty CLAY to CLAY	115	1.5	12	7	6	-	-	0.7	8.3	61	0.005	3.04	15
7.38	11.4	18.3	-	11.4	0.9	1.2	7.8	3	silty CLAY to CLAY	115	1.5	12	8	6	-	-	0.8	8.4	63	0.005	3.07	15
7.55	18.9	30.4	-	19.0	1.0	2.7	5.5	3	silty CLAY to CLAY	115	1.5	20	13	9	-	-	1.3	9.9	46	0.005	2.80	15
7.71	21.4	34.4	-	21.5	1.0	2.0	4.9	3	silty CLAY to CLAY	115	1.5	23	14	9	-	-	1.5	9.9	42	0.005	2.73	15
7.87	19.8	31.7	-	19.8	0.8	2.4	4.2	4	clayy SILT to silty CLAY	115	2.0	16	10	9	-	-	1.4	9.9	41	0.070	2.70	15
8.04	16.6	26.7	-	16.7	0.6	2.4	3.5	4	clayy SILT to silty CLAY	115	2.0	13	8	7	-	-	1.1	9.9	41	0.070	2.71	15
8.20	13.2	21.2	-	13.3	0.4	2.7	3.1	4	clayy SILT to silty CLAY	115	2.0	11	7	6	-	-	0.9	8.8	43	0.070	2.75	15
8.37	11.6	18.7	-	11.7	0.3	2.9	3.1	4	clayy SILT to silty CLAY	115	2.0	9	6	5	-	-	0.8	7.5	46	0.070	2.80	15
8.53	12.6	20.2	-	12.7	0.4	3.8	3.5	3	silty CLAY to CLAY	115	1.5	13	8	6	-	-	0.9	8.0	46	0.005	2.81	15
8.69	16.8	27.0	-	16.9	0.5	4.7	3.2	4	clayy SILT to silty CLAY	115	2.0	14	8	7	-	-	1.2	9.9	40	0.070	2.68	15
8.86	16.7	26.8	-	16.8	0.6	6.1	3.6	4	clayy SILT to silty CLAY	115	2.0	13	8	7	-	-	1.1	9.9	41	0.070	2.72	15
9.02	16.5	26.4	-	16.6	0.5	6.9	3.4	4	clayy SILT to silty CLAY	115	2.0	13	8	7	-	-	1.1	9.9	41	0.070	2.71	15
9.19	14.9	23.9	-	15.1	0.5	7.7	3.4	4	clayy SILT to silty CLAY	115	2.0	12	7	7	-	-	1.0	8.9	43	0.070	2.74	15
9.35	14.1	22.6	-	14.3	0.4	7.8	3.3	4	clayy SILT to silty CLAY	115	2.0	11	7	6	-	-	1.0	8.2	43	0.070	2.75	15
9.51	14.4	23.1	-	14.6	0.4	8.6	3.0	4	clayy SILT to silty CLAY	115	2.0	12	7	6	-	-	1.0	8.2	41	0.070	2.72	15
9.68	14.8	23.7	-	15.0	0.5	8.3	3.7	4	clayy SILT to silty CLAY	115	2.0	12	7	7	-	-	1.0	8.3	44	0.070	2.77	15
9.84	19.8	31.8	-	20.0	0.9	9.6	4.6	3	silty CLAY to CLAY	115	1.5	21	13	9	-	-	1.4	9.9	42	0.005	2.73	15
10.01	22.1	35.4	-	22.4	1.1	18.4	5.2	3	silty CLAY to CLAY	115	1.5	24	15	10	-	-	1.5	9.9	42	0.005	2.74	15
10.17	25.9	36.7	-	26.1	0.9	13.3	3.7	4	clayy SILT to silty CLAY	115	2.0	18	13	9	-	-	1.8	9.9	36	0.070	2.62	15
10.34	22.1	35.4	-	22.4	0.8	13.6	3.7	4	clayy SILT to silty CLAY	115	2.0	18	11	9	-	-	1.5	9.9	37	0.070	2.63	15
10.50	18.5	29.7	-	18.9	0.8	20.2	4.5	3	silty CLAY to CLAY	115	1.5	20	12	8	-	-	1.3	9.7	43	0.005	2.75	15
10.66	19.3	30.9	-	19.7	0.8	22.9	4.5	3	silty CLAY to CLAY	115	1.5	21	13	8	-	-	1.3	9.9	42	0.005	2.73	15
10.83	19.7	31.2	-	20.1	1.0	22.9	5.1	3	silty CLAY to CLAY	115	1.5	21	13	9	-	-	1.3	9.9	44	0.005	2.77	15
10.99	20.2	31.7	-	20.8	0.9	26.7	4.5	3	silty CLAY to CLAY	115	1.5	21	13	9	-	-	1.4	9.9	42	0.005	2.73	15
11.16	20.3	31.3	-	20.9	0.8	27.3	4.3	4	clayy SILT to silty CLAY	115	2.0	16	10	9	-	-	1.4	9.9	41	0.070	2.72	15
11.32	19.1	29.0	-	19.7	0.8	29.5	4.5	3	silty CLAY to CLAY	115	1.5	19	13	8	-	-	1.3	9.2	44	0.005	2.76	15
11.48	18.7	28.0	-	19.2	0.7	27.9	4.0	4	clayy SILT to silty CLAY	115	2.0	14	9	8	-	-	1.3	8.9	42	0.070	2.73	15
11.65	17.3	25.6	-	17.8	0.6	25.0	3.7	4	clayy SILT to silty CLAY	115	2.0	13	9	7	-	-	1.2	8.1	43	0.070	2.74	15
11.81	15.3	22.3	-	15.8	0.6	24.9	4.4	3	silty CLAY to CLAY	115	1.5	15	10	6	-	-	1.0	7.0	48	0.005	2.84	15
11.98	15.8	22.7	-	16.3	0.7	27.6	4.8	3	silty CLAY to CLAY	115	1.5	15	11	7	-	-	1.1	7.2	49	0.005	2.86	15
12.14	17.5	24.9	-	18.1	0.8	26.4	5.0	3	silty CLAY to CLAY	115	1.5	17	12	7	-	-	1.2	7.9	48	0.005	2.84	15
12.30	17.0	23.8	-	17.5	0.8	24.0	5.1	3	silty CLAY to CLAY	115	1.5	16	11	7	-	-	1.2	7.5	49	0.005	2.86	15
12.47	16.2	22.4	-	16.6	0.8	18.5	5.3	3	silty CLAY to CLAY	115	1.5	15	11	7	-	-	1.1	7.1	51	0.005	2.89	15
12.63	16.3	22.2	-	16.6	0.8	16.5	5.0	3	silty CLAY to CLAY	115	1.5	15	11	7	-	-	1.1	7.0	50	0.005	2.88	15
12.80	15.8	21.3	-	16.1	0.8	15.5	5.1	3	silty CLAY to CLAY	115	1.5	14	11	6	-	-	1.1	6.7	52	0.005	2.90	15
12.96	15.5	20.7	-	15.9	0.7	15.6	5.0	3	silty CLAY to CLAY	115	1.5	14	10	6	-	-	1.0	6.5	52	0.005	2.90	15
13.12	15.3	20.2	-	15.6	0.7	13.9	4.7	3	silty CLAY to CLAY	115	1.5	13	10	6	-	-	1.0	6.3	52	0.005	2.89	15
13.29	14.3	18.7	-	14.5	0.6	13.8	4.6	3	silty CLAY to CLAY	115	1.5	12	10	6	-	-	1.0	5.8	53	0.005	2.92	15
13.45	13.3	17.4	-	13.6	0.6	13.6	4.9	3	silty CLAY to CLAY	115	1.5	12	9	5	-	-	0.9	5.4	56	0.005	2.96	15
13.62	13.0	16.9	-	13.3	0.6	12.9	5.2	3	silty CLAY to CLAY	115	1.5	11	9	5	-	-	0.9	5.3	57	0.005	2.98	15
13.78	13.5	17.4	-	13.7	0.7	13.3	5.3	3	silty CLAY to CLAY	115	1.5	12	9	5	-	-	0.9	5.4	57	0.005	2.98	15
13.94	14.1	18.1	-	14.4	0.7	13.5	5.1	3	silty CLAY to CLAY	115	1.5	12	9	6	-	-	0.9	5.6	56	0.005	2.96	15
14.11	14.4	18.4	-	14.6	0.7	13.0	5.2	3	silty CLAY to CLAY	115	1.5	12	10	6	-	-	1.0	5.7	55	0.005	2.95	15
14.27	14.2	18.0	-	14.4	0.7	13.8	5.0	3	silty CLAY to CLAY	115	1.5	12	9	6	-	-	0.9	5.6	55	0.005	2.95	15
14.44	14.6	18.5	-	14.9	0.7	13.7	4.9	3	silty CLAY to CLAY	115	1.5	12	10	6	-	-	1.0	5.8	54	0.005	2.93	15
14.60	14.6	18.4	-	14.9	0.6	14.9	4.6	3	silty CLAY to CLAY	115	1.5	12	10	6	-	-	1.0	5.7	53	0.005	2.92	15
14.76	14.6	18.2	-	14.9	0.6	15.1	4.6	3	silty CLAY to CLAY	115	1.5	12	10	6	-	-	1.0	5.7	53	0.005	2.92	15
14.93	14.1	17.6	-	14.4	0.6	14.6	4.7	3	silty CLAY to CLAY	115	1.5	12	9	5	-	-	0.9	5.4	55	0.005	2.94	15
15.09	13.3	16.4	-	13.6	0.6	17.2	4.8	3	silty CLAY to CLAY	115	1.5	11	9	5	-	-	0.9	5.1	57	0.005	2.97	15
15.26	12.7	15.6	-	13.0	0.5	17.1	4.7	3	silty CLAY to CLAY	115	1.5	10	8	5	-	-	0.8	4.8	57	0.005	2.98	15
15.42	11.5	14.1	-	11.9	0.5	15.9	4.6	3	silty CLAY to CLAY	115	1.5	9	8	5	-	-	0.8	4.3	59	0.005	3.01	15

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SMC-HMB Farmworker Housing project

Project ID: BAGG Engineering
Data File: SDF(865).cpt
CPT Date: 7/26/2023 1:04:56 PM
GW During Test: 13 ft

Sounding ID: CPT-05
Project No: COUSM-23-03
Cone/Rig: DDG1589

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR - -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
15.58	10.9	13.3	-	11.2	0.5	15.0	4.7	3	silty CLAY to CLAY	115	1.5	9	7	4	-	-	0.7	4.0	61	0.005	3.04	15
15.75	11.3	13.7	-	11.6	0.5	15.8	4.6	3	silty CLAY to CLAY	115	1.5	9	8	4	-	-	0.7	4.1	61	0.005	3.03	15
15.91	11.4	13.7	-	11.7	0.5	15.9	4.8	3	silty CLAY to CLAY	115	1.5	9	8	4	-	-	0.7	4.2	61	0.005	3.04	15
16.08	11.6	13.9	-	11.9	0.5	15.6	5.0	3	silty CLAY to CLAY	115	1.5	9	8	5	-	-	0.8	4.2	61	0.005	3.04	15
16.24	11.9	14.2	-	12.2	0.6	16.4	5.1	3	silty CLAY to CLAY	115	1.5	9	8	5	-	-	0.8	4.3	62	0.005	3.05	15
16.40	13.1	15.6	-	13.5	0.6	17.3	4.8	3	silty CLAY to CLAY	115	1.5	10	9	5	-	-	0.9	4.8	58	0.005	2.99	15
16.57	13.5	16.0	-	13.9	0.5	17.0	4.1	3	silty CLAY to CLAY	115	1.5	11	9	5	-	-	0.9	4.9	55	0.005	2.94	15
16.73	13.3	15.6	-	13.6	0.5	18.1	4.0	3	silty CLAY to CLAY	115	1.5	10	9	5	-	-	0.9	4.8	55	0.005	2.94	15
16.90	12.7	14.9	-	13.1	0.4	20.5	3.6	3	silty CLAY to CLAY	115	1.5	10	8	5	-	-	0.8	4.5	54	0.005	2.93	15
17.06	12.6	14.7	-	13.0	0.4	21.1	3.6	3	silty CLAY to CLAY	115	1.5	10	8	5	-	-	0.8	4.5	55	0.005	2.94	15
17.23	12.5	14.4	-	12.9	0.4	22.9	3.7	3	silty CLAY to CLAY	115	1.5	10	8	4	-	-	0.8	4.4	55	0.005	2.95	15
17.39	12.6	14.5	-	13.0	0.5	22.6	4.0	3	silty CLAY to CLAY	115	1.5	10	8	5	-	-	0.8	4.4	56	0.005	2.97	15
17.55	12.5	14.3	-	13.0	0.5	22.8	4.2	3	silty CLAY to CLAY	115	1.5	10	8	5	-	-	0.8	4.4	58	0.005	2.99	15
17.72	12.3	14.0	-	12.7	0.4	22.3	3.8	3	silty CLAY to CLAY	115	1.5	9	8	4	-	-	0.8	4.2	56	0.005	2.97	15
17.88	11.5	13.0	-	11.9	0.4	22.5	4.0	3	silty CLAY to CLAY	115	1.5	9	8	4	-	-	0.7	3.9	59	0.005	3.01	15
18.05	11.4	12.8	-	11.8	0.3	24.7	3.0	3	silty CLAY to CLAY	115	1.5	9	8	4	-	-	0.7	3.8	55	0.005	2.95	15
18.21	12.4	13.9	-	12.9	0.3	24.9	3.0	3	silty CLAY to CLAY	115	1.5	9	8	4	-	-	0.8	4.2	53	0.005	2.91	15
18.37	12.4	13.9	-	12.9	0.3	25.7	3.1	3	silty CLAY to CLAY	115	1.5	9	8	4	-	-	0.8	4.2	53	0.005	2.92	15
18.54	12.7	14.2	-	13.4	0.4	36.4	3.3	3	silty CLAY to CLAY	115	1.5	9	8	4	-	-	0.8	4.3	54	0.005	2.93	15
18.70	12.5	13.8	-	13.2	0.4	36.4	3.7	3	silty CLAY to CLAY	115	1.5	9	8	4	-	-	0.8	4.2	56	0.005	2.97	15
18.87	13.2	14.5	-	13.9	0.4	36.7	3.2	3	silty CLAY to CLAY	115	1.5	10	9	4	-	-	0.9	4.4	53	0.005	2.91	15
19.03	13.1	14.4	-	13.8	0.5	34.9	4.2	3	silty CLAY to CLAY	115	1.5	10	9	5	-	-	0.9	4.4	57	0.005	2.98	15
19.19	14.1	15.4	-	14.9	0.7	40.2	5.4	3	silty CLAY to CLAY	115	1.5	10	9	5	-	-	0.9	4.7	61	0.005	3.03	15
19.36	19.1	20.8	-	20.0	1.2	45.0	6.6	3	silty CLAY to CLAY	115	1.5	14	13	7	-	-	1.3	6.4	58	0.005	2.99	15
19.52	28.2	30.5	-	29.2	1.0	49.3	3.9	4	clayy SILT to silty CLAY	115	2.0	15	14	8	-	-	1.9	9.7	40	0.070	2.70	15
19.69	42.1	42.4	105.6	42.4	1.0	13.1	2.3	5	silty SAND to sandy SILT	120	3.0	14	14	10	39	36	-	-	28	0.200	2.44	16
19.85	29.7	31.8	-	29.9	1.2	8.0	4.1	4	clayy SILT to silty CLAY	115	2.0	16	15	9	-	-	2.0	9.9	41	0.070	2.70	15
20.01	29.0	30.8	-	30.9	1.1	99.5	3.8	4	clayy SILT to silty CLAY	115	2.0	15	14	8	-	-	2.0	9.8	40	0.070	2.69	15
20.18	23.8	25.2	-	24.2	0.9	22.2	4.0	3	silty CLAY to CLAY	115	1.5	17	16	7	-	-	1.6	7.9	44	0.005	2.77	15
20.34	18.7	19.8	-	19.3	0.7	31.4	3.8	3	silty CLAY to CLAY	115	1.5	13	12	6	-	-	1.3	6.1	49	0.005	2.84	15
20.51	17.2	18.1	-	18.0	0.6	42.8	3.8	3	silty CLAY to CLAY	115	1.5	12	11	5	-	-	1.1	5.5	51	0.005	2.88	15
20.67	17.2	18.0	-	18.2	0.5	50.5	3.0	4	clayy SILT to silty CLAY	115	2.0	9	9	5	-	-	1.1	5.5	47	0.070	2.81	15
20.83	16.5	17.2	-	17.4	0.3	43.4	2.1	4	clayy SILT to silty CLAY	115	2.0	9	8	5	-	-	1.1	5.3	43	0.070	2.75	15
21.00	13.7	14.2	-	14.5	0.3	41.3	2.5	4	clayy SILT to silty CLAY	115	2.0	7	7	4	-	-	0.9	4.3	50	0.070	2.86	15
21.16	12.3	12.7	-	13.3	0.4	48.7	4.0	3	silty CLAY to CLAY	115	1.5	8	8	4	-	-	0.8	3.8	60	0.005	3.02	15
21.33	15.2	15.6	-	16.4	0.6	61.9	4.3	3	silty CLAY to CLAY	115	1.5	10	10	5	-	-	1.0	4.7	56	0.005	2.96	15
21.49	26.2	26.8	-	26.9	0.7	35.8	2.7	4	clayy SILT to silty CLAY	115	2.0	13	13	7	-	-	1.8	8.4	38	0.070	2.65	15
21.65	26.3	25.8	83.8	26.5	0.5	5.8	2.1	4	clayy SILT to silty CLAY	115	2.0	13	13	7	-	-	1.8	8.4	35	0.070	2.59	15
21.82	19.3	19.6	-	19.4	0.4	3.9	2.4	4	clayy SILT to silty CLAY	115	2.0	10	10	5	-	-	1.3	6.0	42	0.070	2.73	15
21.98	12.8	12.9	-	13.5	0.3	34.6	2.9	3	silty CLAY to CLAY	115	1.5	9	9	4	-	-	0.8	3.8	54	0.005	2.93	15
22.15	11.7	11.7	-	12.5	0.3	41.4	3.0	3	silty CLAY to CLAY	115	1.5	8	8	4	-	-	0.8	3.4	57	0.005	2.98	15
22.31	11.2	11.2	-	12.1	0.3	44.3	3.0	3	silty CLAY to CLAY	115	1.5	7	7	4	-	-	0.7	3.3	59	0.005	3.00	15
22.47	11.0	10.9	-	11.9	0.3	44.9	2.9	3	silty CLAY to CLAY	115	1.5	7	7	4	-	-	0.7	3.2	59	0.005	3.00	15
22.64	11.0	10.9	-	12.0	0.3	54.0	2.8	3	silty CLAY to CLAY	115	1.5	7	7	3	-	-	0.7	3.2	58	0.005	2.99	15
22.80	11.6	11.5	-	12.8	0.3	58.2	2.9	3	silty CLAY to CLAY	115	1.5	8	8	4	-	-	0.8	3.4	57	0.005	2.98	15
22.97	12.1	12.0	-	13.3	0.3	56.5	3.1	3	silty CLAY to CLAY	115	1.5	8	8	4	-	-	0.8	3.5	57	0.005	2.98	15
23.13	13.2	12.9	-	14.2	0.4	49.3	3.4	3	silty CLAY to CLAY	115	1.5	9	9	4	-	-	0.9	3.8	57	0.005	2.98	15
23.30	13.9	13.5	-	14.9	0.6	54.4	4.4	3	silty CLAY to CLAY	115	1.5	9	9	4	-	-	0.9	4.0	60	0.005	3.03	15
23.46	14.9	14.5	-	16.0	0.7	55.1	4.8	3	silty CLAY to CLAY	115	1.5	10	10	5	-	-	1.0	4.3	60	0.005	3.02	15
23.62	24.0	23.2	-	25.2	0.4	60.8	2.0	4	clayy SILT to silty CLAY	115	2.0	12	12	6	-	-	1.6	7.2	36	0.070	2.61	15
23.79	49.0	46.7	84.2	49.7	0.6	35.6	1.3	5	silty SAND to sandy SILT	120	3.0	16	16	10	42	36	-	-	21	0.200	2.25	16
23.95	77.4	73.6	100.1	77.5	0.8	3.0	1.1	6	clean SAND to silty SAND	125	5.0	15	15	15	57	39	-	-	14	0.350	2.04	16
24.12	84.9	80.5	106.1	84.9	0.9	3.8	1.1	6	clean SAND to silty SAND	125	5.0	16	17	16	60	39	-	-	13	0.350	2.01	16
24.28	98.4	93.1	116.9	98.5	1.1	4.2	1.1	6	clean SAND to silty SAND	125	5.0	19	20	18	65	40	-	-	12	0.350	1.96	16
24.44	102.3	96.7	123.4	102.4	1.2	2.7	1.2	6	clean SAND to silty SAND	125	5.0	19	20	19	66	40	-	-	12	0.350	1.98	16
24.61	92.9	87.5	123.5	93.0	1.4	2.6	1.5	5	silty SAND to sandy SILT	120	3.0	29	31	18	63	40	-	-	15	0.200	2.07	16
24.77	84.6	79.5	141.0	84.6	2.0	2.3	2.4	5	silty SAND to sandy SILT	120	3.0	27	28	17	59	39	-	-	20	0.200	2.24	16
24.94	63.1	59.2	157.3	63.1	2.3	0.1	3.8	4	clayy SILT to silty CLAY	115	2.0	30	32	14	-	-	4.4	9.9	30	0.070	2.48	15
25.10	55.4	51.9	155.7	55.4	2.2	1.6	4.1	4	clayy SILT to silty CLAY	115	2.0	26	28	13	-	-	3.8	9.9	33	0.070	2.54	15
25.26	42.1	38.9	-	42.1	1.6	-0.4	3.8	4	clayy SILT to silty CLAY	115	2.0	19	21	10	-	-	2.9	9.9	36	0.070	2.62	15
25.43	27.6	25.4	-	27.5	1.1	-0.9	4.3	3	silty CLAY to CLAY	115	1.5	17	18	7	-	-	1.9	7.9	46	0.005	2.79	15
25.59	28.3	26.0	-	28.3	0.7	1.7	2.5	4	clayy SILT to silty CLAY	115	2.0	13	14	7	-	-	1.9	8.1	37	0.070	2.64	15
25.76	20.8	19.0	-	20.8	0.6	0.3	2.9	4	clayy SILT to silty CLAY	115	2.0	10	10	5	-	-	1.4	5.8	45	0.070	2.79	15
25.92	14.9	13.6	-	15.0	0.5	2.7	3.4	3	silty CLAY to CLAY	115	1.5	9	10	4	-	-	1.0	4.0	56	0.005	2.96	15
26.08	15.1	13.7	-	15.2	0.4	7.0	2.9	3	silty CLAY to CLAY	115	1.5	9	10	4	-	-	1.0	4.1	53	0.005	2.91	15
26.25	16.5	14.9	-	16.7	0.5	9.4	3.5	3	silty CLAY to CLAY	115	1.5	10	11	5	-	-	1.1	4.5	54	0.005	2.93	15
26.41	16.2	14.6	-	16.4	0.8	12.8	5.6	3	silty CLAY to CLAY	115	1.5	10	11	5	-	-	1.1	4.4	63	0.005	3.06	15
26.58	36.5	33.5	101.6	36.8	0.9	16.2	2.5	4	clayy SILT to silty CLAY	115	2.0	17	18	8	-	-	2.5	9.9	33	0.070	2.55	15
26.74	40.6	37.3	88.3	40.7	0.7	5.5	1.8	5	silty SAND to sandy SILT	120	3.0	12	14	9	34	35	-	-	27	0.200	2.41	16
26.90	109.1	100.0	109.3	109.3	0.6	9.0	0.6	6	clean SAND to silty SAND	125	5.0	20	22	18	67	40	-	-	8	0.350	1.78	16
27.07	136.9	125.1	125.1	136.9	0.6	4.8	0.4	6	clean SAND to silty SAND	125	5.0	25	27	21	74	42	-	-	5	0.350	1.62	16
27.23	138.6	126.4	126.4	138.7	0.6	4.3	0.4	6	clean SAND to silty SAND	125	5.0	25	28	22	75	42	-	-	5	0.350	1.61	16
27.40	127.7	116.1	115.8	127.8	0.5	3.8	0.4	6	clean SAND to silty SAND	125	5.0	23	26	20	72	41	-	-	5	0.350	1.64	16
27.56	122.2	110.9	111.7	122.2	0.5	4.2	0.4	6	clean SAND to silty SAND	125	5.0	22	24	19	70	41	-	-	5	0.350	1.66	16
27.72	128.1	116.0	116.0	128.2	0.4	4.5	0.3	6	clean SAND to silty SAND	125	5.0	23	26	20	72	41	-	-	5	0.350	1.59	16
27.89	126.0	113.9	117.5	126.1	0.6	4.3	0.5	6	clean SAND to silty SAND	125	5.0	23	25	20	71	41	-	-	6	0.350	1.69	16
28.05	112.2	101.1	122.2	112.2	1.1	4.1	1.0	6	clean SAND to silty SAND	125	5.0	20	22	19	67	40	-	-	11	0.350	1.92	16
28.22	101.2	91.0	136.5	101.2	1.8	4.1	1.8	5	silty SAND to sandy SILT	120	3.0	30	34	19	64	40	-	-	17	0.200	2.12	16
28.38	80.1	71.9	131.0	80.1	1.8	0.9	2.2	5	silty SAND to sandy SILT	120	3.0	24	27	16	56	38	-	-	21	0.200	2.26	16
28.54	45.5	40.8	125.4	45.5	1.4	-1.6	3.3	4	clayy SILT to silty CLAY	115	2.0	20	23	10	-	-	3.1	9.9	33	0.070	2.56	15
28.71	45.5	38.6	-	45.6	1.8	4.7	4.2	4	clayy SILT to silty CLAY	115	2.0	19	23	10	-	-	3.1	9.9	38	0.070	2.65	15
28.87	68.9	61.5	121.1	69.0	1.5	5.6	2.2	5	silty SAND to sandy SILT	120	3.0	21	23	14	51	37	-	-	23	0.200	2.31	16
29.04	49.0	43.6	130.6	49.0	1.6	1.3	3.4	4	clayy SILT to silty CLAY	115	2.0	22	24	11	-	-	3.4	9.9	33	0.070	2.54	15
29.20	36.3	30.4	-	36.4	1.4	5.2	3.9	4	clayy SILT to silty CLAY	115	2.0	15	18	8	-	-	2.5	9.6	41	0.070	2.70	15
29.36	42.8	38.0	97.5	42.9	0.9	5.5	2.1	5	silty SAND to sandy SILT	120	3.0	13	14	9	35	35	-	-	29	0.200	2.46	16
29.53	33.6	29.8	89.8	33.6	0.7	3.5	2.2	4	clayy SILT to silty CLAY	115	2.0	15	17	7	-	-	2.3	8.7	33	0.070	2.55	15
29.69	22.5	18.6	-	22.5	0.5	3.0	2.6	4	clayy SILT to silty CLAY	115	2.0	9	11	5	-	-	1.5	5.7	44	0.070	2.77	15
29.86	15.2	12.6	-	15.3	0.4	5.7	2.7	3	silty CLAY to CLAY	115	1.5	8	10	4	-	-	1.0	3.7	54	0.005	2.93	15
30.02	14.9	12.3	-	15.1	0.3	9.5	2.5	3	silty CLAY to CLAY	115	1.5	8	10	4	-	-	1.0	3.6	54	0.005	2.93	15
30.19	15.8	13.0	-	16.4	0.3	29.6	2.4	3	silty CLAY to CLAY	115	1.5	9	11	4	-	-	1.0	3.8	51	0.005	2.89	15
30.35	17.1	14.0	-	17.7	0.3	34.4	2.2	4	clayy SILT to silty CLAY	115	2.0	7	9	4	-	-	1.1	4.1	48	0.070	2.84	15
30.51	16.5	13.4	-	17.3	0.3	40.0	2.3	4	clayy SILT to silty CLAY	115	2.0	7	8	4	-	-	1.1	3.9	50	0.070	2.87	15
30.68	18.3	14.8	-	19.0	0.3	37.3	2.1	4	clayy SILT to silty CLAY	115	2.0	7	9	4	-	-	1.2	4.4	46	0.070	2.80	15
30.84	15.6	12.6	-	16.2	0.4	30.6	2.6	3	silty CLAY to CLAY	115	1.5	8	10	4	-	-	1.0	3.7	53	0.005	2.92	15

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SMC-HMB Farmworker Housing project

Project ID: BAGG Engineering
Data File: SDF(865).cpt
CPT Date: 7/26/2023 1:04:56 PM
GW During Test: 13 ft

Sounding ID: CPT-05
Project No: COUSM-23-03
Cone/Rig: DDG1589

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
31.01	14.1	11.4	-	14.9	0.4	37.7	3.0	3	silty CLAY to CLAY	115	1.5	8	9	4	-	-	0.9	3.3	58	0.005	3.00	15
31.17	14.6	11.7	-	15.4	0.4	40.3	3.1	3	silty CLAY to CLAY	115	1.5	8	10	4	-	-	0.9	3.4	58	0.005	2.99	15
31.33	15.2	12.2	-	16.0	0.4	40.6	2.8	3	silty CLAY to CLAY	115	1.5	8	10	4	-	-	1.0	3.5	56	0.005	2.96	15
31.50	15.5	12.3	-	16.3	0.4	42.0	2.6	3	silty CLAY to CLAY	115	1.5	8	10	4	-	-	1.0	3.6	54	0.005	2.93	15
31.66	15.0	11.9	-	15.9	0.4	46.1	2.9	3	silty CLAY to CLAY	115	1.5	8	10	4	-	-	1.0	3.4	57	0.005	2.98	15
31.83	16.1	12.8	-	17.2	0.4	51.7	3.0	3	silty CLAY to CLAY	115	1.5	9	11	4	-	-	1.1	3.7	55	0.005	2.95	15
31.99	18.1	14.3	-	19.1	0.5	49.0	3.0	3	silty CLAY to CLAY	115	1.5	10	12	4	-	-	1.2	4.2	52	0.005	2.90	15
32.15	18.6	14.6	-	19.6	0.5	49.2	3.2	3	silty CLAY to CLAY	115	1.5	10	12	4	-	-	1.2	4.3	53	0.005	2.92	15
32.32	18.6	14.6	-	19.6	0.6	51.3	3.5	3	silty CLAY to CLAY	115	1.5	10	12	4	-	-	1.2	4.3	55	0.005	2.94	15
32.48	19.7	15.4	-	20.7	0.6	52.7	3.1	3	silty CLAY to CLAY	115	1.5	10	13	5	-	-	1.3	4.6	51	0.005	2.89	15
32.65	22.2	17.3	-	23.3	0.5	56.7	2.4	4	clayy SILT to silty CLAY	115	2.0	9	11	5	-	-	1.5	5.2	45	0.070	2.78	15
32.81	20.9	16.2	-	21.9	0.6	49.3	2.9	3	silty CLAY to CLAY	115	1.5	11	14	5	-	-	1.4	4.9	49	0.005	2.85	15
32.97	18.8	14.5	-	19.9	0.6	55.3	3.8	3	silty CLAY to CLAY	115	1.5	10	13	5	-	-	1.2	4.3	56	0.005	2.97	15
33.14	22.1	17.0	-	23.3	1.1	65.1	5.4	3	silty CLAY to CLAY	115	1.5	11	15	5	-	-	1.5	5.1	58	0.005	3.00	15
33.30	26.9	20.7	-	28.3	1.2	73.2	4.8	3	silty CLAY to CLAY	115	1.5	14	18	6	-	-	1.8	6.3	52	0.005	2.90	15
33.47	38.4	29.4	-	38.7	1.2	15.1	3.3	4	clayy SILT to silty CLAY	115	2.0	15	19	8	-	-	2.6	9.2	39	0.070	2.67	15
33.63	66.2	56.2	117.3	66.4	1.4	10.1	2.3	5	silty SAND to sandy SILT	120	3.0	19	22	13	48	37	-	-	24	0.200	2.34	16
33.79	67.3	57.0	111.9	67.2	1.3	-5.3	2.0	5	silty SAND to sandy SILT	120	3.0	19	22	13	48	37	-	-	23	0.200	2.30	16
33.96	39.4	29.8	-	39.3	1.3	-4.3	3.6	4	clayy SILT to silty CLAY	115	2.0	15	20	8	-	-	2.7	9.4	40	0.070	2.69	15
34.12	24.8	18.8	-	24.8	0.7	-0.5	3.0	4	clayy SILT to silty CLAY	115	2.0	9	12	5	-	-	1.7	5.7	46	0.070	2.80	15
34.29	21.1	15.9	-	21.3	0.6	9.7	2.9	3	silty CLAY to CLAY	115	1.5	11	14	5	-	-	1.4	4.7	50	0.005	2.86	15
34.45	19.1	14.4	-	19.6	0.5	22.9	2.9	3	silty CLAY to CLAY	115	1.5	10	13	4	-	-	1.3	4.2	52	0.005	2.90	15
34.61	15.2	11.4	-	16.5	0.5	65.7	3.5	3	silty CLAY to CLAY	115	1.5	8	10	4	-	-	1.0	3.3	61	0.005	3.04	15
34.78	18.3	13.7	-	19.7	0.4	70.9	2.5	3	silty CLAY to CLAY	115	1.5	9	12	4	-	-	1.2	4.0	51	0.005	2.88	15
34.94	18.7	13.9	-	20.2	0.5	73.6	2.8	3	silty CLAY to CLAY	115	1.5	9	12	4	-	-	1.2	4.1	52	0.005	2.90	15
35.11	18.4	13.6	-	19.7	0.4	68.9	2.5	3	silty CLAY to CLAY	115	1.5	9	12	4	-	-	1.2	4.0	51	0.005	2.89	15
35.27	18.2	13.5	-	19.2	0.3	47.5	2.2	4	clayy SILT to silty CLAY	115	2.0	7	9	4	-	-	1.2	3.9	49	0.070	2.85	15
35.43	15.2	11.2	-	16.6	0.3	69.4	2.6	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	3.2	57	0.005	2.98	15
35.60	15.1	11.1	-	16.5	0.4	73.4	2.8	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	3.2	58	0.005	2.99	15
35.76	15.1	11.0	-	16.7	0.4	80.2	2.7	3	silty CLAY to CLAY	115	1.5	7	10	3	-	-	1.0	3.1	58	0.005	2.99	15
35.93	15.2	11.1	-	16.8	0.3	82.1	2.6	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	3.2	57	0.005	2.98	15
36.09	15.3	11.1	-	17.0	0.3	82.9	2.6	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	3.2	57	0.005	2.98	15
36.26	15.4	11.2	-	17.0	0.3	82.8	2.6	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	3.2	57	0.005	2.98	15
36.42	15.4	11.2	-	17.0	0.4	81.9	2.7	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	3.2	57	0.005	2.98	15
36.58	15.3	11.1	-	16.9	0.3	80.1	2.6	3	silty CLAY to CLAY	115	1.5	7	10	3	-	-	1.0	3.1	57	0.005	2.98	15
36.75	15.5	11.1	-	17.1	0.4	81.1	2.6	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	3.2	57	0.005	2.98	15
36.91	15.1	10.8	-	16.9	0.3	89.8	2.6	3	silty CLAY to CLAY	115	1.5	7	10	3	-	-	1.0	3.1	58	0.005	2.99	15
37.08	15.5	11.0	-	17.1	0.3	80.6	2.6	3	silty CLAY to CLAY	115	1.5	7	10	3	-	-	1.0	3.1	57	0.005	2.98	15
37.24	16.1	11.4	-	17.8	0.3	87.1	2.4	3	silty CLAY to CLAY	115	1.5	8	11	4	-	-	1.0	3.3	55	0.005	2.95	15
37.40	16.9	12.0	-	18.6	0.3	86.8	2.3	3	silty CLAY to CLAY	115	1.5	8	11	4	-	-	1.1	3.4	53	0.005	2.92	15
37.57	17.7	12.5	-	19.4	0.7	91.3	4.3	3	silty CLAY to CLAY	115	1.5	8	12	4	-	-	1.1	3.6	62	0.005	3.06	15
37.73	19.4	13.7	-	21.5	1.2	103.1	6.7	3	silty CLAY to CLAY	115	1.5	9	13	5	-	-	1.3	4.0	69	0.005	3.14	15
37.90	52.0	42.4	121.5	54.4	1.5	121.6	3.0	4	clayy SILT to silty CLAY	115	2.0	21	26	10	-	-	3.6	9.9	32	0.070	2.52	15
38.06	128.2	104.2	140.5	128.3	2.0	9.0	1.6	5	silty SAND to sandy SILT	120	3.0	35	43	21	68	40	-	-	14	0.200	2.03	16
38.22	133.3	108.2	147.1	133.4	2.2	9.5	1.7	5	silty SAND to sandy SILT	120	3.0	36	44	22	70	40	-	-	14	0.200	2.04	16
38.39	86.0	69.7	139.5	86.1	2.2	9.5	2.6	5	silty SAND to sandy SILT	120	3.0	23	29	16	55	38	-	-	23	0.200	2.32	16
38.55	44.6	31.0	-	44.8	1.7	10.4	4.1	4	clayy SILT to silty CLAY	115	2.0	15	22	8	-	-	3.1	9.7	41	0.070	2.71	15
38.72	32.1	22.2	-	32.2	0.9	9.0	3.2	4	clayy SILT to silty CLAY	115	2.0	11	16	6	-	-	2.2	6.8	44	0.070	2.76	15
38.88	26.5	18.3	-	26.8	0.6	15.6	2.4	4	clayy SILT to silty CLAY	115	2.0	9	13	5	-	-	1.8	5.5	43	0.070	2.75	15
39.04	25.2	17.4	-	25.6	0.6	19.3	2.6	4	clayy SILT to silty CLAY	115	2.0	9	13	5	-	-	1.7	5.2	46	0.070	2.80	15
39.21	25.0	17.1	-	25.5	0.6	27.1	2.8	4	clayy SILT to silty CLAY	115	2.0	9	12	5	-	-	1.7	5.1	47	0.070	2.83	15
39.37	26.4	18.0	-	27.3	0.8	45.3	3.1	3	silty CLAY to CLAY	115	1.5	12	18	5	-	-	1.8	5.4	48	0.005	2.83	15
39.54	25.2	17.2	-	26.2	1.0	47.9	4.4	3	silty CLAY to CLAY	115	1.5	11	17	5	-	-	1.7	5.2	55	0.005	2.94	15
39.70	25.2	17.1	-	26.2	1.2	50.9	5.2	3	silty CLAY to CLAY	115	1.5	11	17	5	-	-	1.7	5.1	58	0.005	2.99	15
39.86	24.7	16.7	-	25.8	1.1	59.7	4.9	3	silty CLAY to CLAY	115	1.5	11	16	5	-	-	1.6	5.0	57	0.005	2.98	15
40.03	22.1	14.9	-	23.6	0.9	75.8	4.5	3	silty CLAY to CLAY	115	1.5	10	15	5	-	-	1.5	4.4	59	0.005	3.00	15
40.19	21.9	14.8	-	23.2	0.9	66.1	4.7	3	silty CLAY to CLAY	115	1.5	10	15	5	-	-	1.4	4.4	60	0.005	3.02	15
40.36	23.9	16.0	-	25.7	1.3	91.7	6.1	3	silty CLAY to CLAY	115	1.5	11	16	5	-	-	1.6	4.8	62	0.005	3.06	15
40.52	32.0	21.4	-	33.8	1.7	93.8	5.6	3	silty CLAY to CLAY	115	1.5	14	21	7	-	-	2.2	6.5	54	0.005	2.93	15
40.68	45.7	30.5	-	47.4	1.6	83.2	3.7	4	clayy SILT to silty CLAY	115	2.0	15	23	8	-	-	3.1	9.6	40	0.070	2.69	15
40.85	47.6	31.7	-	47.6	1.9	1.5	4.3	4	clayy SILT to silty CLAY	115	2.0	16	24	9	-	-	3.3	9.9	41	0.070	2.72	15
41.01	38.1	25.3	-	38.6	2.1	22.1	5.9	3	silty CLAY to CLAY	115	1.5	17	25	8	-	-	2.6	7.8	51	0.005	2.89	15
41.18	42.5	28.1	-	44.0	2.5	79.2	6.2	3	silty CLAY to CLAY	115	1.5	19	28	8	-	-	2.9	8.8	50	0.005	2.87	15
41.34	69.3	54.7	144.5	69.9	2.3	30.4	3.4	4	clayy SILT to silty CLAY	115	2.0	27	35	13	-	-	4.8	9.9	30	0.070	2.47	15
41.50	55.1	36.3	-	55.0	2.0	-3.7	3.8	4	clayy SILT to silty CLAY	115	2.0	18	28	9	-	-	3.8	9.9	37	0.070	2.64	15
41.67	39.5	26.0	-	39.6	1.8	4.0	5.0	3	silty CLAY to CLAY	115	1.5	17	26	7	-	-	2.7	8.0	48	0.005	2.83	15
41.83	35.3	23.1	-	36.0	1.6	35.0	4.8	3	silty CLAY to CLAY	115	1.5	15	24	7	-	-	2.4	7.1	49	0.005	2.86	15
42.00	33.2	21.7	-	34.2	1.2	50.0	4.0	3	silty CLAY to CLAY	115	1.5	14	22	6	-	-	2.2	6.6	48	0.005	2.83	15
42.16	30.9	20.1	-	31.9	1.1	49.5	3.7	3	silty CLAY to CLAY	115	1.5	13	21	6	-	-	2.1	6.1	48	0.005	2.84	15
42.32	26.8	17.4	-	27.9	0.8	56.4	3.4	3	silty CLAY to CLAY	115	1.5	12	18	5	-	-	1.8	5.2	50	0.005	2.87	15
42.49	23.8	15.4	-	24.9	0.8	58.8	3.6	3	silty CLAY to CLAY	115	1.5	10	16	5	-	-	1.6	4.6	54	0.005	2.93	15
42.65	21.4	13.8	-	22.7	0.7	64.9	3.9	3	silty CLAY to CLAY	115	1.5	9	14	4	-	-	1.4	4.0	58	0.005	2.99	15
42.82	22.0	14.1	-	23.5	0.6	76.1	3.1	3	silty CLAY to CLAY	115	1.5	9	15	4	-	-	1.4	4.1	54	0.005	2.92	15
42.98	24.0	15.4	-	25.3	0.7	70.4	3.2	3	silty CLAY to CLAY	115	1.5	10	16	5	-	-	1.6	4.5	52	0.005	2.90	15
43.15	20.8	13.3	-	22.1	0.8	65.3	4.3	3	silty CLAY to CLAY	115	1.5	9	14	4	-	-	1.4	3.9	61	0.005	3.03	15
43.31	19.9	12.7	-	21.4	1.2	77.5	6.9	3	silty CLAY to CLAY	115	1.5	8	13	5	-	-	1.3	3.7	72	0.005	3.18	15
43.47	29.8	19.0	-	31.2	1.6	75.0	6.0	3	silty CLAY to CLAY	115	1.5	13	20	6	-	-	2.0	5.7	58	0.005	3.00	15
43.64	68.2	52.8	129.3	70.0	1.9	94.3	2.9	4	clayy SILT to silty CLAY	115	2.0	26	34	12	-	-	4.7	9.9	28	0.070	2.43	15
43.80	109.0	84.3	134.1	108.9	2.1	-5.5	2.0	5	silty SAND to sandy SILT	120	3.0	28	36	18	61	38	-	-	18	0.200	2.17	16
43.97	121.1	93.5	156.3	121.0	2.9	-5.9	2.4	5	silty SAND to sandy SILT	120	3.0	31	40	20	65	39	-	-	19	0.200	2.20	16
44.13	102.9	79.3	173.3	102.8	3.5	-5.4	3.5	4	clayy SILT to silty CLAY	115	2.0	40	51	18	-	-	7.2	9.9	25	0.070	2.37	15
44.29	75.2	57.9	160.6	75.2	2.9	-2.4	3.9	4	clayy SILT to silty CLAY	115	2.0	29	38	14	-	-	5.2	9.9	31	0.070	2.50	15
44.46	69.3	53.2	157.7	69.3	2.7	3.1	4.0	4	clayy SILT to silty CLAY	115	2.0	27	35	13	-	-	4.8	9.9	32	0.070	2.54	15
44.62	93.3	71.6	142.5	93.4	2.4	3.6	2.6	5	silty SAND to sandy SILT	120	3.0	24	31	16	56	37	-	-	23	0.200	2.31	16
44.79	67.5	51.7	127.9	67.4	1.8	-2.0	2.8	4	clayy SILT to silty CLAY	115	2.0	26	34	12	-	-	4.7	9.9	28	0.070	2.44	15
44.95	42.6	26.5	-	42.7	2.1	2.7	5.3	3	silty CLAY to CLAY	115	1.5	18	28	8	-	-	2.9	8.2	49	0.005	2.85	15
45.11	32.5	20.1	-	32.9	1.2	18.6	3.9	3	silty CLAY to CLAY	115	1.5	13	22	6	-	-	2.2	6.1	49	0.005	2.85	15
45.28	52.7	32.5	-	53.7	1.9	50.9	3.9	4	clayy SILT to silty CLAY	115	2.0	16	26	9	-	-	3.6	9.9	40	0.070	2.68	15
45.44	92.1	70.2	130.8	92.1	2.0	1.8	2.3	5	silty SAND to sandy SILT	120	3.0	23	31	15	55	37	-	-	22	0.200	2.27	16
45.61	63.9	48.6	128.9	63.9	1.8	2.4	3.0	4	clayy SILT to silty CLAY	115	2.0	24	32	12	-	-	4.4	9.9	30	0.070	2.48	15
45.77	43.1	26.4	-	43.5	1.9	22.9	4.6	3	silty CLAY to CLAY	115	1.5	18	29	7	-	-	2.9	8.2	46	0.005	2.80	15
45.93	56.0	42.5	117.9	56.5	1.5	25.3	2.8	4	clayy SILT to silty CLAY	115	2.0	21	28	10	-	-	3.8	9.9	31	0.070	2.50	15
46.10	43.1	26.2	-	43.3	1.4	9.7	3.6	4	clayy SILT to silty CLAY	115	2.0	13	22	7	-	-	2.9	8.1	42	0.070	2.73	15
46.26	29.8	18.1	-	30.3	1.1	24.8	4.1	3	silty CLAY to CLAY	115	1.5	12	20	5	-	-	2.0	5.4	52	0.005	2.90	15

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SMC-HMB Farmworker Housing project

Project ID: BAGG Engineering
Data File: SDF(865).cpt
CPT Date: 7/26/2023 1:04:56 PM
GW During Test: 13 ft

Sounding ID: CPT-05
Project No: COUSM-23-03
Cone/Rig: DDG1589

Depth ft	qc PS tsf	qc1n PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR - -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
46.43	27.2	16.5	-	28.0	0.9	39.8	3.8	3	silty CLAY to CLAY	115	1.5	11	18	5	-	-	1.8	4.9	53	0.005	2.92	15
46.59	28.0	16.9	-	28.9	0.9	44.1	3.5	3	silty CLAY to CLAY	115	1.5	11	19	5	-	-	1.9	5.1	51	0.005	2.89	15
46.75	27.1	16.4	-	28.2	1.3	54.2	5.1	3	silty CLAY to CLAY	115	1.5	11	18	5	-	-	1.8	4.9	59	0.005	3.00	15
46.92	40.4	24.3	-	41.2	2.0	43.7	5.3	3	silty CLAY to CLAY	115	1.5	16	27	7	-	-	2.7	7.5	50	0.005	2.87	15
47.08	50.2	30.1	-	51.6	2.6	70.9	5.4	3	silty CLAY to CLAY	115	1.5	20	33	9	-	-	3.4	9.4	46	0.005	2.81	15
47.25	191.3	143.7	176.5	191.4	3.0	6.7	1.6	6	clean SAND to silty SAND	125	5.0	29	38	28	79	41	-	-	11	0.350	1.94	16
47.41	280.2	210.2	210.2	280.1	2.5	-4.0	0.9	6	clean SAND to silty SAND	125	5.0	42	56	36	92	43	-	-	5	0.350	1.64	16
47.57	279.2	209.1	213.6	279.2	2.7	0.3	1.0	6	clean SAND to silty SAND	125	5.0	42	56	37	91	43	-	-	6	0.350	1.68	16
47.74	284.6	212.8	212.8	284.6	2.1	0.5	0.7	6	clean SAND to silty SAND	125	5.0	43	57	36	92	43	-	-	5	0.350	1.58	16
47.90	291.8	217.9	217.9	291.8	2.2	-0.2	0.7	6	clean SAND to silty SAND	125	5.0	44	58	37	93	43	-	-	5	0.350	1.58	16
48.07	297.8	222.0	222.0	298.0	1.8	10.7	0.6	6	clean SAND to silty SAND	125	5.0	44	60	37	93	43	-	-	5	0.350	1.51	16
48.23	282.4	210.2	210.2	282.5	1.7	8.6	0.6	6	clean SAND to silty SAND	125	5.0	42	56	35	92	43	-	-	5	0.350	1.54	16
48.39	300.1	223.1	223.1	300.2	1.8	2.1	0.6	6	clean SAND to silty SAND	125	5.0	45	60	37	93	43	-	-	5	0.350	1.51	16
48.56	273.4	202.9	207.6	273.4	2.6	-1.4	1.0	6	clean SAND to silty SAND	125	5.0	41	55	35	90	43	-	-	6	0.350	1.68	16
48.72	273.8	202.9	202.9	273.8	1.9	0.3	0.7	6	clean SAND to silty SAND	125	5.0	41	55	34	90	43	-	-	5	0.350	1.58	16
48.89	279.6	206.9	206.9	279.5	2.0	-1.2	0.7	6	clean SAND to silty SAND	125	5.0	41	56	35	91	43	-	-	5	0.350	1.58	16
49.05	257.4	190.2	199.7	257.5	2.6	2.1	1.0	6	clean SAND to silty SAND	125	5.0	38	51	34	88	43	-	-	6	0.350	1.72	16
49.22	215.3	158.8	193.0	215.3	3.6	4.3	1.7	6	clean SAND to silty SAND	125	5.0	32	43	30	82	42	-	-	11	0.350	1.93	16
49.38	197.6	145.5	186.8	197.7	3.6	4.3	1.9	6	clean SAND to silty SAND	125	5.0	29	40	28	79	41	-	-	13	0.350	1.99	16
49.54	135.3	99.5	164.0	135.5	3.3	7.6	2.5	5	silty SAND to sandy SILT	120	3.0	33	45	21	67	39	-	-	19	0.200	2.19	16
49.71	110.5	81.1	173.3	111.0	3.7	28.1	3.4	5	silty SAND to sandy SILT	120	3.0	27	37	18	60	38	-	-	25	0.200	2.35	16
49.87	104.5	76.6	179.9	104.6	3.9	4.7	3.8	4	clayy SILT to silty CLAY	115	2.0	38	52	18	-	-	7.3	9.9	27	0.070	2.41	15
50.04	93.0	68.1	157.8	93.2	3.0	12.5	3.3	4	clayy SILT to silty CLAY	115	2.0	34	46	16	-	-	6.4	9.9	26	0.070	2.40	15

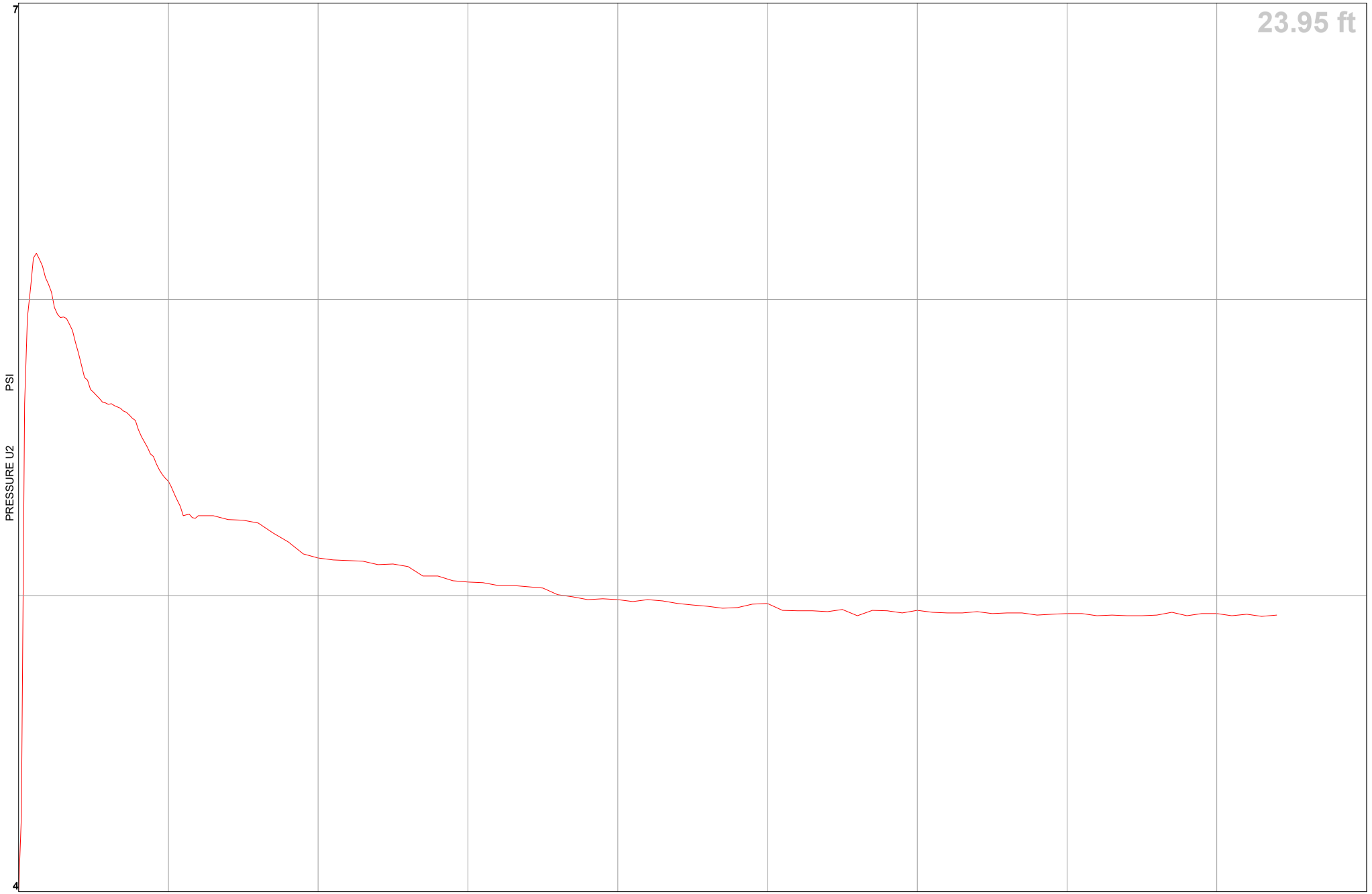
* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

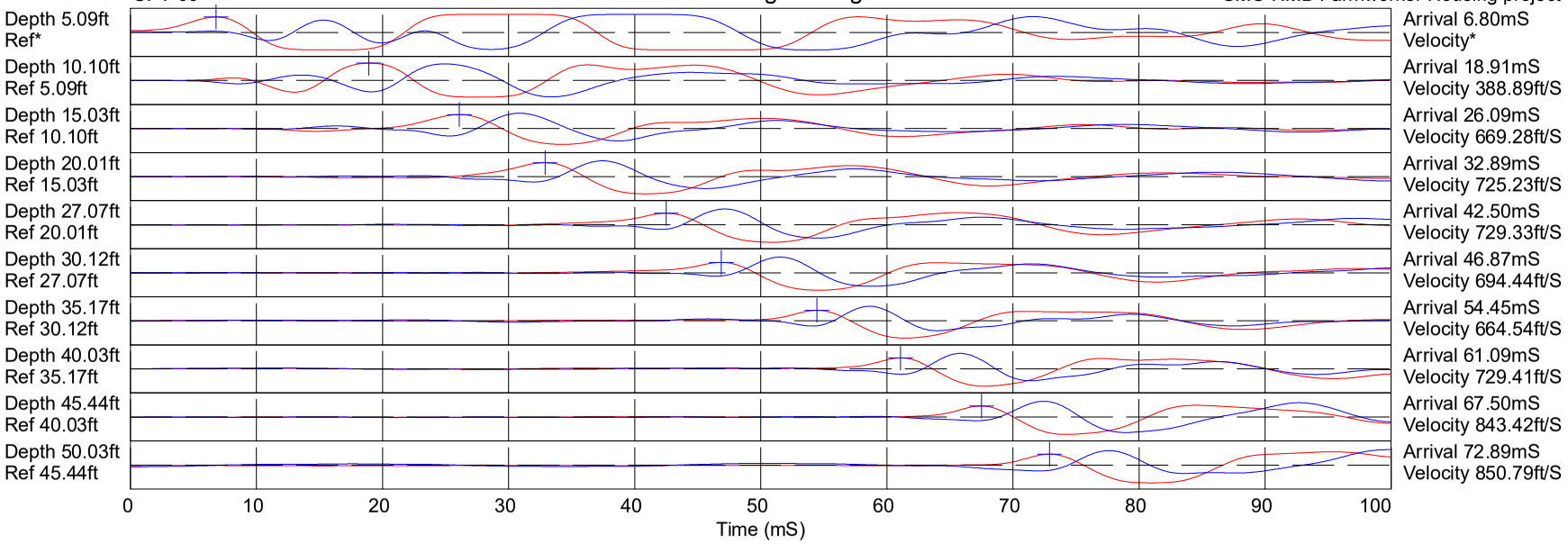
BAGG Engineering

Location	SMC-HMB Farmworker Housing projec	Operator	AJ-ER		
Job Number	COUSM-23-03	Cone Number	DDG1589	GPS	
Hole Number	CPT-05	Date and Time	7/26/2023 1:04:56 PM		
Equilized Pressure	4.9	EST GW Depth During Test	12.5		



DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

CPT-05 BAGG Engineering SMC-HMB Farmworker Housing project



Hammer to Rod String Distance (ft): 2.67
* = Not Determined

COMMENT:

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

APPENDIX B

2021 Boring & CPT Logs
(B-1 through B-5; CPT-1 & CPT-2)

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BORING LOG

Boring No. B-1
Page 1 of 1

JOB NAME: Proposed Corporation Yard Renovation, City of Half Moon Bay
JOB NO.: HALFM-21-01
CLIENT: City of Half Moon Bay
DATE DRILLED: 9/29/2021
LOCATION: 880 Stone Pine Rd, Half Moon Bay
ELEVATION: 86± feet
DRILLER: West Coast Exploration Inc.
LOGGED BY: JL
DRILL METHOD: Truck-Mounted Drilling Rig - 4½" Diam. Continuous Flight Augers

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0			Approx. 6" topsoil over screen	
								CL	SANDY LEAN CLAY: dark brown, very stiff, dry to moist, well-graded sand, few organic	
DSX	320	26.9	480	15.8	88		14 18 20			
						3			... brown to dark brown with orange-brown specks, very stiff, moist, increased sand content, some medium to coarse sand	Swell=0.2%
DSX	500	13.6	1050	8.8	119		12 16 16			
DSX	2000	15.2	1630	9.4	112					
						6			... contains pockets of wet medium-grained sand	
						9			... brown, stiff, moist to wet, fine to medium sand, few coarse sand, contains lense of sandy silt	
DS	1100	NAT	920	19.9	107		5 8 11			
						12			... lense of medium to coarse sand	
									... lense of sandy silt	
				21.2			8	SC	CLAYEY SAND: dark brown, medium dense, wet, medium to coarse sand	Fines=31% LL=28, PI=9
DS	1800	NAT	1630	18.9	101		12			
DS	3500	NAT	2720	19.5	104	15	20			
									The boring was terminated at approximately 15 feet bgs.	
									Groundwater was not encountered in the boring.	
						18			The borehole was backfilled with cement grout.	

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BORING LOG

JOB NAME: Proposed Corporation Yard Renovation, City of Half Moon Bay
JOB NO.: HALFM-21-01
CLIENT: City of Half Moon Bay
DATE DRILLED: 9/29/2021
LOCATION: 880 Stone Pine Rd, Half Moon Bay
ELEVATION: 86± feet
DRILLER: West Coast Exploration Inc.
LOGGED BY: JL
DRILL METHOD: Truck-Mounted Drilling Rig - 4½" Diam. Continuous Flight Augers

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0			Approx. 2" gravel over 1" sand	
							9	CL	SANDY LEAN CLAY: dark gray, very stiff, moist, well-graded sand, reworked in the upper approx. 1'	
DSX	320	20.3	790	2.3	122		11			Swell=0.5%
DSX	1500	20.7	1500	18.8	102		15		... dark brown at about 2'	
						3				
				25.4			5			
							9		... brown, stiff, moist, fine sand, few medium sand	
							10			
						6				
DS	1000	NAT	1340	30.8	91		10		... mottled brown and orange-brown, very stiff, moist, fine sand, trace medium sand	
						9	12			
							15			
						12				
									... lense of wet medium-grained sand	
							14			
DS	3000	NAT	1400	22.7	104		14		... brown, medium stiff, moist to wet	
							26			
						15			... pockets of wet well-graded sand with fine gravel	
								SC	CLAYEY SAND: brown, medium dense to dense, wet, fine to medium sand, few coarse sand	
						18				
							9			

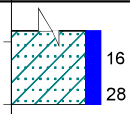
DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BYGG ENGINEERS

BORING LOG

Boring No. B-2
Page 2 of 2

JOB NAME: Proposed Corporation Yard Renovation, City of Half Moon Bay *JOB NO.:* HALFM-21-01

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
DS	2500	NAT	1790	23.1	102					Fines=37%
						21			The boring was terminated at approximately 20 feet bgs. Groundwater was not encountered in the boring. The borehole was backfilled with cement grout.	
						24				
						27				
						30				
						33				
						36				
						39				

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BORING LOG

JOB NAME: Proposed Corporation Yard Renovation, City of Half Moon Bay
JOB NO.: HALFM-21-01
CLIENT: City of Half Moon Bay
DATE DRILLED: 9/29/2021
LOCATION: 880 Stone Pine Rd, Half Moon Bay
ELEVATION: 84± feet
DRILLER: West Coast Exploration Inc.
LOGGED BY: JL
DRILL METHOD: Truck-Mounted Drilling Rig - 4½" Diam. Continuous Flight Augers

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0			Approx. 6" topsoil over screen	
DS	320	NAT	2720	12.9	107		11	CH	SANDY FAT CLAY: dark gray to dark brown, hard, moist, well-graded sand, few organic	LL=52, PI=25
DS	1500	NAT	3130	16.0	97		16			
							17			
						3		CL	SANDY LEAN CLAY: dark brown, hard, moist, some medium sand, few fine and coarse sand	
DS	400	NAT	2250	14.4	112		12			Fines=59%
							16			
							25			
						6				
				30.3	91		10		... mottled brown and orange-brown, very stiff, moist, fine sand, few medium to coarse sand	
						9	17			
							21			
						12			... mottled brown and orange-brown with dark gray specks, stiff, moist, moderately plastic	
DS	1700	NAT	1160	27.0	98		9			
							10			
						15	18		... lense of sandy silt	
						18				
							10			

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BYGG ENGINEERS

BORING LOG

Boring No. B-3
Page 2 of 2

JOB NAME: Proposed Corporation Yard Renovation, City of Half Moon Bay *JOB NO.:* HALFM-21-01

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
				30.6	92		16 20		... brown, stiff, moist to wet	
						21		CH	FAT CLAY with SAND: dark olive-gray with trace dark gray, medium stiff, moist, few fine sand	
DS	3000	NAT	1340	23.9	104	24	7 8 10		... stiff, moist, increased fine sand content	
						27			The boring was terminated at approximately 25 feet bgs. Groundwater was not encountered in the boring. The borehole was backfilled with cement grout.	
						30				
						33				
						36				
						39				

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BORING LOG

Boring No. B-4
Page 1 of 1

JOB NAME: Proposed Corporation Yard Renovation, City of Half Moon Bay
JOB NO.: HALFM-21-01
CLIENT: City of Half Moon Bay
DATE DRILLED: 9/29/2021
LOCATION: 880 Stone Pine Rd, Half Moon Bay
ELEVATION: 83± feet
DRILLER: West Coast Exploration Inc.
LOGGED BY: JL
DRILL METHOD: Truck-Mounted Drilling Rig - 4½" Diam. Continuous Flight Augers

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0			Approx. 6" topsoil over screen	
DSX	320	21.9	1210	16.1	108		11 18 26	CH	SANDY FAT CLAY: dark gray-brown, hard, dry to moist, well-graded sand, few fine gravel, trace organic	Swell=4.6%
						3		CL	SANDY LEAN CLAY: dark brown, very stiff, dry to moist, some well-graded sand, trace fine gravel	
				13.5	115		15 18 22			
						6			The boring was terminated at approximately 5 feet bgs. Groundwater was not encountered in the boring. The borehole was backfilled with cement grout.	
						9				
						12				
						15				
						18				

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BORING LOG

Boring No. B-5
Page 1 of 1

JOB NAME: Proposed Corporation Yard Renovation, City of Half Moon Bay
JOB NO.: HALFM-21-01
CLIENT: City of Half Moon Bay
DATE DRILLED: 9/29/2021
LOCATION: 880 Stone Pine Rd, Half Moon Bay
ELEVATION: 85± feet
DRILLER: West Coast Exploration Inc.
LOGGED BY: JL
DRILL METHOD: Truck-Mounted Drilling Rig - 4½" Diam. Continuous Flight Augers

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0			Approx. 6" topsoil	
DS	320	NAT	420	14.4	85		12 21 23	CL	SANDY LEAN CLAY: dark gray, very stiff, dry to moist, well-graded sand, trace organic	LL=31, PI=12
DS	400	NAT	740	13.2	107	3	7		... dark brown, stiff, moist, increased sand content, well-graded sand, trace organic	
DS	2000	NAT	1710	13.2	107		8 8			
						6			The boring was terminated at approximately 5 feet bgs. Groundwater was not encountered in the boring. The borehole was backfilled with cement grout.	
						9				
						12				
						15				
						18				

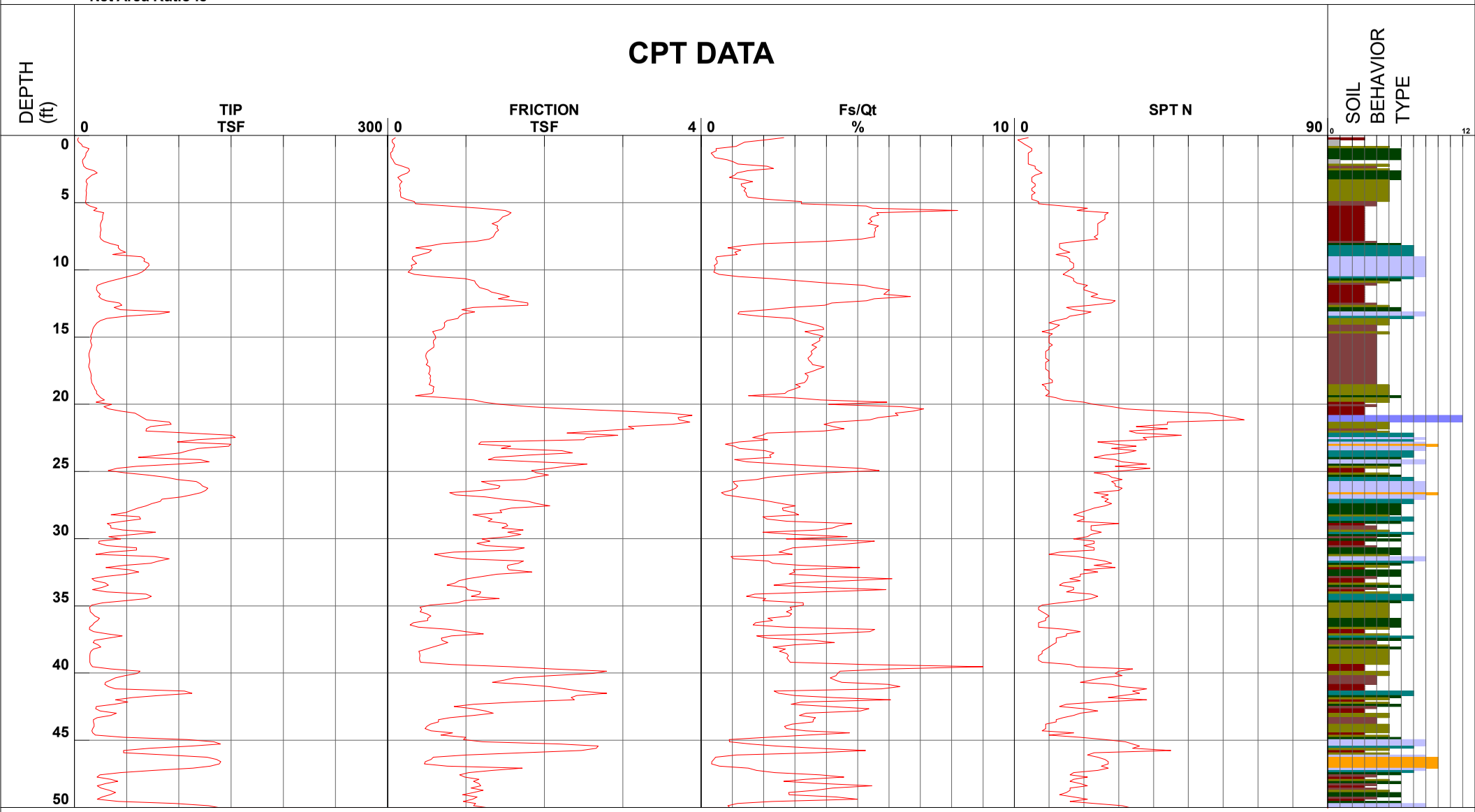
DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BAGG Engineers

Project	Corporation Yard Improvements Project	Operator	JM-IY	Filename	SDF(359).cpt
Job Number	HALFM-21-01	Cone Number	DPG1556	GPS	
Hole Number	CPT-01	Date and Time	10/8/2021 2:00:06 PM	Maximum Depth	50.69 ft
EST GW Depth During Test		19.00 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm squared

*Soil behavior type and SPT based on data from UBC-1983

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Corporation Yard Improvements Project

Project ID: BAGG Engineers
Data File: SDF(359).cpt
CPT Date: 10/8/2021 2:00:06 PM
GW During Test: 18 ft

Sounding ID: CPT-01
Project No: HALFM-21-01
Cone/Rig: DPG1556

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
0.33	2.8	4.5	-	2.8	0.1	0.3	2.1	3	silty CLAY to CLAY	115	1.5	3	2	2	-	-	0.2	9.9	73	0.005	3.21	15
0.49	4.1	6.6	-	4.1	0.1	0.1	1.4	3	silty CLAY to CLAY	115	1.5	4	3	2	-	-	0.3	9.9	57	0.005	2.98	15
0.66	6.8	10.9	-	6.8	0.1	0.3	1.2	4	clayy SILT to silty CLAY	115	2.0	5	3	3	-	-	0.5	9.9	44	0.070	2.77	15
0.82	7.8	12.5	-	7.8	0.1	0.2	1.1	4	clayy SILT to silty CLAY	115	2.0	6	4	3	-	-	0.5	9.9	40	0.070	2.70	15
0.98	13.9	22.4	43.9	13.9	0.1	0.2	0.5	5	silty SAND to sandy SILT	120	3.0	7	5	5	18	45	-	-	23	0.200	2.31	16
1.15	12.8	20.6	43.0	12.8	0.1	0.7	0.5	5	silty SAND to sandy SILT	120	3.0	7	4	5	15	44	-	-	24	0.200	2.34	16
1.31	11.0	17.7	37.1	11.1	0.0	0.6	0.3	5	silty SAND to sandy SILT	120	3.0	6	4	4	10	42	-	-	24	0.200	2.34	16
1.48	10.8	17.4	38.5	10.8	0.0	0.4	0.4	5	silty SAND to sandy SILT	120	3.0	6	4	4	9	42	-	-	25	0.200	2.38	16
1.64	9.7	15.5	38.8	9.7	0.0	0.6	0.4	5	silty SAND to sandy SILT	120	3.0	5	3	4	6	41	-	-	28	0.200	2.44	16
1.80	8.0	12.8	-	8.0	0.1	0.4	0.8	4	clayy SILT to silty CLAY	115	2.0	6	4	3	-	-	0.6	9.9	37	0.070	2.63	15
1.97	7.6	12.2	-	7.6	0.1	0.4	1.0	4	clayy SILT to silty CLAY	115	2.0	6	4	3	-	-	0.5	9.9	40	0.070	2.69	15
2.13	8.3	13.3	-	8.3	0.1	0.4	1.2	4	clayy SILT to silty CLAY	115	2.0	7	4	4	-	-	0.6	9.9	40	0.070	2.69	15
2.30	8.9	14.3	-	8.9	0.2	0.5	2.1	4	clayy SILT to silty CLAY	115	2.0	7	4	4	-	-	0.6	9.9	46	0.070	2.79	15
2.46	11.6	18.6	-	11.6	0.3	0.5	2.3	4	clayy SILT to silty CLAY	115	2.0	9	6	5	-	-	0.8	9.9	41	0.070	2.72	15
2.62	18.8	30.2	74.0	18.8	0.3	0.7	1.5	5	silty SAND to sandy SILT	120	3.0	10	6	7	27	42	-	-	28	0.200	2.43	16
2.79	21.8	35.0	70.1	21.8	0.3	1.2	1.2	5	silty SAND to sandy SILT	120	3.0	12	7	8	32	42	-	-	23	0.200	2.32	16
2.95	16.6	26.6	61.7	16.6	0.2	0.6	1.1	5	silty SAND to sandy SILT	120	3.0	9	6	6	23	40	-	-	26	0.200	2.40	16
3.12	14.1	22.7	55.1	14.2	0.1	0.6	0.9	5	silty SAND to sandy SILT	120	3.0	8	5	5	18	39	-	-	28	0.200	2.43	16
3.28	11.5	18.4	60.8	11.5	0.2	0.6	1.4	4	clayy SILT to silty CLAY	115	2.0	9	6	5	-	-	0.8	9.9	35	0.070	2.60	15
3.45	11.1	17.8	-	11.1	0.2	0.4	1.7	4	clayy SILT to silty CLAY	115	2.0	9	6	5	-	-	0.8	9.9	38	0.070	2.66	15
3.61	12.3	19.8	60.7	12.3	0.2	0.2	1.3	4	clayy SILT to silty CLAY	115	2.0	10	6	5	-	-	0.9	9.9	33	0.070	2.56	15
3.77	11.7	18.8	60.3	11.7	0.2	0.3	1.3	4	clayy SILT to silty CLAY	115	2.0	9	6	5	-	-	0.8	9.9	34	0.070	2.58	15
3.94	11.4	18.3	-	11.4	0.2	0.3	1.5	4	clayy SILT to silty CLAY	115	2.0	9	6	5	-	-	0.8	9.9	36	0.070	2.61	15
4.10	11.2	17.9	-	11.2	0.2	0.3	1.4	4	clayy SILT to silty CLAY	115	2.0	9	6	5	-	-	0.8	9.9	36	0.070	2.61	15
4.27	11.5	18.4	-	11.5	0.2	0.4	1.5	4	clayy SILT to silty CLAY	115	2.0	9	6	5	-	-	0.8	9.9	36	0.070	2.61	15
4.43	11.4	18.2	-	11.4	0.2	0.4	1.5	4	clayy SILT to silty CLAY	115	2.0	9	6	5	-	-	0.8	9.9	36	0.070	2.62	15
4.59	11.1	17.9	-	11.2	0.2	0.2	1.5	4	clayy SILT to silty CLAY	115	2.0	9	6	5	-	-	0.8	9.9	37	0.070	2.64	15
4.76	11.2	17.9	-	11.2	0.2	0.2	2.2	4	clayy SILT to silty CLAY	115	2.0	9	6	5	-	-	0.8	9.9	41	0.070	2.72	15
4.92	10.6	17.0	-	10.6	0.3	0.1	3.3	3	silty CLAY to CLAY	115	1.5	11	7	5	-	-	0.7	9.9	49	0.005	2.84	15
5.09	11.0	17.7	-	11.0	0.4	0.5	3.3	3	silty CLAY to CLAY	115	1.5	12	7	5	-	-	0.8	9.9	48	0.005	2.83	15
5.25	14.6	23.5	-	14.7	0.8	0.9	5.4	3	silty CLAY to CLAY	115	1.5	16	10	7	-	-	1.0	9.9	50	0.005	2.87	15
5.41	21.7	34.8	-	21.7	1.2	0.8	5.6	3	silty CLAY to CLAY	115	1.5	23	14	10	-	-	1.5	9.9	44	0.005	2.76	15
5.58	18.3	29.3	-	18.3	1.5	0.5	8.3	3	silty CLAY to CLAY	115	1.5	20	12	9	-	-	1.3	9.9	54	0.005	2.94	15
5.74	28.1	45.1	-	28.1	1.6	0.6	5.7	3	silty CLAY to CLAY	115	1.5	30	19	12	-	-	2.0	9.9	40	0.005	2.69	15
5.91	27.1	43.4	-	27.1	1.5	0.1	5.7	3	silty CLAY to CLAY	115	1.5	29	18	12	-	-	1.9	9.9	41	0.005	2.70	15
6.07	26.9	43.2	-	26.9	1.5	-0.3	5.5	3	silty CLAY to CLAY	115	1.5	29	18	12	-	-	1.9	9.9	40	0.005	2.69	15
6.23	26.8	43.0	-	26.8	1.4	-0.6	5.5	3	silty CLAY to CLAY	115	1.5	29	18	11	-	-	1.9	9.9	40	0.005	2.69	15
6.40	25.9	41.5	-	25.8	1.4	-2.3	5.5	3	silty CLAY to CLAY	115	1.5	28	17	11	-	-	1.8	9.9	41	0.005	2.70	15
6.56	25.0	40.1	-	25.0	1.3	-1.4	5.4	3	silty CLAY to CLAY	115	1.5	27	17	11	-	-	1.7	9.9	41	0.005	2.71	15
6.73	24.8	39.7	-	24.7	1.4	-0.9	5.8	3	silty CLAY to CLAY	115	1.5	26	17	11	-	-	1.7	9.9	42	0.005	2.73	15
6.89	25.1	40.3	-	25.1	1.4	-0.5	5.6	3	silty CLAY to CLAY	115	1.5	27	17	11	-	-	1.7	9.9	41	0.005	2.72	15
7.05	25.4	40.7	-	25.4	1.4	0.1	5.7	3	silty CLAY to CLAY	115	1.5	27	17	11	-	-	1.8	9.9	41	0.005	2.72	15
7.22	24.9	39.9	-	24.9	1.4	1.5	5.6	3	silty CLAY to CLAY	115	1.5	27	17	11	-	-	1.7	9.9	42	0.005	2.72	15
7.38	24.7	39.6	-	24.7	1.4	1.1	5.6	3	silty CLAY to CLAY	115	1.5	26	16	11	-	-	1.7	9.9	42	0.005	2.72	15
7.55	24.3	39.0	-	24.3	1.3	1.7	5.6	3	silty CLAY to CLAY	115	1.5	26	16	11	-	-	1.7	9.9	42	0.005	2.73	15
7.71	25.3	40.6	-	25.3	1.3	2.2	5.2	3	silty CLAY to CLAY	115	1.5	27	17	11	-	-	1.8	9.9	40	0.005	2.69	15
7.87	28.2	45.2	145.1	28.2	1.1	0.0	4.1	4	clayy SILT to silty CLAY	115	2.0	23	14	11	-	-	2.0	9.9	34	0.070	2.58	15
8.04	34.4	49.0	104.8	34.4	0.7	-1.0	2.1	5	silty SAND to sandy SILT	120	3.0	16	11	11	43	39	-	-	25	0.200	2.36	16
8.20	42.1	59.3	94.8	42.1	0.6	0.1	1.3	5	silty SAND to sandy SILT	120	3.0	20	14	12	50	40	-	-	18	0.200	2.17	16
8.37	41.9	58.4	81.4	41.9	0.4	0.2	0.9	5	silty SAND to sandy SILT	120	3.0	19	14	12	49	40	-	-	15	0.200	2.06	16
8.53	44.1	60.8	94.4	44.1	0.6	0.2	1.3	5	silty SAND to sandy SILT	120	3.0	20	15	13	51	40	-	-	17	0.200	2.15	16
8.69	49.1	67.0	94.4	49.1	0.5	0.7	1.1	5	silty SAND to sandy SILT	120	3.0	22	16	14	54	40	-	-	15	0.200	2.07	16
8.86	36.6	49.6	82.5	36.7	0.4	0.6	1.2	5	silty SAND to sandy SILT	120	3.0	17	12	11	44	39	-	-	19	0.200	2.20	16
9.02	64.0	85.7	94.7	64.0	0.3	0.4	0.5	6	clean SAND to silty SAND	125	5.0	17	13	16	62	42	-	-	8	0.350	1.80	16
9.19	67.1	89.1	96.3	67.1	0.3	0.3	0.5	6	clean SAND to silty SAND	125	5.0	18	13	16	63	42	-	-	7	0.350	1.76	16
9.35	66.6	87.6	96.5	66.7	0.3	0.4	0.5	6	clean SAND to silty SAND	125	5.0	18	13	16	63	42	-	-	8	0.350	1.79	16
9.51	71.1	92.7	100.9	71.1	0.4	0.5	0.5	6	clean SAND to silty SAND	125	5.0	19	14	17	64	42	-	-	8	0.350	1.77	16
9.68	71.5	92.4	97.6	71.6	0.3	0.6	0.4	6	clean SAND to silty SAND	125	5.0	18	14	16	64	42	-	-	7	0.350	1.73	16
9.84	69.2	88.6	95.6	69.2	0.3	0.6	0.5	6	clean SAND to silty SAND	125	5.0	18	14	16	63	41	-	-	7	0.350	1.76	16
10.01	67.4	85.4	92.5	67.4	0.3	0.6	0.4	6	clean SAND to silty SAND	125	5.0	17	13	15	62	41	-	-	7	0.350	1.77	16
10.17	64.4	81.0	88.0	64.4	0.3	0.5	0.4	6	clean SAND to silty SAND	125	5.0	16	13	15	60	41	-	-	8	0.350	1.77	16
10.34	59.5	74.2	87.0	59.5	0.3	0.4	0.6	6	clean SAND to silty SAND	125	5.0	15	12	14	57	40	-	-	10	0.350	1.88	16
10.50	51.0	63.0	94.6	51.0	0.6	0.4	1.2	5	silty SAND to sandy SILT	120	3.0	21	17	13	52	39	-	-	17	0.200	2.12	16
10.66	43.5	53.4	114.6	43.5	1.0	0.4	2.3	5	silty SAND to sandy SILT	120	3.0	18	15	12	46	38	-	-	25	0.200	2.36	16
10.83	35.1	42.7	124.8	35.1	1.1	0.8	3.2	4	clayy SILT to silty CLAY	115	2.0	21	18	11	-	-	2.4	9.9	32	0.070	2.53	15
10.99	27.6	42.7	-	27.6	1.1	1.4	4.2	4	clayy SILT to silty CLAY	115	2.0	21	14	11	-	-	1.9	9.9	36	0.070	2.61	15
11.16	22.1	33.6	-	22.2	1.1	7.2	5.4	3	silty CLAY to CLAY	115	1.5	22	15	9	-	-	1.5	9.9	44	0.005	2.76	15
11.32	21.2	31.9	-	21.4	1.2	8.5	5.7	3	silty CLAY to CLAY	115	1.5	21	14	9	-	-	1.5	9.9	46	0.005	2.80	15
11.48	21.2	31.5	-	21.4	1.3	9.1	6.2	3	silty CLAY to CLAY	115	1.5	21	14	9	-	-	1.5	9.9	48	0.005	2.83	15
11.65	22.4	32.7	-	22.6	1.3	10.2	6.1	3	silty CLAY to CLAY	115	1.5	22	15	9	-	-	1.5	9.9	47	0.005	2.81	15
11.81	24.8	35.8	-	25.0	1.4	9.7	6.0	3	silty CLAY to CLAY	115	1.5	24	17	10	-	-	1.7	9.9	45	0.005	2.78	15
11.98	23.2	33.0	-	23.4	1.6	9.9	6.9	3	silty CLAY to CLAY	115	1.5	22	15	10	-	-	1.6	9.9	49	0.005	2.85	15
12.14	25.6	35.9	-	25.8	1.4	12.8	5.7	3	silty CLAY to CLAY	115	1.5	24	17	10	-	-	1.8	9.9	44	0.005	2.76	15
12.30	30.4	42.1	-	30.7	1.6	15.9	5.4	3	silty CLAY to CLAY	115	1.5	28	20	11	-	-	2.1	9.9	40	0.005	2.69	15
12.47	42.9	48.7	154.0	43.3	1.8	21.0	4.2	4	clayy SILT to silty CLAY	115	2.0	24	21	12	-	-	3.0	9.9	34	0.070	2.57	15
12.63	45.3	51.2	152.5	45.6	1.8	11.8	4.0	4	clayy SILT to silty CLAY	115	2.0	26	23	13	-	-	3.2	9.9	33	0.070	2.54	15
12.80	38.0	42.6	118.5	38.4	1.1	21.9	2.9	4	clayy SILT to silty CLAY	115	2.0	21	19	10	-	-	2.6	9.9	31	0.070	2.50	15
12.96	44.1	49.1	107.9	45.0	0.9	46.9	2.2	5	silty SAND to sandy SILT	120	3.0	16	15	11	44	37	-	-	25	0.200	2.37	16
13.12	91.1	100.9	127.3	91.5	1.1	16.6	1.2	6	clean SAND to silty SAND	125	5.0	20	18	20	67	41	-	-	12	0.350	1.97	16
13.29	81.5	89.6	116.4	81.6	1.0	3.9	1.2	6	clean SAND to silty SAND	125	5.0	18	16	18	63	41	-	-	13	0.350	2.00	16
13.45	49.4	53.9	104.8	49.4	0.9	2.7	1.9	5	silty SAND to sandy SILT	120	3.0	18	16	12	47	38	-	-	22	0.200	2.30	16
13.62	30.9	33.6	109.1	31.0	0.9	5.2	3.0	4	clayy SILT to silty CLAY	115	2.0	17	15	9	-	-	2.1	9.9	35	0.070	2.59	15
13.78	24.7	30.5	-	24.9	0.8	9.2	3.2	4	clayy SILT to silty CLAY	115	2.0	15	12	8	-	-	1.7	9.7	37	0.070	2.64	15
13.94	21.7	26.5	-	21.9	0.7	10.4	3.5	4	clayy SILT to silty CLAY	115	2.0	13	11	7	-	-	1.5	8.4	41	0.070	2.71	15
14.11	19.8	24.0	-	20.0	0.7	9.1	3.8	4	clayy SILT to silty CLAY	115	2.0	12	10	7	-	-	1.3	7.6	45	0.070	2.77	15
14.27	18.5	22.1	-	18.7	0.7	9.5	4.1	3	silty CLAY to CLAY	115	1.5	15	12	6	-	-	1.2	7.0	47	0.005	2.82	15
14.44	17.6	20.8	-	17.8	0.7	10.2	4.1	3	silty CLAY to CLAY	115	1.5	14	12	6	-	-	1.2	6.5	49	0.005	2.84	15
14.60	17.3	20.2	-	17.5	0.6	11.5	3.5	3	silty CLAY to CLAY	115	1.5	13	12	6	-	-	1.2	6.3	46	0.005	2.81	15
14.76	16.5	19.1	-	16.7	0.6	10.5	3.8	3	silty CLAY to CLAY	115	1.5	13	11	6	-	-	1.1	6.0	49	0.005	2.85	15
14.93	15.6	17.9	-	15.9	0.6	11.5	4.1	3	silty CLAY to CLAY	115	1.5	12	10	5	-	-	1.0	5.6	52	0.005	2.90	15
15.09	16.3	18.4	-	16.5	0.6	11.1	4.0	3	silty CLAY to CLAY	115	1.5	12	11	5	-	-	1.1	5.7	51	0.005	2.88	15
15.26	15.4	17.2	-	15.6	0.6	11.7	4.0	3	silty CLAY to CLAY	115	1.5	11	10	5	-	-	1.0	5.4	52	0.005	2.90	15
15.42	15.8	17.5	-	16.1	0.6	11.8	3.9	3	silty CLAY to CLAY	115	1.5	12	11	5	-	-	1.1	5.4	51	0.005	2.89	15

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Corporation Yard Improvements Project

Project ID: BAGG Engineers
Data File: SDF(359).cpt
CPT Date: 10/8/2021 2:00:06 PM
GW During Test: 18 ft

Sounding ID: CPT-01
Project No: HALFM-21-01
Cone/Rig: DPG1556

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
15.58	16.7	18.3	-	16.9	0.6	11.0	3.7	3	silty CLAY to CLAY	115	1.5	12	11	5	-	-	1.1	5.7	50	0.005	2.86	15
15.75	15.9	17.3	-	16.1	0.6	7.3	3.9	3	silty CLAY to CLAY	115	1.5	12	11	5	-	-	1.1	5.4	52	0.005	2.90	15
15.91	15.3	16.4	-	15.4	0.5	6.4	3.8	3	silty CLAY to CLAY	115	1.5	11	10	5	-	-	1.0	5.1	53	0.005	2.91	15
16.08	14.6	15.5	-	14.7	0.5	7.2	3.8	3	silty CLAY to CLAY	115	1.5	10	10	5	-	-	1.0	4.8	54	0.005	2.92	15
16.24	13.9	14.6	-	14.1	0.5	8.8	3.8	3	silty CLAY to CLAY	115	1.5	10	9	5	-	-	0.9	4.5	55	0.005	2.95	15
16.40	13.9	14.5	-	14.1	0.5	9.7	3.7	3	silty CLAY to CLAY	115	1.5	10	9	4	-	-	0.9	4.4	55	0.005	2.95	15
16.57	14.3	14.8	-	14.5	0.5	10.1	3.7	3	silty CLAY to CLAY	115	1.5	10	10	5	-	-	0.9	4.6	54	0.005	2.93	15
16.73	14.7	15.1	-	15.0	0.5	11.0	3.7	3	silty CLAY to CLAY	115	1.5	10	10	5	-	-	1.0	4.6	54	0.005	2.93	15
16.90	14.6	14.7	-	14.8	0.5	10.6	3.8	3	silty CLAY to CLAY	115	1.5	10	10	5	-	-	1.0	4.5	55	0.005	2.94	15
17.06	13.8	13.8	-	14.0	0.5	11.0	3.8	3	silty CLAY to CLAY	115	1.5	9	9	4	-	-	0.9	4.2	57	0.005	2.97	15
17.23	13.7	13.6	-	13.9	0.5	11.7	4.2	3	silty CLAY to CLAY	115	1.5	9	9	4	-	-	0.9	4.1	59	0.005	3.01	15
17.39	14.4	14.2	-	14.7	0.5	13.3	4.0	3	silty CLAY to CLAY	115	1.5	9	10	4	-	-	0.9	4.4	57	0.005	2.97	15
17.55	15.1	14.7	-	15.4	0.5	13.5	3.8	3	silty CLAY to CLAY	115	1.5	10	10	5	-	-	1.0	4.5	55	0.005	2.95	15
17.72	15.8	15.2	-	16.0	0.5	14.7	3.5	3	silty CLAY to CLAY	115	1.5	10	11	5	-	-	1.0	4.7	53	0.005	2.92	15
17.88	16.1	15.4	-	16.4	0.5	15.8	3.7	3	silty CLAY to CLAY	115	1.5	10	11	5	-	-	1.1	4.7	53	0.005	2.92	15
18.05	15.9	15.1	-	16.2	0.5	17.5	3.6	3	silty CLAY to CLAY	115	1.5	10	11	5	-	-	1.0	4.7	54	0.005	2.93	15
18.21	16.3	15.5	-	16.7	0.5	18.4	3.6	3	silty CLAY to CLAY	115	1.5	10	11	5	-	-	1.1	4.8	53	0.005	2.91	15
18.37	16.4	15.5	-	16.7	0.5	17.9	3.5	3	silty CLAY to CLAY	115	1.5	10	11	5	-	-	1.1	4.8	53	0.005	2.91	15
18.54	17.4	16.4	-	17.8	0.5	19.4	3.2	3	silty CLAY to CLAY	115	1.5	11	12	5	-	-	1.2	5.1	50	0.005	2.86	15
18.70	18.7	17.5	-	19.1	0.6	20.7	3.4	3	silty CLAY to CLAY	115	1.5	12	12	5	-	-	1.2	5.4	49	0.005	2.85	15
18.87	19.5	18.2	-	19.9	0.6	23.1	3.2	3	silty CLAY to CLAY	115	1.5	12	13	5	-	-	1.3	5.7	47	0.005	2.82	15
19.03	21.2	19.7	-	21.6	0.6	24.5	2.9	4	clayy SILT to silty CLAY	115	2.0	10	11	5	-	-	1.4	6.2	44	0.070	2.77	15
19.19	21.1	19.6	-	21.7	0.6	30.2	2.8	4	clayy SILT to silty CLAY	115	2.0	10	11	5	-	-	1.4	6.1	44	0.070	2.76	15
19.36	23.4	21.8	69.9	24.0	0.4	32.7	1.6	4	clayy SILT to silty CLAY	115	2.0	11	12	6	-	-	1.6	6.8	34	0.070	2.58	15
19.52	25.2	23.2	-	26.0	0.7	37.7	3.1	4	clayy SILT to silty CLAY	115	2.0	12	13	6	-	-	1.7	7.3	42	0.070	2.73	15
19.69	28.8	26.3	-	29.4	1.1	34.6	4.0	4	clayy SILT to silty CLAY	115	2.0	13	14	7	-	-	2.0	8.3	43	0.070	2.75	15
19.85	20.7	18.9	-	21.4	1.2	33.2	6.3	3	silty CLAY to CLAY	115	1.5	13	14	6	-	-	1.4	5.9	58	0.005	3.00	15
20.01	35.5	32.2	-	36.2	1.4	35.8	4.2	4	clayy SILT to silty CLAY	115	2.0	16	18	9	-	-	2.4	9.9	41	0.070	2.70	15
20.18	28.2	25.5	-	29.4	1.8	60.8	6.7	3	silty CLAY to CLAY	115	1.5	17	19	8	-	-	1.9	8.1	53	0.005	2.92	15
20.34	32.8	29.6	-	34.1	2.3	64.2	7.4	3	silty CLAY to CLAY	115	1.5	20	22	9	-	-	2.2	9.4	52	0.005	2.90	15
20.51	44.4	39.9	-	45.6	3.0	61.3	7.0	3	silty CLAY to CLAY	115	1.5	27	30	11	-	-	3.1	9.9	45	0.005	2.79	15
20.67	57.8	51.7	-	58.1	3.6	13.1	6.3	3	silty CLAY to CLAY	115	1.5	34	39	14	-	-	4.0	9.9	40	0.005	2.68	15
20.83	61.7	55.0	-	61.8	3.9	4.6	6.4	3	silty CLAY to CLAY	115	1.5	37	41	15	-	-	4.3	9.9	39	0.005	2.67	15
21.00	65.5	58.1	-	65.7	3.7	8.9	5.8	4	clayy SILT to silty CLAY	115	2.0	29	33	15	-	-	4.5	9.9	36	0.070	2.62	15
21.16	69.0	63.1	202.1	69.3	3.7	12.2	5.5	4	clayy SILT to silty CLAY	115	2.0	32	35	16	-	-	4.8	9.9	34	0.070	2.58	15
21.33	91.0	82.9	198.9	91.1	3.9	8.5	4.3	4	clayy SILT to silty CLAY	115	2.0	41	45	19	-	-	6.3	9.9	27	0.070	2.42	15
21.49	92.6	84.3	191.6	92.6	3.6	-0.5	4.0	4	clayy SILT to silty CLAY	115	2.0	42	46	19	-	-	6.5	9.9	26	0.070	2.39	15
21.65	73.0	66.3	178.3	73.0	3.1	-1.2	4.3	4	clayy SILT to silty CLAY	115	2.0	33	37	16	-	-	5.1	9.9	30	0.070	2.48	15
21.82	68.8	62.4	182.1	68.9	3.1	6.1	4.6	4	clayy SILT to silty CLAY	115	2.0	31	34	15	-	-	4.8	9.9	32	0.070	2.53	15
21.98	68.4	61.8	165.8	68.5	2.7	7.3	4.0	4	clayy SILT to silty CLAY	115	2.0	31	34	15	-	-	4.7	9.9	30	0.070	2.48	15
22.15	108.8	98.2	151.3	109.0	2.3	12.6	2.1	5	silty SAND to sandy SILT	120	3.0	33	36	20	66	40	-	-	17	0.200	2.14	16
22.31	150.3	135.5	180.4	150.4	2.9	2.5	2.0	5	silty SAND to sandy SILT	120	3.0	45	50	27	77	42	-	-	14	0.200	2.02	16
22.47	154.1	138.6	173.7	154.2	2.5	2.5	1.7	6	clean SAND to silty SAND	125	5.0	28	31	27	78	42	-	-	12	0.350	1.96	16
22.64	117.8	105.7	158.7	117.8	2.5	2.8	2.1	5	silty SAND to sandy SILT	120	3.0	35	39	22	69	41	-	-	17	0.200	2.12	16
22.80	98.6	88.3	116.3	99.0	1.2	21.1	1.2	6	clean SAND to silty SAND	125	5.0	18	20	17	63	40	-	-	13	0.350	2.01	16
22.97	149.5	133.5	143.0	149.6	1.2	6.9	0.8	6	clean SAND to silty SAND	125	5.0	27	30	24	77	42	-	-	7	0.350	1.75	16
23.13	147.9	131.9	150.2	148.0	1.6	3.5	1.1	6	clean SAND to silty SAND	125	5.0	26	30	24	76	42	-	-	9	0.350	1.84	16
23.30	118.2	105.2	131.5	118.3	1.4	2.2	1.2	6	clean SAND to silty SAND	125	5.0	21	24	20	69	40	-	-	12	0.350	1.96	16
23.46	108.9	96.7	148.1	109.0	2.2	3.8	2.1	5	silty SAND to sandy SILT	120	3.0	32	36	20	66	40	-	-	17	0.200	2.14	16
23.62	101.3	89.8	150.4	101.4	2.4	2.9	2.4	5	silty SAND to sandy SILT	120	3.0	30	34	19	63	40	-	-	19	0.200	2.20	16
23.79	81.2	71.8	130.3	81.3	1.8	1.7	2.2	5	silty SAND to sandy SILT	120	3.0	24	27	16	56	38	-	-	21	0.200	2.26	16
23.95	61.1	54.0	115.6	61.2	1.4	3.7	2.3	5	silty SAND to sandy SILT	120	3.0	18	20	12	47	37	-	-	25	0.200	2.36	16
24.12	120.2	105.9	127.6	120.5	1.3	15.2	1.1	6	clean SAND to silty SAND	125	5.0	21	24	20	69	40	-	-	11	0.350	1.92	16
24.28	129.0	113.4	145.7	129.1	1.9	3.0	1.5	6	clean SAND to silty SAND	125	5.0	23	26	22	71	41	-	-	13	0.350	1.99	16
24.44	99.4	87.2	155.1	99.4	2.5	2.8	2.6	5	silty SAND to sandy SILT	120	3.0	29	33	19	62	39	-	-	20	0.200	2.24	16
24.61	59.6	52.2	151.9	59.7	2.3	2.8	3.9	4	clayy SILT to silty CLAY	115	2.0	26	30	13	-	-	4.1	9.9	32	0.070	2.53	15
24.77	40.7	33.0	-	40.9	2.1	8.3	5.3	3	silty CLAY to CLAY	115	1.5	22	27	9	-	-	2.8	9.9	44	0.005	2.77	15
24.94	32.3	26.1	-	33.2	1.8	41.7	6.0	3	silty CLAY to CLAY	115	1.5	17	22	8	-	-	2.2	8.2	51	0.005	2.88	15
25.10	48.1	38.6	-	48.9	1.9	44.6	4.1	4	clayy SILT to silty CLAY	115	2.0	19	24	10	-	-	3.3	9.9	37	0.070	2.64	15
25.26	70.0	60.9	140.3	70.3	2.1	16.5	3.0	4	clayy SILT to silty CLAY	115	2.0	30	35	14	-	-	4.9	9.9	26	0.070	2.40	15
25.43	87.4	75.8	132.5	87.6	1.9	10.2	2.2	5	silty SAND to sandy SILT	120	3.0	25	29	16	58	39	-	-	20	0.200	2.23	16
25.59	98.4	85.3	130.5	98.6	1.8	6.3	1.8	5	silty SAND to sandy SILT	120	3.0	28	33	18	62	39	-	-	17	0.200	2.14	16
25.76	116.5	100.7	122.1	116.6	1.2	4.7	1.0	6	clean SAND to silty SAND	125	5.0	20	23	19	67	40	-	-	11	0.350	1.92	16
25.92	120.4	103.8	126.0	120.4	1.3	3.0	1.1	6	clean SAND to silty SAND	125	5.0	21	24	20	68	40	-	-	11	0.350	1.93	16
26.08	122.6	105.6	130.2	122.6	1.4	2.3	1.2	6	clean SAND to silty SAND	125	5.0	21	25	20	69	40	-	-	11	0.350	1.94	16
26.25	127.7	109.8	132.2	127.8	1.4	2.2	1.1	6	clean SAND to silty SAND	125	5.0	22	26	21	70	41	-	-	11	0.350	1.92	16
26.41	125.6	107.8	125.7	125.7	1.2	1.4	1.0	6	clean SAND to silty SAND	125	5.0	22	25	20	69	40	-	-	10	0.350	1.88	16
26.58	121.1	103.6	114.1	121.1	0.8	0.4	0.7	6	clean SAND to silty SAND	125	5.0	21	24	19	68	40	-	-	8	0.350	1.79	16
26.74	111.8	95.5	110.7	111.8	0.9	-0.8	0.8	6	clean SAND to silty SAND	125	5.0	19	22	18	65	40	-	-	10	0.350	1.87	16
26.90	102.4	87.3	115.9	102.4	1.2	1.0	1.2	6	clean SAND to silty SAND	125	5.0	17	20	17	63	39	-	-	14	0.350	2.02	16
27.07	83.9	71.4	117.5	83.9	1.5	1.5	1.8	5	silty SAND to sandy SILT	120	3.0	24	28	15	56	38	-	-	19	0.200	2.19	16
27.23	82.0	69.7	128.6	82.1	1.8	1.8	2.2	5	silty SAND to sandy SILT	120	3.0	23	27	15	55	38	-	-	21	0.200	2.27	16
27.40	74.0	62.7	132.8	74.0	1.9	0.9	2.6	5	silty SAND to sandy SILT	120	3.0	21	25	14	52	37	-	-	24	0.200	2.35	16
27.56	68.7	58.1	139.8	68.7	2.1	0.1	3.1	4	clayy SILT to silty CLAY	115	2.0	29	34	14	-	-	4.8	9.9	27	0.070	2.42	15
27.72	60.8	51.3	122.7	60.8	1.6	0.2	2.7	5	silty SAND to sandy SILT	120	3.0	17	20	12	45	36	-	-	27	0.200	2.42	16
27.89	54.8	46.2	118.1	54.8	1.4	0.0	2.7	4	clayy SILT to silty CLAY	115	2.0	23	27	11	-	-	3.8	9.9	29	0.070	2.46	15
28.05	49.1	41.3	121.1	49.1	1.5	0.0	3.1	4	clayy SILT to silty CLAY	115	2.0	21	25	10	-	-	3.4	9.9	32	0.070	2.53	15
28.22	34.9	26.2	-	35.0	1.1	3.3	3.3	4	clayy SILT to silty CLAY	115	2.0	13	17	7	-	-	2.4	8.2	41	0.070	2.70	15
28.38	62.3	52.3	107.6	62.4	1.2	4.7	2.0	5	silty SAND to sandy SILT	120	3.0	17	21	12	46	36	-	-	24	0.200	2.33	16
28.54	63.3	53.1	111.7	63.3	1.3	1.1	2.2	5	silty SAND to sandy SILT	120	3.0	18	21	12	46	36	-	-	24	0.200	2.35	16
28.71	46.6	39.0	113.8	46.6	1.3	1.0	2.9	4	clayy SILT to silty CLAY	115	2.0	19	23	10	-	-	3.2	9.9	32	0.070	2.53	15
28.87	31.4	23.2	-	31.4	1.5	2.5	5.1	3	silty CLAY to CLAY	115	1.5	15	21	7	-	-	2.1	7.2	50	0.005	2.87	15
29.04	34.8	25.7	-	34.9	1.5	4.7	4.6	3	silty CLAY to CLAY	115	1.5	17	23	7	-	-	2.4	8.1	47	0.005	2.81	15
29.20	34.7	25.5	-	34.8	1.5	4.3	4.4	3	silty CLAY to CLAY	115	1.5	17	23	7	-	-	2.4	8.0	46	0.005	2.80	15
29.36	46.2	33.8	-	46.3	1.7	7.2	3.9	4	clayy SILT to silty CLAY	115	2.0	17	23	9	-	-	3.2	9.9	39	0.070	2.67	15
29.53	77.6	64.4	118.1	77.7	1.5	6.3	2.0	5	silty SAND to sandy SILT	120	3.0	21	26	14	52	37	-	-	21	0.200	2.26	16
29.69	56.9	47.1	128.0	56.9	1.7	2.9	3.1	4	clayy SILT to silty CLAY	115	2.0	24	28	11	-	-	3.9	9.9	30	0.070	2.49	15
29.86	33.0	23.9	-	33.1	1.5	6.0	4.9	3	silty CLAY to CLAY	115	1.5	16	22	7	-	-	2.2	7.5	49	0.005	2.85	15
30.02	44.3	36.6	110.9	44.6	1.2	12.4	2.8	4	clayy SILT to silty CLAY	115	2.0	18	22	9	-	-	3.0	9.9	33	0.070	2.55	15
30.19	23.6	17.0	-	23.7	1.3	10.0	6.0	3	silty CLAY to CLAY	115	1.5	11	16	6	-	-	1.6	5.2	60	0.005	3.03	15
30.35	23.3	16.7	-	23.8	1.1	25.3	5.3	3	silty CLAY to CLAY	115	1.5	11	16	5	-	-	1.5	5.1	58	0.005	3.00	15
30.51	31.2	22.3	-	31.7	1.3	28.1	4.3	3	silty CLAY to CLAY	115	1.5	15	21	6	-	-	2.1	6.9	48	0.005	2.83	15
30.68	59.5	48.8	128.4	59.8	1.7	16.5	3.0	4	clayy SILT to silty CLAY	115	2.0	24	30	12	-	-	4.1	9.9	29	0.070	2.47	15
30.84	59.5	48.7	122.7	59.5	1.6	2.5	2.8	4	clayy SILT to silty CLAY	115	2.0	24	30	12	-	-	4.1	9.9	28	0.070	2.45	15

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Corporation Yard Improvements Project

Project ID: BAGG Engineers
Data File: SDF(359).cpt
CPT Date: 10/8/2021 2:00:06 PM
GW During Test: 18 ft

Sounding ID: CPT-01
Project No: HALFM-21-01
Cone/Rig: DPG1556

Depth ft	qc PS tsf	qc1n PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
31.01	33.9	24.1	-	34.0	0.8	1.2	2.6	4	clayy SILT to silty CLAY	115	2.0	12	17	6	-	-	2.3	7.5	39	0.070	2.67	15
31.17	20.6	14.5	-	20.7	0.6	4.9	3.2	3	silty CLAY to CLAY	115	1.5	10	14	4	-	-	1.4	4.4	53	0.005	2.91	15
31.33	76.6	62.5	88.1	76.9	0.7	17.2	1.0	5	silty SAND to sandy SILT	120	3.0	21	26	13	51	37	-	-	15	0.200	2.07	16
31.50	90.8	73.9	99.9	90.8	0.9	2.3	1.1	6	clean SAND to silty SAND	125	5.0	15	18	15	57	38	-	-	14	0.350	2.04	16
31.66	80.6	65.5	124.0	80.6	1.7	0.5	2.2	5	silty SAND to sandy SILT	120	3.0	22	27	14	53	37	-	-	22	0.200	2.28	16
31.83	72.9	59.2	122.1	72.9	1.7	-0.6	2.3	5	silty SAND to sandy SILT	120	3.0	20	24	13	50	37	-	-	24	0.200	2.33	16
31.99	48.5	33.7	-	48.4	1.5	-1.7	3.3	4	clayy SILT to silty CLAY	115	2.0	17	24	9	-	-	3.3	9.9	36	0.070	2.62	15
32.15	30.1	20.9	-	30.1	1.5	-0.8	5.4	3	silty CLAY to CLAY	115	1.5	14	20	6	-	-	2.0	6.5	54	0.005	2.93	15
32.32	52.4	42.3	122.3	52.5	1.5	2.8	3.1	4	clayy SILT to silty CLAY	115	2.0	21	26	10	-	-	3.6	9.9	32	0.070	2.52	15
32.48	61.6	49.7	131.0	61.6	1.8	1.1	3.1	4	clayy SILT to silty CLAY	115	2.0	25	31	12	-	-	4.3	9.9	29	0.070	2.47	15
32.65	49.6	39.9	116.7	49.6	1.4	-0.7	2.9	4	clayy SILT to silty CLAY	115	2.0	20	25	10	-	-	3.4	9.9	32	0.070	2.53	15
32.81	29.5	20.3	-	29.5	1.2	-1.4	4.4	3	silty CLAY to CLAY	115	1.5	14	20	6	-	-	2.0	6.2	50	0.005	2.88	15
32.97	16.8	11.5	-	16.8	1.0	-0.2	6.9	3	silty CLAY to CLAY	115	1.5	8	11	4	-	-	1.1	3.3	74	0.005	3.21	15
33.14	19.2	13.1	-	19.3	0.9	4.9	5.3	3	silty CLAY to CLAY	115	1.5	9	13	4	-	-	1.3	3.9	64	0.005	3.09	15
33.30	29.4	20.0	-	29.7	0.9	15.1	3.1	4	clayy SILT to silty CLAY	115	2.0	10	15	6	-	-	2.0	6.2	45	0.070	2.79	15
33.47	32.6	22.1	-	32.8	0.8	12.0	2.5	4	clayy SILT to silty CLAY	115	2.0	11	16	6	-	-	2.2	6.8	40	0.070	2.69	15
33.63	26.5	17.9	-	26.8	1.0	10.6	4.1	3	silty CLAY to CLAY	115	1.5	12	18	5	-	-	1.8	5.5	52	0.005	2.90	15
33.79	17.3	11.6	-	17.5	1.0	12.9	6.7	3	silty CLAY to CLAY	115	1.5	8	12	4	-	-	1.1	3.4	73	0.005	3.20	15
33.96	30.7	20.6	-	31.1	1.2	21.1	4.1	3	silty CLAY to CLAY	115	1.5	14	20	6	-	-	2.1	6.4	49	0.005	2.85	15
34.12	68.6	54.5	102.8	68.8	1.2	11.7	1.8	5	silty SAND to sandy SILT	120	3.0	18	23	12	47	36	-	-	22	0.200	2.28	16
34.29	73.7	58.5	98.9	73.7	1.1	0.5	1.5	5	silty SAND to sandy SILT	120	3.0	19	25	12	49	36	-	-	19	0.200	2.21	16
34.45	69.1	54.7	112.5	69.1	1.4	2.5	2.1	5	silty SAND to sandy SILT	120	3.0	18	23	12	47	36	-	-	24	0.200	2.33	16
34.61	49.9	39.5	97.3	49.9	1.0	0.3	2.1	5	silty SAND to sandy SILT	120	3.0	13	17	9	36	34	-	-	28	0.200	2.44	16
34.78	27.2	18.0	-	27.3	0.9	1.4	3.5	3	silty CLAY to CLAY	115	1.5	12	18	5	-	-	1.8	5.5	50	0.005	2.86	15
34.94	16.6	10.9	-	16.8	0.5	10.5	3.7	3	silty CLAY to CLAY	115	1.5	7	11	4	-	-	1.1	3.2	63	0.005	3.07	15
35.11	14.5	9.6	-	15.2	0.4	35.2	3.3	3	silty CLAY to CLAY	115	1.5	6	10	3	-	-	0.9	2.7	65	0.005	3.09	15
35.27	14.9	9.8	-	15.7	0.4	38.9	3.4	3	silty CLAY to CLAY	115	1.5	7	10	3	-	-	0.9	2.8	64	0.005	3.09	15
35.43	15.2	9.9	-	16.0	0.4	40.8	3.2	3	silty CLAY to CLAY	115	1.5	7	10	3	-	-	1.0	2.8	63	0.005	3.06	15
35.60	17.2	11.2	-	18.0	0.5	43.4	3.3	3	silty CLAY to CLAY	115	1.5	7	11	4	-	-	1.1	3.2	60	0.005	3.02	15
35.76	19.4	12.6	-	20.2	0.5	40.5	3.2	3	silty CLAY to CLAY	115	1.5	8	13	4	-	-	1.3	3.7	56	0.005	2.97	15
35.93	24.0	15.6	-	25.0	0.5	49.0	2.3	4	clayy SILT to silty CLAY	115	2.0	8	12	4	-	-	1.6	4.7	47	0.070	2.81	15
36.09	22.3	14.4	-	23.0	0.5	36.6	2.5	4	clayy SILT to silty CLAY	115	2.0	7	11	4	-	-	1.5	4.3	50	0.070	2.86	15
36.26	18.9	12.2	-	19.7	0.3	42.8	2.0	4	clayy SILT to silty CLAY	115	2.0	6	9	4	-	-	1.2	3.6	50	0.070	2.87	15
36.42	17.2	11.1	-	18.2	0.3	46.5	1.9	4	clayy SILT to silty CLAY	115	2.0	6	9	3	-	-	1.1	3.2	52	0.070	2.90	15
36.58	14.5	9.3	-	15.4	0.4	47.6	3.2	3	silty CLAY to CLAY	115	1.5	6	10	3	-	-	0.9	2.6	65	0.005	3.09	15
36.75	14.4	9.2	-	15.5	0.8	54.8	6.5	3	silty CLAY to CLAY	115	1.5	6	10	4	-	-	0.9	2.6	80	0.005	3.28	15
36.91	18.4	11.8	-	19.6	1.0	61.2	6.1	3	silty CLAY to CLAY	115	1.5	8	12	4	-	-	1.2	3.4	71	0.005	3.17	15
37.08	31.4	20.0	-	32.3	1.2	42.1	4.2	3	silty CLAY to CLAY	115	1.5	13	21	6	-	-	2.1	6.1	50	0.005	2.87	15
37.24	45.8	35.4	89.2	46.2	0.8	18.8	1.9	5	silty SAND to sandy SILT	120	3.0	12	15	8	33	33	-	-	28	0.200	2.45	16
37.40	32.4	20.5	-	32.6	0.7	8.9	2.3	4	clayy SILT to silty CLAY	115	2.0	10	16	5	-	-	2.2	6.3	40	0.070	2.70	15
37.57	19.2	12.1	-	19.6	0.7	20.7	4.1	3	silty CLAY to CLAY	115	1.5	8	13	4	-	-	1.2	3.5	62	0.005	3.05	15
37.73	18.0	11.3	-	18.9	0.8	44.3	4.9	3	silty CLAY to CLAY	115	1.5	8	12	4	-	-	1.2	3.3	67	0.005	3.12	15
37.90	22.5	14.1	-	23.5	0.7	48.9	3.3	3	silty CLAY to CLAY	115	1.5	9	15	4	-	-	1.5	4.2	54	0.005	2.94	15
38.06	25.2	15.8	-	26.2	0.6	50.7	2.5	4	clayy SILT to silty CLAY	115	2.0	8	13	5	-	-	1.7	4.7	47	0.070	2.82	15
38.22	18.2	11.4	-	19.1	0.5	45.3	3.1	3	silty CLAY to CLAY	115	1.5	8	12	4	-	-	1.2	3.3	59	0.005	3.00	15
38.39	15.8	9.9	-	16.9	0.4	53.8	2.9	3	silty CLAY to CLAY	115	1.5	7	11	3	-	-	1.0	2.8	62	0.005	3.05	15
38.55	15.0	9.3	-	16.1	0.4	58.3	3.2	3	silty CLAY to CLAY	115	1.5	6	10	3	-	-	0.9	2.6	65	0.005	3.10	15
38.72	14.7	9.1	-	16.0	0.4	61.7	3.3	3	silty CLAY to CLAY	115	1.5	6	10	3	-	-	0.9	2.5	66	0.005	3.11	15
38.88	14.7	9.1	-	16.0	0.4	62.7	3.2	3	silty CLAY to CLAY	115	1.5	6	10	3	-	-	0.9	2.5	66	0.005	3.11	15
39.04	14.6	9.0	-	15.9	0.4	63.6	3.3	3	silty CLAY to CLAY	115	1.5	6	10	3	-	-	0.9	2.5	67	0.005	3.12	15
39.21	14.8	9.1	-	16.1	0.4	66.6	3.4	3	silty CLAY to CLAY	115	1.5	6	10	3	-	-	0.9	2.5	67	0.005	3.12	15
39.37	15.6	9.6	-	16.9	0.8	66.9	6.1	3	silty CLAY to CLAY	115	1.5	6	10	4	-	-	1.0	2.7	77	0.005	3.25	15
39.54	17.4	10.6	-	18.9	1.6	74.9	9.9	3	silty CLAY to CLAY	115	1.5	7	12	4	-	-	1.1	3.0	85	0.005	3.35	15
39.70	34.8	21.2	-	36.4	2.1	82.4	6.5	3	silty CLAY to CLAY	115	1.5	14	23	7	-	-	2.3	6.5	57	0.005	2.97	15
39.86	62.9	38.2	-	63.9	2.8	47.7	4.6	4	clayy SILT to silty CLAY	115	2.0	19	31	10	-	-	4.3	9.9	39	0.070	2.68	15
40.03	60.0	36.4	-	60.1	2.6	5.6	4.5	4	clayy SILT to silty CLAY	115	2.0	18	30	10	-	-	4.1	9.9	40	0.070	2.69	15
40.19	48.4	29.2	-	48.4	2.1	0.1	4.5	3	silty CLAY to CLAY	115	1.5	19	32	8	-	-	3.3	9.2	44	0.005	2.76	15
40.36	39.2	23.6	-	39.2	1.6	3.1	4.4	3	silty CLAY to CLAY	115	1.5	16	26	7	-	-	2.7	7.3	47	0.005	2.83	15
40.52	34.7	20.9	-	34.8	1.5	5.7	4.6	3	silty CLAY to CLAY	115	1.5	14	23	6	-	-	2.3	6.4	51	0.005	2.88	15
40.68	29.7	17.8	-	29.9	1.3	8.1	4.9	3	silty CLAY to CLAY	115	1.5	12	20	6	-	-	2.0	5.4	55	0.005	2.95	15
40.85	29.1	17.4	-	29.3	1.7	12.3	6.5	3	silty CLAY to CLAY	115	1.5	12	19	6	-	-	1.9	5.3	62	0.005	3.04	15
41.01	32.5	19.4	-	32.8	2.1	15.8	6.9	3	silty CLAY to CLAY	115	1.5	13	22	6	-	-	2.2	5.9	60	0.005	3.02	15
41.18	39.3	23.4	-	39.7	2.3	22.7	6.1	3	silty CLAY to CLAY	115	1.5	16	26	7	-	-	2.7	7.2	54	0.005	2.93	15
41.34	105.4	78.9	141.6	105.6	2.5	8.2	2.4	5	silty SAND to sandy SILT	120	3.0	26	35	17	59	38	-	-	21	0.200	2.25	16
41.50	112.5	84.0	150.9	112.5	2.8	-0.3	2.5	5	silty SAND to sandy SILT	120	3.0	28	37	18	61	38	-	-	21	0.200	2.25	16
41.67	80.6	60.1	142.5	80.5	2.4	-2.5	3.1	4	clayy SILT to silty CLAY	115	2.0	30	40	14	-	-	5.6	9.9	27	0.070	2.41	15
41.83	55.7	32.8	-	55.7	2.3	-1.7	4.4	3	silty CLAY to CLAY	115	1.5	22	37	9	-	-	3.8	9.9	41	0.005	2.71	15
42.00	39.4	23.1	-	39.4	2.4	1.8	6.5	3	silty CLAY to CLAY	115	1.5	15	26	7	-	-	2.7	7.2	55	0.005	2.95	15
42.16	51.0	29.9	-	51.2	1.6	6.3	3.4	4	clayy SILT to silty CLAY	115	2.0	15	26	8	-	-	3.5	9.4	39	0.070	2.67	15
42.32	38.3	22.3	-	38.3	1.1	1.7	3.1	4	clayy SILT to silty CLAY	115	2.0	11	19	6	-	-	2.6	6.9	43	0.070	2.75	15
42.49	20.8	12.1	-	20.9	0.8	3.1	4.6	3	silty CLAY to CLAY	115	1.5	8	14	4	-	-	1.4	3.5	64	0.005	3.08	15
42.65	20.4	11.8	-	20.5	1.1	7.6	6.1	3	silty CLAY to CLAY	115	1.5	8	14	4	-	-	1.3	3.4	71	0.005	3.17	15
42.82	24.5	14.2	-	24.7	1.2	10.1	5.7	3	silty CLAY to CLAY	115	1.5	9	16	5	-	-	1.6	4.2	64	0.005	3.08	15
42.98	40.2	23.2	-	40.4	1.3	14.2	3.6	4	clayy SILT to silty CLAY	115	2.0	12	20	6	-	-	2.7	7.2	44	0.070	2.77	15
43.15	34.9	20.1	-	35.0	1.1	6.2	3.4	3	silty CLAY to CLAY	115	1.5	13	23	6	-	-	2.3	6.2	47	0.005	2.81	15
43.31	21.8	12.6	-	21.9	0.8	5.9	4.1	3	silty CLAY to CLAY	115	1.5	8	15	4	-	-	1.4	3.7	61	0.005	3.04	15
43.47	18.1	10.4	-	18.3	0.6	12.7	4.2	3	silty CLAY to CLAY	115	1.5	7	12	4	-	-	1.2	2.9	67	0.005	3.12	15
43.64	18.2	10.4	-	18.5	0.6	17.0	4.2	3	silty CLAY to CLAY	115	1.5	7	12	4	-	-	1.2	2.9	67	0.005	3.12	15
43.80	18.7	10.7	-	19.1	0.5	21.1	3.4	3	silty CLAY to CLAY	115	1.5	7	12	4	-	-	1.2	3.0	62	0.005	3.05	15
43.97	18.8	10.7	-	19.3	0.5	23.6	3.1	3	silty CLAY to CLAY	115	1.5	7	13	3	-	-	1.2	3.1	61	0.005	3.03	15
44.13	17.4	9.9	-	17.9	0.5	25.7	3.2	3	silty CLAY to CLAY	115	1.5	7	12	3	-	-	1.1	2.8	64	0.005	3.07	15
44.29	16.6	9.4	-	17.4	0.6	37.8	4.0	3	silty CLAY to CLAY	115	1.5	6	11	3	-	-	1.1	2.6	69	0.005	3.15	15
44.46	17.5	9.9	-	18.3	0.8	43.5	5.6	3	silty CLAY to CLAY	115	1.5	7	12	4	-	-	1.1	2.8	74	0.005	3.22	15
44.62	20.0	11.3	-	21.0	0.7	51.0	3.9	3	silty CLAY to CLAY	115	1.5	8	13	4	-	-	1.3	3.2	63	0.005	3.07	15
44.79	47.4	34.6	96.8	48.9	1.0	76.0	2.2	4	clayy SILT to silty CLAY	115	2.0	17	24	8	-	-	3.2	8.3	31	0.070	2.51	15
44.95	107.7	78.4	99.9	107.9	1.0	11.5	0.9	6	clean SAND to silty SAND	125	5.0	16	22	15	59	38	-	-	12	0.350	1.98	16
45.11	133.5	97.0	115.8	133.5	1.2	-0.3	0.9	6	clean SAND to silty SAND	125	5.0	19	27	18	66	39	-	-	11	0.350	1.91	16
45.28	140.0	101.6	139.1	139.9	2.2	-3.5	1.6	5	silty SAND to sandy SILT	120	3.0	34	47	20	68	39	-	-	14	0.200	2.05	16
45.44	112.3	81.4	145.9	112.3	2.7	-3.3	2.4	5	silty SAND to sandy SILT	120	3.0	27	37	18	60	38	-	-	21	0.200	2.25	16
45.61	71.9	39.9	-	71.8	2.7	-2.9	3.8	4	clayy SILT to silty CLAY	115	2.0	20	36	10	-	-	5.0	9.9	36	0.070	2.61	15
45.77	47.0	26.1	-	47.0	2.5	-1.2	5.6	3	silty CLAY to CLAY	115	1.5	17	31	8	-	-	3.2	8.1	50	0.005	2.86	15
45.93	47.0	26.0	-	47.1	1.7	1.7	3.9	4	clayy SILT to silty CLAY	115	2.0	13	24	7	-	-	3.2	8.1	44	0.070	2.76	15
46.10	88.4	63.8	94.7	88.5	1.0	3.2	1.2	5	silty SAND to sandy SILT	120	3.0	21	29	13	52	36	-	-	16	0.200	2.12	16
46.26	126.8	91.3	98.6	126.8	0.6	-0.1	0.5	6	clean SAND to silty SAND	125	5.0	18	25	16	64	39	-	-	7	0.350	1.76	16

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Corporation Yard Improvements Project

Project ID: BAGG Engineers
Data File: SDF(359).cpt
CPT Date: 10/8/2021 2:00:06 PM
GW During Test: 18 ft
Sounding ID: CPT-01
Project No: HALFM-21-01
Cone/Rig: DPG1556

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR - -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
46.43	136.2	98.0	102.2	136.2	0.6	-0.5	0.4	6	clean SAND to silty SAND	125	5.0	20	27	17	66	39	-	-	6	0.350	1.71	16
46.59	140.1	100.7	101.8	140.1	0.5	0.1	0.3	6	clean SAND to silty SAND	125	5.0	20	28	17	67	39	-	-	5	0.350	1.66	16
46.75	138.6	99.4	100.7	138.6	0.5	0.0	0.3	6	clean SAND to silty SAND	125	5.0	20	28	17	67	39	-	-	5	0.350	1.66	16
46.92	130.1	93.2	103.7	130.1	0.8	-0.5	0.6	6	clean SAND to silty SAND	125	5.0	19	26	17	65	39	-	-	8	0.350	1.81	16
47.08	113.5	81.1	119.9	113.4	1.7	-0.8	1.6	5	silty SAND to sandy SILT	120	3.0	27	38	17	60	38	-	-	16	0.200	2.11	16
47.25	75.6	54.0	104.8	75.6	1.3	-0.7	1.8	5	silty SAND to sandy SILT	120	3.0	18	25	12	47	35	-	-	22	0.200	2.30	16
47.41	43.9	23.7	-	43.9	1.0	0.1	2.5	4	clayy SILT to silty CLAY	115	2.0	12	22	6	-	-	3.0	7.3	39	0.070	2.67	15
47.57	24.2	13.0	-	24.7	0.9	22.7	4.3	3	silty CLAY to CLAY	115	1.5	9	16	4	-	-	1.6	3.8	61	0.005	3.04	15
47.74	21.6	11.6	-	22.4	1.0	38.3	5.2	3	silty CLAY to CLAY	115	1.5	8	14	4	-	-	1.4	3.3	68	0.005	3.14	15
47.90	34.9	18.7	-	35.9	1.2	51.5	3.6	3	silty CLAY to CLAY	115	1.5	12	23	5	-	-	2.3	5.7	49	0.005	2.86	15
48.07	41.4	22.1	-	41.7	1.1	11.4	2.8	4	clayy SILT to silty CLAY	115	2.0	11	21	6	-	-	2.8	6.8	42	0.070	2.73	15
48.23	30.0	16.0	-	30.1	1.2	6.9	4.3	3	silty CLAY to CLAY	115	1.5	11	20	5	-	-	2.0	4.8	56	0.005	2.96	15
48.39	21.8	11.6	-	22.0	1.2	12.8	6.3	3	silty CLAY to CLAY	115	1.5	8	15	4	-	-	1.4	3.3	72	0.005	3.19	15
48.56	25.4	13.5	-	25.7	1.1	16.7	4.7	3	silty CLAY to CLAY	115	1.5	9	17	4	-	-	1.7	3.9	62	0.005	3.05	15
48.72	33.4	17.7	-	33.7	1.2	17.9	4.0	3	silty CLAY to CLAY	115	1.5	12	22	5	-	-	2.2	5.3	52	0.005	2.90	15
48.89	39.2	20.7	-	39.5	1.1	12.0	3.0	4	clayy SILT to silty CLAY	115	2.0	10	20	6	-	-	2.6	6.3	44	0.070	2.77	15
49.05	34.1	18.0	-	34.1	1.0	2.7	3.1	3	silty CLAY to CLAY	115	1.5	12	23	5	-	-	2.3	5.4	48	0.005	2.83	15
49.22	26.5	13.9	-	26.6	1.1	3.9	4.8	3	silty CLAY to CLAY	115	1.5	9	18	5	-	-	1.7	4.1	62	0.005	3.04	15
49.38	21.7	11.4	-	21.9	1.1	7.3	5.8	3	silty CLAY to CLAY	115	1.5	8	14	4	-	-	1.4	3.3	71	0.005	3.17	15
49.54	42.3	22.1	-	42.5	1.0	13.9	2.5	4	clayy SILT to silty CLAY	115	2.0	11	21	6	-	-	2.9	6.8	40	0.070	2.69	15
49.71	96.2	67.6	98.7	96.3	1.1	4.3	1.2	5	silty SAND to sandy SILT	120	3.0	23	32	14	54	37	-	-	16	0.200	2.10	16
49.87	128.4	90.1	108.5	128.5	1.1	5.7	0.9	6	clean SAND to silty SAND	125	5.0	18	26	17	64	38	-	-	11	0.350	1.92	16
50.04	137.7	96.5	115.6	137.8	1.3	3.5	0.9	6	clean SAND to silty SAND	125	5.0	19	28	18	66	39	-	-	11	0.350	1.91	16
50.20	165.3	115.6	126.5	165.4	1.2	8.9	0.7	6	clean SAND to silty SAND	125	5.0	23	33	21	72	40	-	-	8	0.350	1.78	16

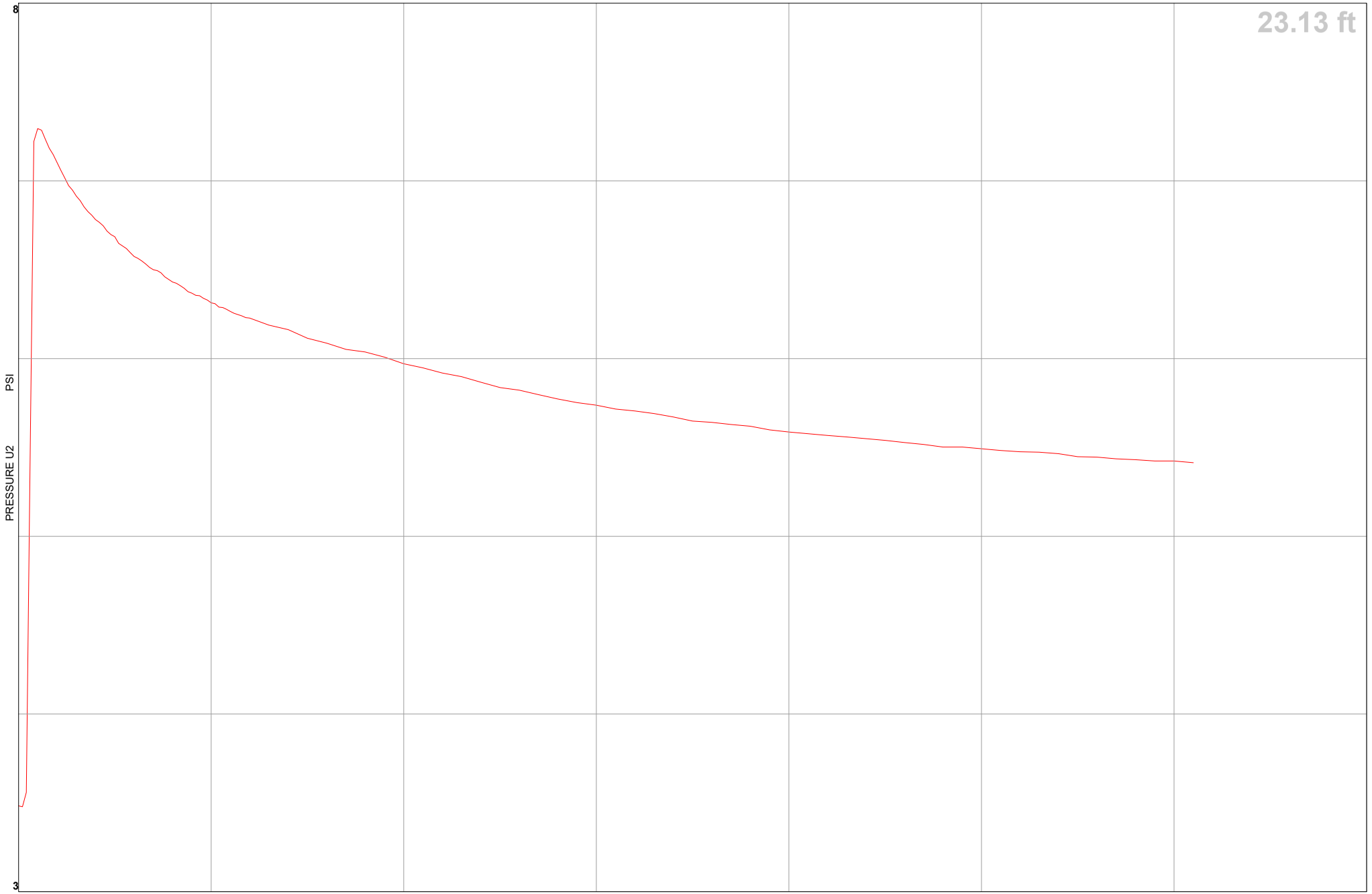
* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

Middle Earth Geo Testing

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BAGG Engineers

Location	Corporation Yard Improvements Projec	Operator	JM-IY		
Job Number	HALFM-21-01	Cone Number	DPG1556	GPS	
Hole Number	CPT-01	Date and Time	10/8/2021 2:00:06 PM		
Equilized Pressure	5.4	EST GW Depth During Test	10.6		



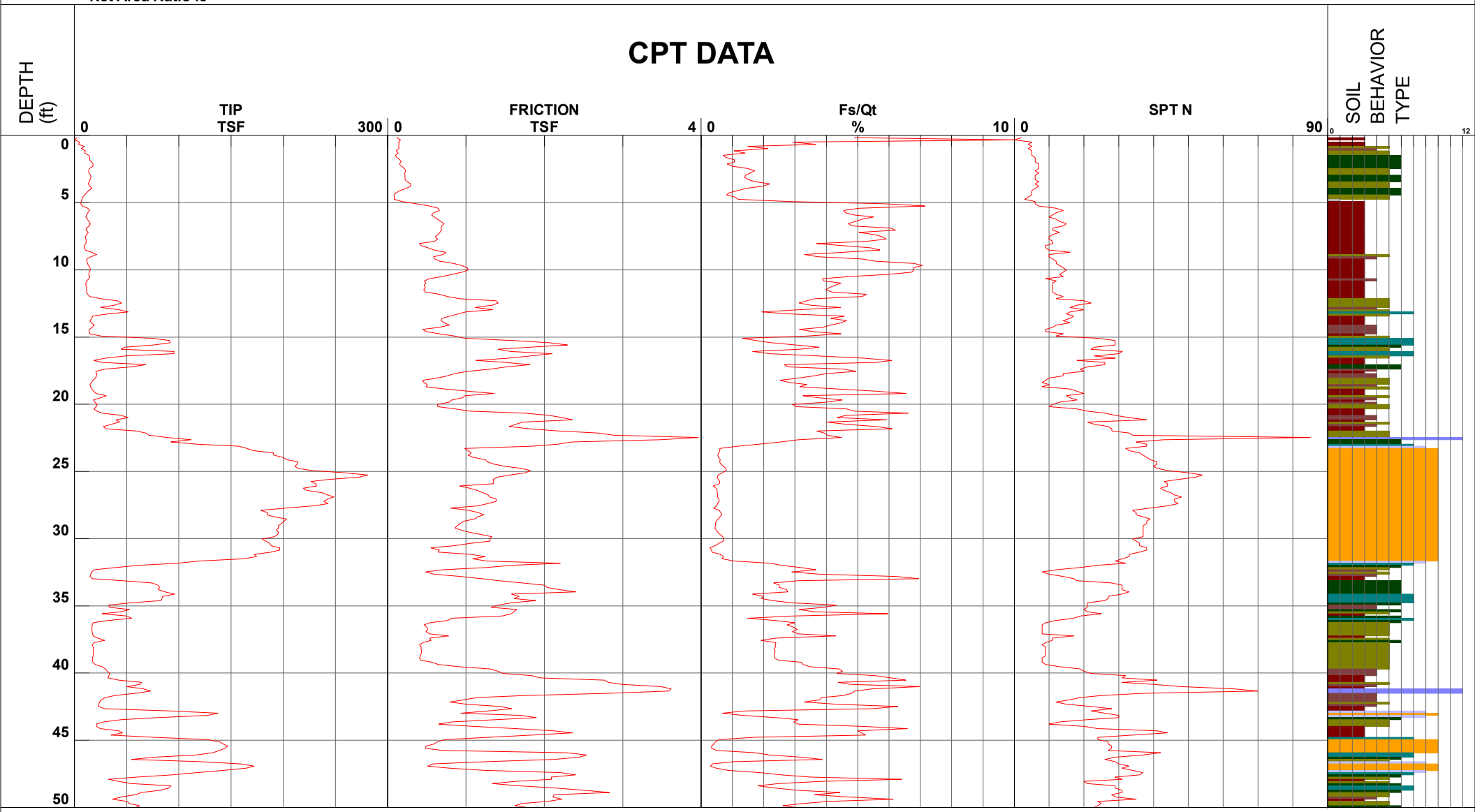
DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BAGG Engineers

Project	Corporation Yard Improvements Project	Operator	JM-IY	Filename	SDF(360).cpt
Job Number	HALFM-21-01	Cone Number	DPG1556	GPS	
Hole Number	CPT-02	Date and Time	10/8/2021 3:02:21 PM	Maximum Depth	50.69 ft
EST GW Depth During Test		18.30 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm squared

S*Soil behavior type and SPT based on data from UBC-1983

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Corporation Yard Improvements Project

Project ID: BAGGS Engineering
Data File: SDF(360).cpt
CPT Date: 10/8/2021 3:02:21 PM
GW During Test: 18 ft

Sounding ID: CPT-02
Project No: HALFM-21-01
Cone/Rig: DPG1556

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
0.33	1.1	0.9	-	1.1	0.2	1.3	9.9	2	Organic SOILS - Peats	100	1.0	1	1	1	-	-	0.1	9.9	95	0.100	4.16	10
0.49	4.9	7.8	-	4.9	0.1	1.1	2.9	3	silty CLAY to CLAY	115	1.5	5	3	3	-	-	0.3	9.9	64	0.005	3.08	15
0.66	3.9	6.2	-	3.9	0.1	0.9	3.7	3	silty CLAY to CLAY	115	1.5	4	3	2	-	-	0.3	9.9	75	0.005	3.22	15
0.82	9.5	15.2	-	9.5	0.1	1.1	1.5	4	clayy SILT to silty CLAY	115	2.0	8	5	4	-	-	0.7	9.9	39	0.070	2.68	15
0.98	6.7	10.7	-	6.7	0.1	1.1	2.1	4	clayy SILT to silty CLAY	115	2.0	5	3	3	-	-	0.5	9.9	52	0.070	2.89	15
1.15	10.4	16.6	52.7	10.4	0.1	1.1	1.1	4	clayy SILT to silty CLAY	115	2.0	8	5	4	-	-	0.7	9.9	34	0.070	2.57	15
1.31	9.7	15.5	-	9.7	0.1	1.8	1.4	4	clayy SILT to silty CLAY	115	2.0	8	5	4	-	-	0.7	9.9	38	0.070	2.66	15
1.48	13.6	21.8	49.4	13.6	0.1	1.7	0.7	5	silty SAND to sandy SILT	120	3.0	7	5	5	17	43	-	-	26	0.200	2.39	16
1.64	14.8	23.7	53.0	14.8	0.1	1.6	0.8	5	silty SAND to sandy SILT	120	3.0	8	5	5	19	43	-	-	26	0.200	2.38	16
1.80	14.5	23.2	58.7	14.5	0.2	2.0	1.1	5	silty SAND to sandy SILT	120	3.0	8	5	6	19	42	-	-	28	0.200	2.45	16
1.97	16.1	25.8	61.0	16.1	0.2	1.7	1.1	5	silty SAND to sandy SILT	120	3.0	9	5	6	22	42	-	-	27	0.200	2.41	16
2.13	17.8	28.5	57.6	17.8	0.1	2.0	0.8	5	silty SAND to sandy SILT	120	3.0	10	6	6	26	42	-	-	23	0.200	2.32	16
2.30	17.6	28.3	61.4	17.7	0.2	1.9	1.0	5	silty SAND to sandy SILT	120	3.0	9	6	6	25	42	-	-	25	0.200	2.36	16
2.46	14.2	22.8	67.5	14.3	0.2	1.6	1.5	5	silty SAND to sandy SILT	120	3.0	8	5	6	18	41	-	-	32	0.200	2.54	16
2.62	13.5	21.7	70.7	13.6	0.2	1.5	1.7	4	clayy SILT to silty CLAY	115	2.0	11	7	6	-	-	0.9	9.9	35	0.070	2.59	15
2.79	13.8	22.2	68.6	13.9	0.2	1.7	1.6	4	clayy SILT to silty CLAY	115	2.0	11	7	6	-	-	1.0	9.9	33	0.070	2.56	15
2.95	15.4	24.8	68.2	15.5	0.2	2.0	1.4	5	silty SAND to sandy SILT	120	3.0	8	5	6	21	40	-	-	31	0.200	2.50	16
3.12	15.7	25.1	67.8	15.7	0.2	1.8	1.4	5	silty SAND to sandy SILT	120	3.0	8	5	6	21	40	-	-	30	0.200	2.49	16
3.28	14.9	23.8	69.0	14.9	0.2	1.5	1.5	5	silty SAND to sandy SILT	120	3.0	8	5	6	20	39	-	-	32	0.200	2.52	16
3.45	14.2	22.7	72.3	14.2	0.2	1.5	1.8	4	clayy SILT to silty CLAY	115	2.0	11	7	6	-	-	1.0	9.9	34	0.070	2.58	15
3.61	13.3	21.4	-	13.4	0.3	1.6	2.2	4	clayy SILT to silty CLAY	115	2.0	11	7	6	-	-	0.9	9.9	38	0.070	2.66	15
3.77	14.9	23.9	78.4	14.9	0.3	1.9	2.0	4	clayy SILT to silty CLAY	115	2.0	12	7	6	-	-	1.0	9.9	35	0.070	2.59	15
3.94	16.6	26.6	70.2	16.6	0.2	1.6	1.5	5	silty SAND to sandy SILT	120	3.0	9	6	6	23	39	-	-	30	0.200	2.47	16
4.10	13.5	21.6	60.2	13.5	0.2	1.6	1.2	5	silty SAND to sandy SILT	120	3.0	7	4	5	16	37	-	-	31	0.200	2.50	16
4.27	11.8	18.9	52.1	11.8	0.1	1.5	0.9	5	silty SAND to sandy SILT	120	3.0	6	4	5	12	36	-	-	31	0.200	2.50	16
4.43	9.7	15.6	48.1	9.7	0.1	1.5	0.8	5	silty SAND to sandy SILT	120	3.0	5	3	4	6	35	-	-	33	0.200	2.56	16
4.59	7.9	12.7	-	7.9	0.1	1.2	1.1	4	clayy SILT to silty CLAY	115	2.0	6	4	3	-	-	0.5	9.4	40	0.070	2.70	15
4.76	7.1	11.4	-	7.2	0.1	1.1	1.2	4	clayy SILT to silty CLAY	115	2.0	6	4	3	-	-	0.5	8.2	44	0.070	2.76	15
4.92	6.5	10.4	-	6.5	0.2	1.1	3.0	3	silty CLAY to CLAY	115	1.5	7	4	3	-	-	0.4	7.1	58	0.005	3.00	15
5.09	6.3	10.1	-	6.3	0.4	1.2	6.2	3	silty CLAY to CLAY	115	1.5	7	4	4	-	-	0.4	6.7	73	0.005	3.20	15
5.25	7.5	12.0	-	7.5	0.5	1.2	7.5	3	silty CLAY to CLAY	115	1.5	8	5	4	-	-	0.5	7.8	72	0.005	3.19	15
5.41	12.8	20.5	-	12.8	0.6	1.4	5.2	3	silty CLAY to CLAY	115	1.5	14	9	6	-	-	0.9	9.9	52	0.005	2.91	15
5.58	14.5	23.3	-	14.5	0.7	1.8	4.7	3	silty CLAY to CLAY	115	1.5	16	10	7	-	-	1.0	9.9	48	0.005	2.83	15
5.74	12.8	20.5	-	12.8	0.6	2.2	4.7	3	silty CLAY to CLAY	115	1.5	14	9	6	-	-	0.9	9.9	51	0.005	2.88	15
5.91	11.4	18.3	-	11.5	0.6	2.7	5.0	3	silty CLAY to CLAY	115	1.5	12	8	6	-	-	0.8	9.9	54	0.005	2.94	15
6.07	10.8	17.3	-	10.9	0.6	3.7	5.7	3	silty CLAY to CLAY	115	1.5	12	7	5	-	-	0.7	9.8	58	0.005	2.99	15
6.23	12.3	19.7	-	12.4	0.6	5.1	5.3	3	silty CLAY to CLAY	115	1.5	13	8	6	-	-	0.8	9.9	54	0.005	2.93	15
6.40	13.8	22.1	-	13.9	0.7	5.7	5.1	3	silty CLAY to CLAY	115	1.5	15	9	7	-	-	0.9	9.9	50	0.005	2.88	15
6.56	15.3	24.5	-	15.4	0.7	6.1	4.8	3	silty CLAY to CLAY	115	1.5	16	10	7	-	-	1.1	9.9	48	0.005	2.83	15
6.73	14.3	22.9	-	14.4	0.7	3.3	5.0	3	silty CLAY to CLAY	115	1.5	15	10	7	-	-	1.0	9.9	49	0.005	2.86	15
6.89	11.2	18.0	-	11.3	0.7	3.2	6.3	3	silty CLAY to CLAY	115	1.5	12	7	6	-	-	0.8	9.0	59	0.005	3.01	15
7.05	11.1	17.8	-	11.2	0.7	4.4	6.4	3	silty CLAY to CLAY	115	1.5	12	7	6	-	-	0.8	8.6	60	0.005	3.02	15
7.22	13.2	21.1	-	13.3	0.7	5.4	5.2	3	silty CLAY to CLAY	115	1.5	14	9	6	-	-	0.9	9.9	52	0.005	2.90	15
7.38	11.6	18.6	-	11.7	0.6	4.3	5.7	3	silty CLAY to CLAY	115	1.5	12	8	6	-	-	0.8	8.6	57	0.005	2.97	15
7.55	10.5	16.8	-	10.6	0.6	4.9	6.1	3	silty CLAY to CLAY	115	1.5	11	7	5	-	-	0.7	7.6	60	0.005	3.02	15
7.71	10.8	17.3	-	10.9	0.6	6.2	6.2	3	silty CLAY to CLAY	115	1.5	12	7	6	-	-	0.7	7.6	60	0.005	3.02	15
7.87	11.3	18.1	-	11.4	0.6	6.4	5.5	3	silty CLAY to CLAY	115	1.5	12	8	6	-	-	0.8	7.9	56	0.005	2.97	15
8.04	11.0	17.6	-	11.1	0.4	6.6	3.9	3	silty CLAY to CLAY	115	1.5	12	7	5	-	-	0.7	7.5	51	0.005	2.88	15
8.20	9.5	15.2	-	9.6	0.4	7.3	4.7	3	silty CLAY to CLAY	115	1.5	10	6	5	-	-	0.6	6.2	58	0.005	2.99	15
8.37	9.5	15.2	-	9.7	0.5	8.2	5.7	3	silty CLAY to CLAY	115	1.5	10	6	5	-	-	0.6	6.1	61	0.005	3.04	15
8.53	10.4	16.7	-	10.6	0.6	8.8	6.0	3	silty CLAY to CLAY	115	1.5	11	7	5	-	-	0.7	6.6	60	0.005	3.02	15
8.69	16.3	26.2	-	16.5	0.7	8.9	4.7	3	silty CLAY to CLAY	115	1.5	17	11	7	-	-	1.1	9.9	46	0.005	2.80	15
8.86	21.4	34.4	-	21.6	0.7	6.4	3.4	4	clayy SILT to silty CLAY	115	2.0	17	11	9	-	-	1.5	9.9	36	0.070	2.62	15
9.02	15.7	25.2	-	15.8	0.6	6.4	3.9	4	clayy SILT to silty CLAY	115	2.0	13	8	7	-	-	1.1	9.6	44	0.070	2.76	15
9.19	11.7	18.7	-	11.8	0.6	7.4	5.4	3	silty CLAY to CLAY	115	1.5	12	8	6	-	-	0.8	6.9	55	0.005	2.95	15
9.35	12.0	19.3	-	12.2	0.7	8.2	5.8	3	silty CLAY to CLAY	115	1.5	13	8	6	-	-	0.8	7.0	56	0.005	2.97	15
9.51	12.3	19.8	-	12.5	0.8	8.2	7.1	3	silty CLAY to CLAY	115	1.5	13	8	6	-	-	0.8	7.1	60	0.005	3.02	15
9.68	13.4	21.4	-	13.5	0.9	9.3	7.4	3	silty CLAY to CLAY	115	1.5	14	9	7	-	-	0.9	7.5	59	0.005	3.00	15
9.84	14.9	23.9	-	15.1	1.0	10.2	7.1	3	silty CLAY to CLAY	115	1.5	16	10	7	-	-	1.0	8.3	55	0.005	2.95	15
10.01	15.2	24.3	-	15.4	1.0	9.8	7.1	3	silty CLAY to CLAY	115	1.5	16	10	8	-	-	1.0	8.3	55	0.005	2.95	15
10.17	14.1	22.7	-	14.3	1.0	9.9	7.0	3	silty CLAY to CLAY	115	1.5	15	9	7	-	-	1.0	7.6	56	0.005	2.97	15
10.34	13.7	22.0	-	13.9	0.8	9.5	6.3	3	silty CLAY to CLAY	115	1.5	15	9	7	-	-	0.9	7.3	55	0.005	2.94	15
10.50	14.7	23.5	-	14.9	0.7	10.4	4.9	3	silty CLAY to CLAY	115	1.5	16	10	7	-	-	1.0	7.6	49	0.005	2.85	15
10.66	13.7	22.0	-	13.9	0.5	10.1	4.1	3	silty CLAY to CLAY	115	1.5	15	9	6	-	-	0.9	7.0	47	0.005	2.82	15
10.83	12.0	19.2	-	12.2	0.5	10.2	4.1	3	silty CLAY to CLAY	115	1.5	13	8	6	-	-	0.8	6.0	50	0.005	2.87	15
10.99	10.9	17.1	-	11.1	0.5	10.2	4.7	3	silty CLAY to CLAY	115	1.5	11	7	5	-	-	0.7	5.3	55	0.005	2.95	15
11.16	10.9	16.9	-	11.1	0.5	10.3	4.5	3	silty CLAY to CLAY	115	1.5	11	7	5	-	-	0.7	5.2	55	0.005	2.94	15
11.32	11.7	17.9	-	11.9	0.5	10.6	4.3	3	silty CLAY to CLAY	115	1.5	12	8	5	-	-	0.8	5.6	53	0.005	2.91	15
11.48	11.5	17.4	-	11.8	0.5	11.0	4.2	3	silty CLAY to CLAY	115	1.5	12	8	5	-	-	0.8	5.4	53	0.005	2.91	15
11.65	11.5	17.1	-	11.7	0.5	11.1	4.4	3	silty CLAY to CLAY	115	1.5	11	8	5	-	-	0.8	5.3	54	0.005	2.93	15
11.81	12.5	18.3	-	12.7	0.7	12.1	5.6	3	silty CLAY to CLAY	115	1.5	12	8	6	-	-	0.8	5.7	57	0.005	2.98	15
11.98	14.8	21.4	-	15.0	0.8	11.9	5.4	3	silty CLAY to CLAY	115	1.5	14	10	6	-	-	1.0	6.7	53	0.005	2.91	15
12.14	25.4	36.3	-	25.7	0.9	12.5	3.7	4	clayy SILT to silty CLAY	115	2.0	18	13	9	-	-	1.7	9.9	37	0.070	2.63	15
12.30	40.8	47.1	134.8	41.0	1.4	7.4	3.4	4	clayy SILT to silty CLAY	115	2.0	24	20	12	-	-	2.8	9.9	32	0.070	2.52	15
12.47	45.0	51.5	134.2	45.1	1.4	4.9	3.2	4	clayy SILT to silty CLAY	115	2.0	26	23	12	-	-	3.1	9.9	29	0.070	2.47	15
12.63	38.2	43.5	132.9	38.3	1.3	5.3	3.6	4	clayy SILT to silty CLAY	115	2.0	22	19	11	-	-	2.6	9.9	33	0.070	2.55	15
12.80	25.0	33.9	-	25.2	1.1	8.1	4.6	3	silty CLAY to CLAY	115	1.5	23	17	9	-	-	1.7	9.9	41	0.005	2.71	15
12.96	42.5	47.7	130.7	42.7	1.3	10.6	3.2	4	clayy SILT to silty CLAY	115	2.0	24	21	12	-	-	3.0	9.9	30	0.070	2.49	15
13.12	51.3	57.2	110.0	51.4	1.0	6.9	2.0	5	silty SAND to sandy SILT	120	3.0	19	17	13	49	38	-	-	22	0.200	2.29	16
13.29	31.8	35.2	109.7	31.9	0.9	6.5	2.9	4	clayy SILT to silty CLAY	115	2.0	18	16	9	-	-	2.2	9.9	34	0.070	2.56	15
13.45	17.3	22.3	-	17.6	0.8	12.3	4.8	3	silty CLAY to CLAY	115	1.5	15	12	7	-	-	1.2	7.0	50	0.005	2.86	15
13.62	16.7	21.2	-	16.9	0.7	11.7	4.3	3	silty CLAY to CLAY	115	1.5	14	11	6	-	-	1.1	6.7	49	0.005	2.85	15
13.78	14.6	18.4	-	14.9	0.7	12.5	4.9	3	silty CLAY to CLAY	115	1.5	12	10	6	-	-	1.0	5.7	54	0.005	2.94	15
13.94	16.3	20.2	-	16.5	0.7	13.7	4.7	3	silty CLAY to CLAY	115	1.5	13	11	6	-	-	1.1	6.3	51	0.005	2.89	15
14.11	19.1	23.4	-	19.3	0.8	13.6	4.3	3	silty CLAY to CLAY	115	1.5	16	13	7	-	-	1.3	7.4	47	0.005	2.82	15
14.27	16.8	20.3	-	17.0	0.7	12.9	4.1	3	silty CLAY to CLAY	115	1.5	14	11	6	-	-	1.1	6.4	49	0.005	2.85	15
14.44	14.3	17.1	-	14.5	0.4	13.1	3.3	3	silty CLAY to CLAY	115	1.5	11	10	5	-	-	0.9	5.3	49	0.005	2.86	15
14.60	13.8	16.4	-	14.1	0.5	14.0	3.8	3	silty CLAY to CLAY	115	1.5	11	9	5	-	-	0.9	5.1	52	0.005	2.91	15
14.76	14.8	17.4	-	15.1	0.7	14.0	4.7	3	silty CLAY to CLAY	115	1.5	12	10	5	-	-	1.0	5.4	55	0.005	2.95	15
14.93	25.3	29.4	-	25.6	0.9	15.9	3.5	4	clayy SILT to silty CLAY	115	2.0	15	13	8	-	-	1.7	9.4	39	0.070	2.68	15
15.09	74.5	77.5	110.1	74.7	1.0	10.9	1.3	5	silty SAND to sandy SILT	120	3.0	26	25	16	59	40	-	-	15	0.200	2.08	16
15.26	91.1	94.3	136.8	91.3	1.6	10.5	1.8	5	silty SAND to sandy SILT	120	3.0	31	30	19	65	41	-	-	16	0.200	2.10	16
15.42	91.8	94.5	152.0	92.0	2.1	9.9	2.3	5	silty SAND to sandy SILT	120	3.0	31	31	20	65	41	-	-	18	0.200	2.18	16

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Corporation Yard Improvements Project

Project ID: BAGGS Engineering
Data File: SDF(360).cpt
CPT Date: 10/8/2021 3:02:21 PM
GW During Test: 18 ft

Sounding ID: CPT-02
Project No: HALFM-21-01
Cone/Rig: DPG1556

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR - -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
15.58	75.6	77.4	158.6	75.8	2.3	7.5	3.1	5	silty SAND to sandy SILT	120	3.0	26	25	17	59	40	-	-	24	0.200	2.33	16
15.75	48.0	48.9	145.8	48.2	1.8	10.0	3.8	4	clayy SILT to silty CLAY	115	2.0	24	24	12	-	-	3.3	9.9	33	0.070	2.54	15
15.91	44.7	45.2	128.1	45.0	1.4	15.0	3.2	4	clayy SILT to silty CLAY	115	2.0	23	22	11	-	-	3.1	9.9	31	0.070	2.51	15
16.08	95.4	96.1	135.4	95.8	1.6	22.7	1.7	5	silty SAND to sandy SILT	120	3.0	32	32	19	66	41	-	-	15	0.200	2.07	16
16.24	95.3	95.5	151.4	95.5	2.1	9.1	2.2	5	silty SAND to sandy SILT	120	3.0	32	32	20	65	41	-	-	18	0.200	2.17	16
16.40	48.8	48.6	145.0	48.9	1.8	5.7	3.8	4	clayy SILT to silty CLAY	115	2.0	24	24	12	-	-	3.4	9.9	33	0.070	2.54	15
16.57	29.7	31.0	-	29.9	1.5	8.7	5.4	3	silty CLAY to CLAY	115	1.5	21	20	9	-	-	2.0	9.9	45	0.005	2.79	15
16.73	18.5	19.2	-	18.8	1.1	12.0	6.4	3	silty CLAY to CLAY	115	1.5	13	12	6	-	-	1.2	6.0	58	0.005	3.00	15
16.90	26.9	27.6	-	27.3	1.5	19.4	5.8	3	silty CLAY to CLAY	115	1.5	18	18	8	-	-	1.8	8.8	49	0.005	2.85	15
17.06	68.3	66.8	138.0	68.6	1.8	15.6	2.7	5	silty SAND to sandy SILT	120	3.0	22	23	15	54	38	-	-	24	0.200	2.34	16
17.23	54.4	52.9	127.6	54.5	1.5	9.3	2.8	4	clayy SILT to silty CLAY	115	2.0	26	27	12	-	-	3.8	9.9	27	0.070	2.42	15
17.39	28.8	28.6	-	29.1	1.3	12.7	4.7	3	silty CLAY to CLAY	115	1.5	19	19	8	-	-	2.0	9.1	45	0.005	2.78	15
17.55	20.6	20.3	-	21.0	1.0	19.9	5.2	3	silty CLAY to CLAY	115	1.5	14	14	6	-	-	1.4	6.4	53	0.005	2.92	15
17.72	21.2	20.7	-	21.6	0.8	20.2	4.2	3	silty CLAY to CLAY	115	1.5	14	14	6	-	-	1.4	6.5	49	0.005	2.85	15
17.88	21.2	20.5	-	21.6	0.8	19.4	3.8	3	silty CLAY to CLAY	115	1.5	14	14	6	-	-	1.4	6.4	48	0.005	2.83	15
18.05	20.1	19.4	-	20.5	0.6	20.2	3.3	4	clayy SILT to silty CLAY	115	2.0	10	10	6	-	-	1.4	6.1	46	0.070	2.81	15
18.21	17.7	17.0	-	18.1	0.4	18.9	2.7	4	clayy SILT to silty CLAY	115	2.0	8	9	5	-	-	1.2	5.3	46	0.070	2.80	15
18.37	16.3	15.5	-	16.7	0.5	19.6	3.0	3	silty CLAY to CLAY	115	1.5	10	11	5	-	-	1.1	4.8	50	0.005	2.87	15
18.54	14.9	14.2	-	15.3	0.5	19.8	3.6	3	silty CLAY to CLAY	115	1.5	9	10	4	-	-	1.0	4.3	55	0.005	2.95	15
18.70	15.4	14.6	-	15.9	0.5	25.4	3.4	3	silty CLAY to CLAY	115	1.5	10	10	4	-	-	1.0	4.5	53	0.005	2.92	15
18.87	16.7	15.8	-	17.2	0.7	26.2	4.7	3	silty CLAY to CLAY	115	1.5	11	11	5	-	-	1.1	4.9	57	0.005	2.98	15
19.03	18.4	17.2	-	18.9	1.0	26.8	6.0	3	silty CLAY to CLAY	115	1.5	11	12	6	-	-	1.2	5.3	60	0.005	3.02	15
19.19	20.7	19.4	-	21.2	1.4	27.5	6.9	3	silty CLAY to CLAY	115	1.5	13	14	6	-	-	1.4	6.0	60	0.005	3.02	15
19.36	30.4	28.3	-	30.9	1.0	27.6	3.4	4	clayy SILT to silty CLAY	115	2.0	14	15	8	-	-	2.1	9.0	40	0.070	2.68	15
19.52	25.5	23.7	-	25.9	1.0	18.3	3.9	3	silty CLAY to CLAY	115	1.5	16	17	7	-	-	1.7	7.5	45	0.005	2.79	15
19.69	18.2	16.8	-	18.6	0.8	20.0	4.8	3	silty CLAY to CLAY	115	1.5	11	12	5	-	-	1.2	5.2	56	0.005	2.96	15
19.85	19.7	18.1	-	20.2	0.8	23.4	4.2	3	silty CLAY to CLAY	115	1.5	12	13	5	-	-	1.3	5.6	52	0.005	2.90	15
20.01	21.7	19.9	-	22.2	0.6	22.0	3.1	4	clayy SILT to silty CLAY	115	2.0	10	11	6	-	-	1.5	6.2	45	0.070	2.78	15
20.18	21.0	19.1	-	21.4	0.6	22.4	3.2	4	clayy SILT to silty CLAY	115	2.0	10	10	5	-	-	1.4	6.0	46	0.070	2.81	15
20.34	18.5	16.8	-	19.0	0.9	24.0	5.0	3	silty CLAY to CLAY	115	1.5	11	12	5	-	-	1.2	5.2	57	0.005	2.97	15
20.51	21.4	19.4	-	21.9	1.0	25.1	5.2	3	silty CLAY to CLAY	115	1.5	13	14	6	-	-	1.4	6.1	54	0.005	2.93	15
20.67	26.4	23.8	-	26.9	1.7	26.1	6.9	3	silty CLAY to CLAY	115	1.5	16	18	7	-	-	1.8	7.5	55	0.005	2.95	15
20.83	44.6	40.1	-	45.1	2.1	26.2	4.8	4	clayy SILT to silty CLAY	115	2.0	20	22	11	-	-	3.1	9.9	39	0.070	2.67	15
21.00	51.4	46.0	-	51.6	2.2	7.4	4.4	4	clayy SILT to silty CLAY	115	2.0	23	26	12	-	-	3.6	9.9	36	0.070	2.61	15
21.16	39.9	35.5	-	40.0	2.4	7.6	6.1	3	silty CLAY to CLAY	115	1.5	24	27	10	-	-	2.7	9.9	45	0.005	2.79	15
21.33	43.1	38.3	-	43.3	1.7	7.8	4.1	4	clayy SILT to silty CLAY	115	2.0	19	22	10	-	-	3.0	9.9	37	0.070	2.64	15
21.49	35.2	31.2	-	35.3	1.6	4.5	4.8	3	silty CLAY to CLAY	115	1.5	21	23	9	-	-	2.4	9.9	43	0.005	2.75	15
21.65	27.7	24.5	-	27.8	1.6	4.6	5.9	3	silty CLAY to CLAY	115	1.5	16	18	7	-	-	1.9	7.7	52	0.005	2.89	15
21.82	29.6	26.0	-	29.7	1.8	8.0	6.4	3	silty CLAY to CLAY	115	1.5	17	20	8	-	-	2.0	8.2	52	0.005	2.90	15
21.98	59.2	53.8	151.0	59.4	2.2	9.1	3.8	4	clayy SILT to silty CLAY	115	2.0	27	30	13	-	-	4.1	9.9	31	0.070	2.51	15
22.15	68.3	61.9	166.2	68.4	2.7	4.5	4.0	4	clayy SILT to silty CLAY	115	2.0	31	34	15	-	-	4.7	9.9	30	0.070	2.48	15
22.31	71.4	64.7	172.4	71.5	2.9	4.5	4.1	4	clayy SILT to silty CLAY	115	2.0	32	36	16	-	-	5.0	9.9	30	0.070	2.48	15
22.47	88.7	80.2	202.1	88.8	4.0	5.4	4.5	4	clayy SILT to silty CLAY	115	2.0	40	44	19	-	-	6.2	9.9	28	0.070	2.45	15
22.64	111.6	100.6	184.9	111.6	3.5	3.9	3.2	5	silty SAND to sandy SILT	120	3.0	34	37	22	67	40	-	-	21	0.200	2.26	16
22.80	92.4	83.1	150.8	92.4	2.4	2.0	2.6	5	silty SAND to sandy SILT	120	3.0	28	31	18	61	39	-	-	21	0.200	2.26	16
22.97	117.3	105.4	150.0	117.5	2.2	12.2	1.9	5	silty SAND to sandy SILT	120	3.0	35	39	21	69	41	-	-	15	0.200	2.08	16
23.13	157.3	141.0	161.6	157.3	1.8	3.1	1.2	6	clean SAND to silty SAND	125	5.0	28	31	26	78	42	-	-	9	0.350	1.85	16
23.30	165.3	147.8	147.6	165.4	1.0	3.3	0.6	6	clean SAND to silty SAND	125	5.0	30	33	26	80	42	-	-	5	0.350	1.64	16
23.46	171.3	152.9	152.9	171.4	1.0	2.9	0.6	6	clean SAND to silty SAND	125	5.0	31	34	26	81	42	-	-	5	0.350	1.63	16
23.62	190.4	169.6	169.6	190.5	1.1	3.0	0.6	6	clean SAND to silty SAND	125	5.0	34	38	29	84	43	-	-	5	0.350	1.58	16
23.79	190.9	169.7	169.7	191.0	1.0	3.1	0.5	6	clean SAND to silty SAND	125	5.0	34	38	29	84	43	-	-	5	0.350	1.57	16
23.95	199.7	177.1	177.1	199.8	1.1	2.5	0.6	6	clean SAND to silty SAND	125	5.0	35	40	30	86	43	-	-	5	0.350	1.56	16
24.12	203.2	179.8	179.8	203.2	1.2	2.7	0.6	6	clean SAND to silty SAND	125	5.0	36	41	30	86	43	-	-	5	0.350	1.58	16
24.28	214.2	189.1	189.1	214.2	1.3	2.7	0.6	6	clean SAND to silty SAND	125	5.0	38	43	32	88	43	-	-	5	0.350	1.56	16
24.44	213.4	188.0	188.0	213.4	1.4	2.5	0.6	6	clean SAND to silty SAND	125	5.0	38	43	32	88	43	-	-	5	0.350	1.58	16
24.61	211.3	185.8	185.8	211.3	1.5	2.5	0.7	6	clean SAND to silty SAND	125	5.0	37	42	32	87	43	-	-	5	0.350	1.61	16
24.77	213.9	187.7	187.5	214.0	1.7	2.5	0.8	6	clean SAND to silty SAND	125	5.0	38	43	32	88	43	-	-	5	0.350	1.64	16
24.94	227.3	199.1	199.1	227.4	1.8	2.8	0.8	6	clean SAND to silty SAND	125	5.0	40	45	34	90	44	-	-	5	0.350	1.63	16
25.10	258.6	225.9	225.9	258.6	1.8	3.1	0.7	6	clean SAND to silty SAND	125	5.0	45	52	38	94	44	-	-	5	0.350	1.54	16
25.26	280.9	244.9	244.9	281.0	1.6	2.6	0.6	6	clean SAND to silty SAND	125	5.0	49	56	40	95	45	-	-	5	0.350	1.45	16
25.43	271.9	236.6	236.6	272.0	1.4	2.4	0.5	6	clean SAND to silty SAND	125	5.0	47	54	38	95	44	-	-	5	0.350	1.44	16
25.59	243.1	211.1	211.1	243.2	1.3	2.0	0.6	6	clean SAND to silty SAND	125	5.0	42	49	35	92	44	-	-	5	0.350	1.50	16
25.76	226.7	196.5	196.5	226.8	1.4	1.9	0.6	6	clean SAND to silty SAND	125	5.0	39	45	33	89	44	-	-	5	0.350	1.55	16
25.92	230.9	199.7	199.7	230.9	1.3	1.9	0.6	6	clean SAND to silty SAND	125	5.0	40	46	33	90	44	-	-	5	0.350	1.53	16
26.08	231.9	200.1	200.1	231.9	0.9	1.9	0.4	6	clean SAND to silty SAND	125	5.0	40	46	32	90	44	-	-	5	0.350	1.43	16
26.25	219.1	188.7	188.7	219.1	1.0	1.6	0.5	6	clean SAND to silty SAND	125	5.0	38	44	31	88	43	-	-	5	0.350	1.50	16
26.41	222.8	191.5	191.5	222.8	1.1	1.2	0.5	6	clean SAND to silty SAND	125	5.0	38	45	32	88	43	-	-	5	0.350	1.51	16
26.58	237.0	203.3	203.3	237.0	1.2	1.4	0.5	6	clean SAND to silty SAND	125	5.0	41	47	33	90	44	-	-	5	0.350	1.49	16
26.74	242.2	207.4	207.4	242.2	1.3	0.7	0.5	6	clean SAND to silty SAND	125	5.0	41	48	34	91	44	-	-	5	0.350	1.49	16
26.90	248.4	212.2	212.2	248.3	1.3	-0.8	0.5	6	clean SAND to silty SAND	125	5.0	42	50	35	92	44	-	-	5	0.350	1.48	16
27.07	242.5	206.8	206.8	242.5	1.4	-1.0	0.6	6	clean SAND to silty SAND	125	5.0	41	48	34	91	44	-	-	5	0.350	1.52	16
27.23	238.7	203.2	203.2	238.7	1.4	-0.6	0.6	6	clean SAND to silty SAND	125	5.0	41	48	34	90	44	-	-	5	0.350	1.53	16
27.40	243.0	206.4	206.4	242.9	1.3	-0.8	0.5	6	clean SAND to silty SAND	125	5.0	41	49	34	91	44	-	-	5	0.350	1.49	16
27.56	229.0	194.1	194.1	228.9	1.1	-0.9	0.5	6	clean SAND to silty SAND	125	5.0	39	46	32	89	43	-	-	5	0.350	1.50	16
27.72	202.4	171.3	171.3	202.4	0.8	-1.3	0.4	6	clean SAND to silty SAND	125	5.0	34	40	28	85	43	-	-	5	0.350	1.49	16
27.89	178.5	150.8	150.8	178.5	1.0	-1.7	0.6	6	clean SAND to silty SAND	125	5.0	30	36	26	81	42	-	-	5	0.350	1.63	16
28.05	184.6	155.6	155.6	184.5	1.2	-1.7	0.6	6	clean SAND to silty SAND	125	5.0	31	37	27	82	42	-	-	5	0.350	1.64	16
28.22	184.5	155.2	156.4	184.5	1.2	-1.4	0.7	6	clean SAND to silty SAND	125	5.0	31	37	27	82	42	-	-	5	0.350	1.66	16
28.38	191.3	160.6	160.6	191.3	1.1	-2.2	0.6	6	clean SAND to silty SAND	125	5.0	32	38	27	83	42	-	-	5	0.350	1.62	16
28.54	203.1	170.2	170.2	203.0	1.1	-2.7	0.5	6	clean SAND to silty SAND	125	5.0	34	41	29	85	43	-	-	5	0.350	1.57	16
28.71	200.6	167.8	167.8	200.5	1.0	-3.3	0.5	6	clean SAND to silty SAND	125	5.0	34	40	28	84	43	-	-	5	0.350	1.54	16
28.87	198.4	165.6	165.6	198.3	0.9	-3.2	0.5	6	clean SAND to silty SAND	125	5.0	33	40	28	84	42	-	-	5	0.350	1.54	16
29.04	195.1	162.5	162.5	195.0	0.9	-3.4	0.5	6	clean SAND to silty SAND	125	5.0	33	39	27	83	42	-	-	5	0.350	1.54	16
29.20	195.5	162.6	162.6	195.5	0.9	-3.6	0.4	6	clean SAND to silty SAND	125	5.0	33	39	27	83	42	-	-	5	0.350	1.53	16
29.36	193.4	160.6	160.6	193.4	0.9	-3.6	0.5	6	clean SAND to silty SAND	125	5.0	32	39	27	83	42	-	-	5	0.350	1.56	16
29.53	195.4	161.9	161.9	195.3	1.0	-3.7	0.5	6	clean SAND to silty SAND	125	5.0	32	39	27	83	42	-	-	5	0.350	1.58	16
29.69	194.8	161.1	161.1	194.7	1.2	-3.7	0.6	6	clean SAND to silty SAND	125	5.0	32	39	28	83	42	-	-	5	0.350	1.62	16
29.86	191.5	158.1	159.8	191.4	1.3	-3.8	0.7	6	clean SAND to silty SAND	125	5.0	32	38	27	82	42	-	-	5	0.350	1.66	16
30.02	179.8	148.1	153.4	179.7	1.3	-3.8	0.7	6	clean SAND to silty SAND	125	5.0	30	36	26	80	42	-	-	6	0.350	1.70	16
30.19	183.1	150.5	154.8	183.0	1.3	-3.9	0.7	6	clean SAND to silty SAND	125	5.0	30	37	26	81	42	-	-	6	0.350	1.69	16
30.35	186.9	153.4	153.4	186.8	1.1	-4.0	0.6	6	clean SAND to silty SAND	125	5.0	31	37	26	81	42	-	-	5	0.350	1.62	16
30.51	188.3	154.3	154.3	188.2	0.9	-3.8	0.5	6	clean SAND to silty SAND	125	5.0	31	38	26	81	42	-	-	5	0.350	1.56	16
30.68	196.7	160.9	160.9	196.6	0.6	-4.0	0.3	6	clean SAND to silty SAND	125	5.0	32	39	26	83	42	-	-	5	0.350	1.43	16
30.84	196.5	160.4	160.4	196.4	0.7	-4.0	0.3	6	clean SAND to silty SAND	125	5.0	32	39	26	83	42	-	-	5	0.350	1.47	16

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Corporation Yard Improvements Project

Project ID: BAGGS Engineering
Data File: SDF(360).cpt
CPT Date: 10/8/2021 3:02:21 PM
GW During Test: 18 ft

Sounding ID: CPT-02
Project No: HALFM-21-01
Cone/Rig: DPG1556

Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
31.01	188.4	153.5	153.5	188.3	0.6	-4.1	0.3	6	clean SAND to silty SAND	125	5.0	31	38	25	81	42	-	-	5	0.350	1.49	16
31.17	172.3	140.2	142.6	172.3	1.1	-2.4	0.6	6	clean SAND to silty SAND	125	5.0	28	34	24	78	42	-	-	6	0.350	1.67	16
31.33	174.4	141.6	147.6	174.3	1.2	-3.5	0.7	6	clean SAND to silty SAND	125	5.0	28	35	25	78	42	-	-	6	0.350	1.71	16
31.50	161.9	131.2	137.7	161.8	1.1	-4.0	0.7	6	clean SAND to silty SAND	125	5.0	26	32	23	76	41	-	-	6	0.350	1.72	16
31.66	119.2	96.5	119.4	119.1	1.3	-4.7	1.1	6	clean SAND to silty SAND	125	5.0	19	24	19	66	39	-	-	12	0.350	1.95	16
31.83	98.9	79.9	139.1	98.8	2.2	-4.9	2.3	5	silty SAND to sandy SILT	120	3.0	27	33	17	60	38	-	-	20	0.200	2.23	16
31.99	62.1	50.1	120.7	62.0	1.6	-4.3	2.6	5	silty SAND to sandy SILT	120	3.0	17	21	12	44	36	-	-	27	0.200	2.42	16
32.15	39.8	27.3	-	39.7	1.3	-3.7	3.3	4	clayy SILT to silty CLAY	115	2.0	14	20	7	-	-	2.7	8.6	40	0.070	2.69	15
32.32	19.1	13.1	-	19.0	0.7	-2.1	4.1	3	silty CLAY to CLAY	115	1.5	9	13	4	-	-	1.2	3.9	60	0.005	3.02	15
32.48	16.6	11.4	-	16.6	0.5	-0.2	3.3	3	silty CLAY to CLAY	115	1.5	8	11	4	-	-	1.1	3.3	60	0.005	3.02	15
32.65	15.5	10.6	-	15.5	0.6	1.0	4.3	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	3.1	67	0.005	3.12	15
32.81	14.9	10.1	-	15.0	0.9	1.9	7.2	3	silty CLAY to CLAY	115	1.5	7	10	4	-	-	1.0	2.9	78	0.005	3.27	15
32.97	17.3	11.7	-	17.3	1.2	2.7	7.8	3	silty CLAY to CLAY	115	1.5	8	12	4	-	-	1.1	3.4	76	0.005	3.24	15
33.14	45.8	30.9	-	45.9	1.4	2.4	3.2	4	clayy SILT to silty CLAY	115	2.0	15	23	8	-	-	3.1	9.8	37	0.070	2.64	15
33.30	74.0	58.9	123.0	74.0	1.7	0.7	2.4	5	silty SAND to sandy SILT	120	3.0	20	25	13	50	37	-	-	24	0.200	2.34	16
33.47	80.1	63.7	132.0	80.0	2.0	-1.5	2.6	5	silty SAND to sandy SILT	120	3.0	21	27	14	52	37	-	-	24	0.200	2.34	16
33.63	81.6	64.8	133.1	81.6	2.0	-2.4	2.6	5	silty SAND to sandy SILT	120	3.0	22	27	15	53	37	-	-	24	0.200	2.33	16
33.79	80.2	63.6	138.4	80.1	2.2	-3.0	2.8	5	silty SAND to sandy SILT	120	3.0	21	27	15	52	37	-	-	25	0.200	2.37	16
33.96	86.7	68.7	144.3	86.6	2.4	-3.1	2.8	5	silty SAND to sandy SILT	120	3.0	23	29	16	55	37	-	-	24	0.200	2.34	16
34.12	95.8	75.8	118.7	95.8	1.6	-3.7	1.7	5	silty SAND to sandy SILT	120	3.0	25	32	16	58	38	-	-	18	0.200	2.16	16
34.29	84.5	66.7	120.5	84.4	1.7	-3.8	2.0	5	silty SAND to sandy SILT	120	3.0	22	28	15	54	37	-	-	21	0.200	2.25	16
34.45	84.0	66.2	118.4	83.9	1.6	-3.7	2.0	5	silty SAND to sandy SILT	120	3.0	22	28	14	53	37	-	-	21	0.200	2.25	16
34.61	82.9	65.2	127.6	82.8	1.9	-4.2	2.3	5	silty SAND to sandy SILT	120	3.0	22	28	14	53	37	-	-	23	0.200	2.30	16
34.78	54.2	42.6	121.9	54.1	1.6	-4.8	3.0	4	clayy SILT to silty CLAY	115	2.0	21	27	10	-	-	3.7	9.9	32	0.070	2.52	15
34.94	32.7	21.3	-	32.6	1.4	-4.8	4.6	3	silty CLAY to CLAY	115	1.5	14	22	6	-	-	2.2	6.6	50	0.005	2.87	15
35.11	33.6	21.9	-	33.5	1.3	-3.6	4.2	3	silty CLAY to CLAY	115	1.5	15	22	6	-	-	2.3	6.8	48	0.005	2.84	15
35.27	52.6	34.1	-	52.6	1.6	-3.5	3.3	4	clayy SILT to silty CLAY	115	2.0	17	26	9	-	-	3.6	9.9	36	0.070	2.61	15
35.43	44.6	28.9	-	44.5	1.6	-4.0	3.8	4	clayy SILT to silty CLAY	115	2.0	14	22	8	-	-	3.0	9.1	41	0.070	2.71	15
35.60	26.5	17.1	-	26.4	1.6	-3.5	6.5	3	silty CLAY to CLAY	115	1.5	11	18	6	-	-	1.8	5.2	62	0.005	3.05	15
35.76	50.0	32.2	-	50.0	1.5	-2.5	3.0	4	clayy SILT to silty CLAY	115	2.0	16	25	8	-	-	3.4	9.9	36	0.070	2.61	15
35.93	54.8	42.7	87.5	54.8	0.8	-3.2	1.5	5	silty SAND to sandy SILT	120	3.0	14	18	10	39	34	-	-	24	0.200	2.33	16
36.09	32.5	20.8	-	32.5	0.8	-3.6	2.5	4	clayy SILT to silty CLAY	115	2.0	10	16	6	-	-	2.2	6.4	41	0.070	2.72	15
36.26	18.0	11.5	-	18.0	0.5	-2.9	3.4	3	silty CLAY to CLAY	115	1.5	8	12	4	-	-	1.2	3.3	60	0.005	3.02	15
36.42	16.8	10.7	-	16.8	0.5	-1.9	3.2	3	silty CLAY to CLAY	115	1.5	7	11	3	-	-	1.1	3.1	61	0.005	3.03	15
36.58	16.9	10.7	-	16.8	0.5	-1.5	3.4	3	silty CLAY to CLAY	115	1.5	7	11	4	-	-	1.1	3.1	62	0.005	3.05	15
36.75	16.6	10.5	-	16.6	0.5	-1.2	3.5	3	silty CLAY to CLAY	115	1.5	7	11	4	-	-	1.1	3.0	63	0.005	3.07	15
36.91	16.7	10.6	-	16.7	0.5	-0.9	3.4	3	silty CLAY to CLAY	115	1.5	7	11	3	-	-	1.1	3.0	62	0.005	3.05	15
37.08	17.4	11.0	-	17.4	0.5	-0.7	3.5	3	silty CLAY to CLAY	115	1.5	7	12	4	-	-	1.1	3.2	62	0.005	3.05	15
37.24	18.1	11.3	-	18.0	0.8	-0.5	4.9	3	silty CLAY to CLAY	115	1.5	8	12	4	-	-	1.2	3.3	67	0.005	3.12	15
37.40	22.4	14.0	-	22.4	0.5	-0.1	2.6	3	silty CLAY to CLAY	115	1.5	9	15	4	-	-	1.5	4.2	51	0.005	2.88	15
37.57	28.9	18.0	-	28.9	0.6	-0.3	2.1	4	clayy SILT to silty CLAY	115	2.0	9	14	5	-	-	1.9	5.5	42	0.070	2.72	15
37.73	18.9	11.8	-	18.9	0.5	-0.4	2.7	3	silty CLAY to CLAY	115	1.5	8	13	4	-	-	1.2	3.4	56	0.005	2.96	15
37.90	17.1	10.6	-	17.1	0.4	0.7	2.7	3	silty CLAY to CLAY	115	1.5	7	11	3	-	-	1.1	3.0	59	0.005	3.00	15
38.06	18.0	11.2	-	18.0	0.4	0.8	2.7	3	silty CLAY to CLAY	115	1.5	7	12	4	-	-	1.2	3.2	57	0.005	2.98	15
38.22	18.2	11.2	-	18.2	0.4	0.9	2.7	3	silty CLAY to CLAY	115	1.5	7	12	4	-	-	1.2	3.3	57	0.005	2.97	15
38.39	18.3	11.3	-	18.3	0.4	1.0	2.7	3	silty CLAY to CLAY	115	1.5	8	12	4	-	-	1.2	3.3	57	0.005	2.98	15
38.55	18.2	11.2	-	18.2	0.4	1.1	2.7	3	silty CLAY to CLAY	115	1.5	7	12	4	-	-	1.2	3.2	57	0.005	2.98	15
38.72	17.8	10.9	-	17.8	0.4	1.2	2.7	3	silty CLAY to CLAY	115	1.5	7	12	3	-	-	1.1	3.1	58	0.005	2.99	15
38.88	17.3	10.6	-	17.3	0.4	1.3	2.7	3	silty CLAY to CLAY	115	1.5	7	12	3	-	-	1.1	3.0	59	0.005	3.00	15
39.04	17.1	10.4	-	17.2	0.4	1.4	2.9	3	silty CLAY to CLAY	115	1.5	7	11	3	-	-	1.1	3.0	60	0.005	3.02	15
39.21	17.7	10.7	-	17.7	0.6	1.5	3.7	3	silty CLAY to CLAY	115	1.5	7	12	4	-	-	1.1	3.1	64	0.005	3.07	15
39.37	19.8	12.0	-	19.8	0.6	1.6	3.7	3	silty CLAY to CLAY	115	1.5	8	13	4	-	-	1.3	3.5	60	0.005	3.03	15
39.54	26.3	15.9	-	26.3	0.9	2.0	3.8	3	silty CLAY to CLAY	115	1.5	11	18	5	-	-	1.7	4.8	54	0.005	2.93	15
39.70	29.7	17.9	-	29.7	1.3	1.7	4.8	3	silty CLAY to CLAY	115	1.5	12	20	6	-	-	2.0	5.4	55	0.005	2.95	15
39.86	31.1	18.7	-	31.1	1.4	1.7	4.9	3	silty CLAY to CLAY	115	1.5	12	21	6	-	-	2.1	5.7	54	0.005	2.94	15
40.03	34.0	20.4	-	34.0	1.5	1.7	4.7	3	silty CLAY to CLAY	115	1.5	14	23	6	-	-	2.3	6.3	52	0.005	2.89	15
40.19	33.0	19.8	-	33.1	1.8	1.6	6.0	3	silty CLAY to CLAY	115	1.5	13	22	6	-	-	2.2	6.1	57	0.005	2.98	15
40.36	32.1	19.2	-	32.2	1.9	1.8	6.5	3	silty CLAY to CLAY	115	1.5	13	21	6	-	-	2.2	5.9	59	0.005	3.01	15
40.52	42.3	25.2	-	42.4	2.8	2.0	6.9	3	silty CLAY to CLAY	115	1.5	17	28	8	-	-	2.9	7.8	54	0.005	2.94	15
40.68	64.4	38.2	-	64.4	2.8	1.5	4.5	4	clayy SILT to silty CLAY	115	2.0	19	32	10	-	-	4.4	9.9	39	0.070	2.67	15
40.85	62.6	37.1	-	62.6	3.0	-1.7	5.0	3	silty CLAY to CLAY	115	1.5	25	42	10	-	-	4.3	9.9	41	0.005	2.71	15
41.01	49.9	29.5	-	49.9	3.5	-1.6	7.3	3	silty CLAY to CLAY	115	1.5	20	33	9	-	-	3.4	9.3	52	0.005	2.90	15
41.18	66.1	38.9	-	66.1	3.6	-1.0	5.7	3	silty CLAY to CLAY	115	1.5	26	44	11	-	-	4.6	9.9	42	0.005	2.74	15
41.34	73.2	43.0	-	73.2	3.6	-1.4	5.1	3	silty CLAY to CLAY	115	1.5	29	49	11	-	-	5.1	9.9	39	0.005	2.67	15
41.50	58.5	34.3	-	58.4	2.8	-2.1	5.0	3	silty CLAY to CLAY	115	1.5	23	39	9	-	-	4.0	9.9	43	0.005	2.74	15
41.67	38.5	22.5	-	38.4	1.7	-2.7	4.8	3	silty CLAY to CLAY	115	1.5	15	26	7	-	-	2.6	6.9	50	0.005	2.87	15
41.83	29.6	17.3	-	29.6	1.1	-2.0	4.2	3	silty CLAY to CLAY	115	1.5	12	20	5	-	-	2.0	5.2	54	0.005	2.92	15
42.00	25.7	15.0	-	25.7	1.0	-1.5	4.2	3	silty CLAY to CLAY	115	1.5	10	17	5	-	-	1.7	4.5	57	0.005	2.98	15
42.16	24.1	14.0	-	24.0	0.8	-1.2	3.7	3	silty CLAY to CLAY	115	1.5	9	16	4	-	-	1.6	4.1	56	0.005	2.97	15
42.32	23.3	13.5	-	23.2	1.0	-0.9	4.9	3	silty CLAY to CLAY	115	1.5	9	16	4	-	-	1.5	4.0	62	0.005	3.06	15
42.49	22.9	13.2	-	22.8	1.4	-0.7	7.1	3	silty CLAY to CLAY	115	1.5	9	15	5	-	-	1.5	3.9	71	0.005	3.17	15
42.65	29.0	16.7	-	29.0	1.6	-0.3	6.0	3	silty CLAY to CLAY	115	1.5	11	19	5	-	-	1.9	5.0	61	0.005	3.04	15
42.82	92.1	67.8	105.2	92.1	1.3	0.2	1.4	5	silty SAND to sandy SILT	120	3.0	23	31	14	54	37	-	-	17	0.200	2.15	16
42.98	137.6	101.2	113.0	137.5	0.9	-3.1	0.7	6	clean SAND to silty SAND	125	5.0	20	28	19	67	39	-	-	8	0.350	1.81	16
43.15	127.0	93.3	125.0	126.9	1.7	-5.1	1.4	5	silty SAND to sandy SILT	120	3.0	31	42	19	65	39	-	-	14	0.200	2.03	16
43.31	78.6	57.7	124.9	78.5	1.9	-5.3	2.5	5	silty SAND to sandy SILT	120	3.0	19	26	13	49	36	-	-	25	0.200	2.36	16
43.47	44.6	25.3	-	44.5	1.4	-5.0	3.3	4	clayy SILT to silty CLAY	115	2.0	13	22	7	-	-	3.0	7.9	41	0.070	2.72	15
43.64	27.9	15.8	-	27.8	0.8	-4.1	3.3	3	silty CLAY to CLAY	115	1.5	11	19	5	-	-	1.8	4.7	51	0.005	2.89	15
43.80	20.9	11.8	-	20.9	0.7	-3.3	3.5	3	silty CLAY to CLAY	115	1.5	8	14	4	-	-	1.4	3.4	60	0.005	3.03	15
43.97	21.2	12.0	-	21.2	1.1	-1.3	5.8	3	silty CLAY to CLAY	115	1.5	8	14	4	-	-	1.4	3.5	69	0.005	3.15	15
44.13	24.8	14.0	-	24.8	1.6	-0.9	7.4	3	silty CLAY to CLAY	115	1.5	9	17	5	-	-	1.6	4.1	70	0.005	3.16	15
44.29	42.3	23.8	-	42.3	2.1	-0.3	5.3	3	silty CLAY to CLAY	115	1.5	16	28	7	-	-	2.9	7.4	51	0.005	2.88	15
44.46	46.0	25.8	-	46.0	2.4	-1.3	5.4	3	silty CLAY to CLAY	115	1.5	17	31	8	-	-	3.1	8.0	49	0.005	2.86	15
44.62	35.0	19.6	-	35.0	1.8	-1.4	5.7	3	silty CLAY to CLAY	115	1.5	13	23	6	-	-	2.3	6.0	56	0.005	2.96	15
44.79	76.4	55.4	103.5	76.4	1.3	-0.5	1.7	5	silty SAND to sandy SILT	120	3.0	18	25	12	48	36	-	-	22	0.200	2.27	16
44.95	127.1	92.1	102.7	127.1	0.7	-2.4	0.6	6	clean SAND to silty SAND	125	5.0	18	25	17	64	39	-	-	8	0.350	1.81	16
45.11	138.8	100.4	105.7	138.8	0.6	-3.7	0.5	6	clean SAND to silty SAND	125	5.0	20	28	18	67	39	-	-	7	0.350	1.72	16
45.28	142.4	102.8	106.2	142.3	0.6	-4.0	0.4	6	clean SAND to silty SAND	125	5.0	21	28	18	68	39	-	-	6	0.350	1.69	16
45.44	146.9	105.9	105.9	146.8	0.5	-4.1	0.3	6	clean SAND to silty SAND	125	5.0	21	29	18	69	39	-	-	5	0.350	1.64	16
45.61	144.3	103.9	103.8	144.2	0.5	-4.4	0.3	6	clean SAND to silty SAND	125	5.0	21	29	18	68	39	-	-	5	0.350	1.64	16
45.77	138.9	99.9	107.1	138.9	0.7	-4.5	0.5	6	clean SAND to silty SAND	125	5.0	20	28	18	67	39	-	-	7	0.350	1.75	16
45.93	132.3	95.0	137.9	132.2	2.3	-4.4	1.8	5	silty SAND to sandy SILT	120	3.0	32	44	19	65	39	-	-	16	0.200	2.10	16
46.10	116.6	83.6	141.6	116.5	2.5	-4.2	2.2	5	silty SAND to sandy SILT	120	3.0	28	39	18	61	38	-	-	19	0.200	2.21	16
46.26	76.2	54.6	142.7	76.1	2.4	-4.1	3.3	4	clayy SILT to silty CLAY	115	2.0	27	38	13	-	-	5.3	9.9	29	0.070	2.47	15

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Project ID: BAGGS Engineering
Data File: SDF(360).cpt
CPT Date: 10/8/2021 3:02:21 PM
GW During Test: 18 ft

Sounding ID: CPT-02
Project No: HALFM-21-01
Cone/Rig: DPG1556

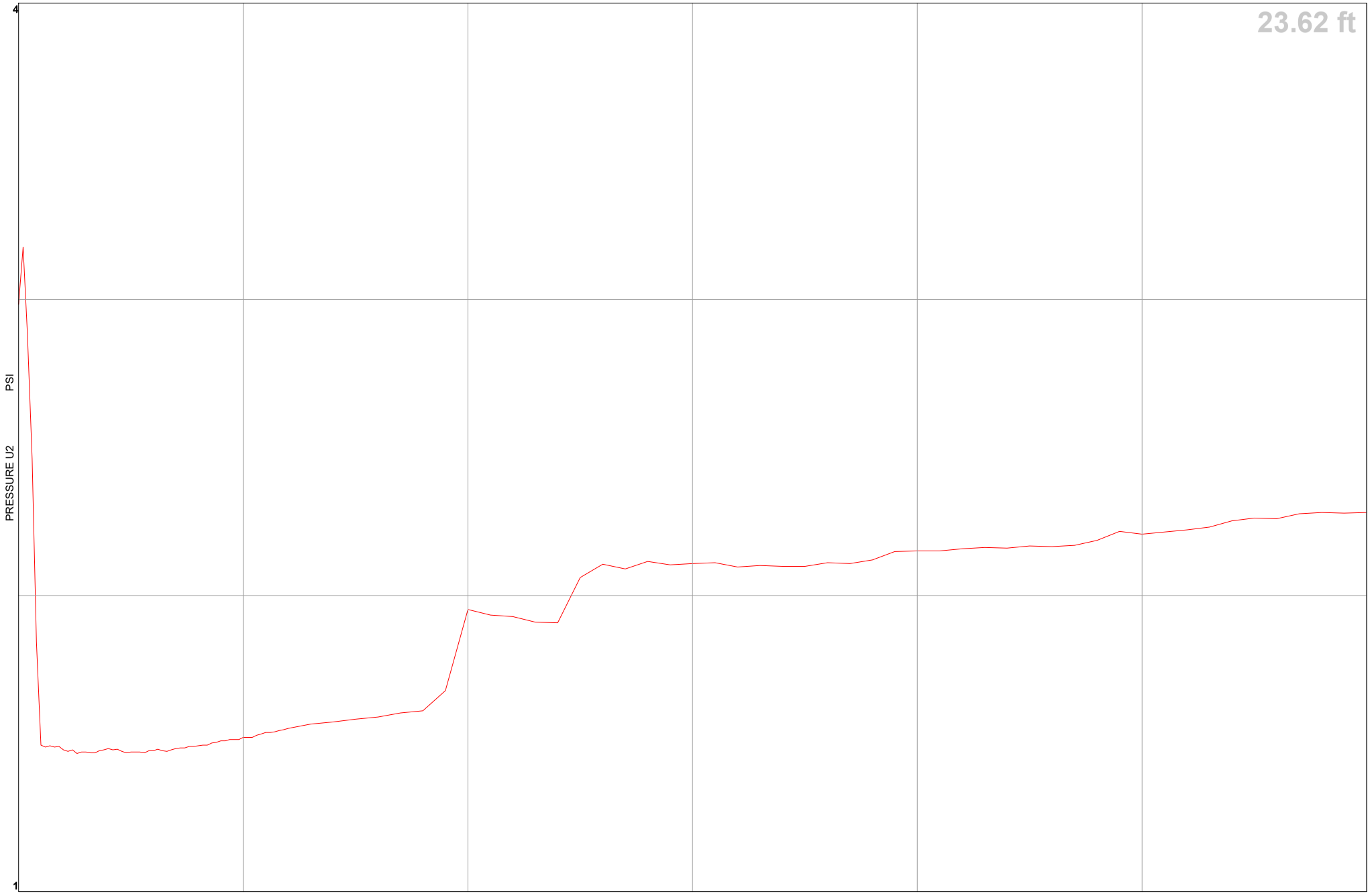
Depth ft	qc PS tsf	qcln PS -	q1ncs PS -	qt PS tsf	Slv Stss tsf	pore prss (psi)	Frct Rato %	Mat Typ Zon	Material Behavior Description	Unit Wght pcf	Qc to N	SPT R-N1 60%	SPT R-N 60%	SPT IcN1 60%	Rel Den %	Ftn Ang deg	Und Shr tsf	OCR -	Fin Ic %	D50 - mm	Ic SBT Indx	Nk -
46.43	54.8	29.7	-	54.8	2.1	-2.0	4.1	4	clayy SILT to silty CLAY	115	2.0	15	27	8	-	-	3.7	9.3	42	0.070	2.72	15
46.59	120.7	86.2	110.5	120.7	1.3	-0.9	1.1	6	clean SAND to silty SAND	125	5.0	17	24	17	62	38	-	-	13	0.350	1.99	16
46.75	159.2	113.6	113.6	159.1	0.6	-2.6	0.4	6	clean SAND to silty SAND	125	5.0	23	32	19	71	40	-	-	5	0.350	1.63	16
46.92	171.9	122.5	122.5	171.8	0.5	-3.4	0.3	6	clean SAND to silty SAND	125	5.0	24	34	21	74	40	-	-	5	0.350	1.56	16
47.08	164.5	117.0	119.5	164.4	0.8	-3.7	0.5	6	clean SAND to silty SAND	125	5.0	23	33	20	72	40	-	-	6	0.350	1.68	16
47.25	142.6	101.3	118.7	142.5	1.2	-4.3	0.9	6	clean SAND to silty SAND	125	5.0	20	29	19	67	39	-	-	10	0.350	1.88	16
47.41	117.2	83.2	132.5	117.1	2.2	-2.9	1.9	5	silty SAND to sandy SILT	120	3.0	28	39	17	61	38	-	-	18	0.200	2.17	16
47.57	93.6	66.3	137.1	93.5	2.4	-4.5	2.6	5	silty SAND to sandy SILT	120	3.0	22	31	15	53	37	-	-	24	0.200	2.34	16
47.74	59.8	31.8	-	59.7	2.1	-5.5	3.7	4	clayy SILT to silty CLAY	115	2.0	16	30	8	-	-	4.1	9.9	39	0.070	2.67	15
47.90	32.7	17.3	-	32.6	2.1	-5.5	7.0	3	silty CLAY to CLAY	115	1.5	12	22	6	-	-	2.2	5.2	63	0.005	3.07	15
48.07	42.2	22.3	-	42.1	1.6	-4.6	4.2	3	silty CLAY to CLAY	115	1.5	15	28	6	-	-	2.8	6.9	48	0.005	2.83	15
48.23	54.1	28.6	-	54.0	1.3	-4.9	2.6	4	clayy SILT to silty CLAY	115	2.0	14	27	7	-	-	3.7	8.9	36	0.070	2.61	15
48.39	92.4	65.1	115.2	92.3	1.7	-4.6	1.9	5	silty SAND to sandy SILT	120	3.0	22	31	14	53	36	-	-	20	0.200	2.24	16
48.56	90.3	63.5	129.5	90.2	2.1	-4.9	2.5	5	silty SAND to sandy SILT	120	3.0	21	30	14	52	36	-	-	24	0.200	2.33	16
48.72	82.0	57.6	142.4	81.9	2.5	-4.9	3.2	4	clayy SILT to silty CLAY	115	2.0	29	41	14	-	-	5.7	9.9	28	0.070	2.44	15
48.89	63.9	33.4	-	63.8	2.8	-4.5	4.6	3	silty CLAY to CLAY	115	1.5	22	43	9	-	-	4.4	9.9	42	0.005	2.73	15
49.05	58.7	30.6	-	58.6	2.1	-4.4	3.8	4	clayy SILT to silty CLAY	115	2.0	15	29	8	-	-	4.0	9.6	40	0.070	2.70	15
49.22	45.0	23.4	-	44.9	2.1	-4.6	5.0	3	silty CLAY to CLAY	115	1.5	16	30	7	-	-	3.0	7.2	50	0.005	2.87	15
49.38	36.3	18.8	-	36.2	2.2	-4.2	6.7	3	silty CLAY to CLAY	115	1.5	13	24	6	-	-	2.4	5.7	60	0.005	3.03	15
49.54	50.2	26.0	-	50.2	2.0	-3.9	4.3	3	silty CLAY to CLAY	115	1.5	17	33	7	-	-	3.4	8.1	45	0.005	2.79	15
49.71	52.6	27.2	-	52.5	1.7	-4.2	3.5	4	clayy SILT to silty CLAY	115	2.0	14	26	7	-	-	3.6	8.5	41	0.070	2.71	15
49.87	62.1	43.3	117.3	62.1	1.6	-4.3	2.7	4	clayy SILT to silty CLAY	115	2.0	22	31	10	-	-	4.3	9.9	30	0.070	2.49	15
50.04	58.9	30.3	-	58.8	1.8	-4.4	3.2	4	clayy SILT to silty CLAY	115	2.0	15	29	8	-	-	4.0	9.5	38	0.070	2.65	15
50.20	44.0	22.6	-	44.0	2.1	-4.5	5.1	3	silty CLAY to CLAY	115	1.5	15	29	7	-	-	3.0	7.0	51	0.005	2.88	15

* Indicates the parameter was calculated using the normalized point stress.
The parameters listed above were determined using empirical correlations.
A Professional Engineer must determine their suitability for analysis and design.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

BAGG Engineers

Location	Corporation Yard Improvements Projec	Operator	JM-IY		
Job Number	HALFM-21-01	Cone Number	DPG1556	GPS	
Hole Number	CPT-02	Date and Time	10/8/2021 3:02:21 PM		
Equilized Pressure	2.2	EST GW Depth During Test	18.3		



DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical-engineering report prepared for a different client can be seriously misled*. No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be*, and, in general, *if you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying it. A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only*. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures*. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old.*

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration.*** Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

Telephone: 301/565-2733
e-mail: info@geoprofessional.org www.geoprofessional.org

Copyright 2016 by Geoprofessional Business Association (GBA). Duplication, reproduction, or copying of this document, in whole or in part, by any means whatsoever, is strictly prohibited, except with GBA's specific written permission. Excerpting, quoting, or otherwise extracting wording from this document is permitted only with the express written permission of GBA, and only for purposes of scholarly research or book review. Only members of GBA may use this document or its wording as a complement to or as an element of a report of any kind. Any other firm, individual, or other entity that so uses this document without being a GBA member could be committing negligent

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhibit 3

SCOPE OF WORK

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Part 2. Method and Strategic Plan – A. ***The technical and managerial approach to Respondent's partnership with the County. Consider the County's goals for the Project and the general functions required. Respondent may identify additional necessary tasks and discuss these in its proposed method to accomplish the work.***

Bigfoot Homes, Inc. is committed to adopting a holistic approach that emphasizes collaborative partnerships, effective communication, and adaptability to County dynamics.

Our priority is to establish open lines of communication with all stakeholders involved in the project, including the County of San Mateo, Project Manager, County staff, technical consultants, the criteria architect, project inspectors, and any other committees identified by County partner leads. Regular meetings will be scheduled to foster collaboration, address concerns, and ensure that every party is aligned with the overarching project goals. Bigfoot Homes, Inc. is dedicated to making itself available for meetings and actively participating in discussions to strengthen these partnerships.

From a technical perspective, Bigfoot Homes, Inc. will collaborate closely with our engineer, contractor and County inspectors to ensure the project adheres to all technical specifications and regulatory requirements. Regular updates will be provided to County staff and the Project Manager, seeking their input and approval at key project milestones.

A key component of our plan is to work closely with project inspectors to maintain high-quality standards throughout the construction process. We will implement a robust quality assurance program, conducting regular assessments to identify and address any issues promptly.

Recognizing the dynamic nature of government projects, Bigfoot Homes, Inc. is committed to flexibility and adaptability. We will stay informed about changes in County requirements or regulations and be prepared to adjust the project plan as needed, ensuring ongoing compliance.

To ensure a timely and professional completion of the project, the project timeline will be regularly updated with input from the County staff and the Project Manager. Regular reviews of progress against the timeline will be conducted, and proactive measures will be taken to address any potential delays.

Chris Lippi, Bigfoot Home's dedicated project manager, will work in collaboration with the assigned Project Manager for the County and will provide consistent oversight and coordination. Seamless communication among all team members and stakeholders will be maintained through regular status updates and reports.

Lastly, our strategic plan emphasizes continuous improvement. We will foster a culture that encourages feedback from all project leads and regularly assess and refine strategies based on lessons learned and emerging opportunities.

Through this comprehensive strategic plan, Bigfoot Homes, Inc. aims to position itself as a reliable and collaborative leader, ensuring the success of the Farmworker Housing Project through effective partnerships, community engagement, and adaptability to County dynamics.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Part 2. Method and Strategic Plan – B. ***Design capabilities and description of professional services to be provided by Respondent:***

Design Capabilities

- Champion Homes (manufacturer) will build homes to meet County specifications this includes home-specific engineering work and some architectural drawings. Champion will provide a "base" model which is modified in collaboration with Bigfoot Homes, Inc. in order to meet County standards.

- Bigfoot Homes, Inc. engages third party vendors to produce additional home elevations and renderings not provided by Champion Homes.

- Streamline Engineering will provide engineering work and construction drawings for home foundations, stairs and ramps.

- Streamline Engineering can provide additional engineering and design services as required.

- Bigfoot Homes, Inc. will engage other design and architectural consultants as needed.

Professional Services

- Bigfoot Homes, Inc. will provide the following professional services:
  - Construction Contract Administration
  - Manufactured Home Procurement
  - Coordinating Home Deliveries and Home Installations
  - Coordinating Home Inspections
  - Management of owner purchases as required by the County
  - Adherence and management of warranty repair requests

- Bigfoot Homes, Inc. AND S R M Contracting will provide the following services:
  - Safety program implementation
  - Managing prevailing wage requirement adherence
  - Compliance with skilled and trained workforce requirements

- S R M Contracting will provide the following services
  - Home installations and on-site construction

- Monica R. Lippi
  - Consultant to Bigfoot Homes, Inc., she will be ensuring proper adherence to County requirements and expectations.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Part 2. Method and Strategic Plan – C. Construction means and methods Respondent intends to utilize on the Project:

- Labor: S R M Contracting has a 30+ year operating history that started in the Bay Area. Over its history the Company's principal, Stephen R. Midkiff, has developed relationships and work crews across northern California. S R M Contracting will also draw on its labor force in Butte County to complete the project.

- Materials: Materials for foundations, skirting, stairs, utility connections and ramps will be procured from Westland Distributing, a manufactured housing supplies specialist, and other regional suppliers as required to meet project needs.

- Temporary Structures – There will be one (1) temporary job site trailer placed on the site, location is to-be-determined.

- Tools & Equipment - All tools & equipment will be the sole property of S R M Contracting, Bigfoot Homes, Inc. or one of our trucking vendors that will deliver homes to the construction site. Any equipment that is not the existing property of the parties will be rented as appropriate.

- Plant – All homes will be produced at either Skyline/Champion in Woodland, California or Redman/Champion in Lindsay, California.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhibit 4

PRICE PROPOSAL

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Section 10

Fixed Fee Price Proposal

Bigfoot Homes, Inc. proposes to provide the requested 47 manufactured homes and installed as requested by the County per the terms of this Proposal at the prices listed below and provided in more detail on the next page.

Summary (please see the break-out of each category on the following page):

- "Good" home options - $5,850,055 total price
- "Better" home options - $5,920,060 total price
- "Best" home options - $5,999,360 total price

Definitions:

- Base Price: The wholesale retail price Bigfoot Homes, Inc. received from home manufacturers.
- Markup: Bigfoot Homes, Inc. will charge a combined 29.38% markup on these homes which includes the San Mateo County 9.38% sales tax and a 20% markup paid to Bigfoot Homes, Inc. for services offered including a 2-year warranty exposure and exposure to materials price fluctuations.
- Storage and Delivery of Homes: Bigfoot Homes, Inc. has secured bids from trucking vendors mentioned in Section 5 – Technical Proposal. Our trucking company vendors have storage lots that will assist in project staging.
- Site Installation + 10% Contingency: Bigfoot Homes, Inc. will pay S R M Contracting the listed installation costs per home site, increased by a 10% contingency factor. This contingency factor was chosen based on S R M Contracting's experience in home installations.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Fixed Fee Price Proposal

Quantity	Home Type	Base Price to Bigfoot from Manufacturer (per home)	GOOD - Home Cost after 20% Markup and 9.38% Sales Tax in San Mateo County (per home)	Delivery and Storage Cost (per site)	Site Installation (per site) + 10% Contingency	Total Costs
9	1 Bed 1 Bath	$61,650	$79,763	$3,000	$27,500	$992,365
2	1 Bed 1 Bath ADA	$65,650	$84,938	$3,000	$33,000	$241,876
21	2 Bed 1 Bath	$63,413	$82,044	$3,000	$33,000	$2,478,919
3	2 Bed 1 Bath ADA	$70,350	$91,019	$3,000	$38,500	$397,556
10	3 Bed 2 Bath	$75,330	$97,462	$5,000	$38,500	$1,409,620
2	3 Bed 2 Bath ADA	$89,550	$115,860	$5,000	$44,000	$329,720
					Total	$5,850,055

Quantity	Home Type	Base Price to Bigfoot from Manufacturer (per home)	BETTER - Home Cost after 20% Markup and 9.38% Sales Tax in San Mateo County (per home)	Delivery and Storage Cost (per site)	Site Installation (per site) + 10% Contingency	Total Costs
9	1 Bed 1 Bath	$62,450	$80,798	$3,000	$27,500	$1,001,680
2	1 Bed 1 Bath ADA	$67,250	$87,008	$3,000	$33,000	$246,016
21	2 Bed 1 Bath	$65,021	$84,124	$3,000	$33,000	$2,522,608
3	2 Bed 1 Bath ADA	$71,000	$91,860	$3,000	$38,500	$400,079
10	3 Bed 2 Bath	$76,009	$98,340	$5,000	$38,500	$1,418,404
2	3 Bed 2 Bath ADA	$90,150	$116,636	$5,000	$44,000	$331,272
					Total	$5,920,060

Quantity	Home Type	Base Price to Bigfoot from Manufacturer (per home)	BEST - Home Cost after 20% Markup and 9.38% Sales Tax in San Mateo County (per home)	Delivery and Storage Cost (per site)	Site Installation (per site) + 10% Contingency	Total Costs
9	1 Bed 1 Bath	$63,650	$82,350	$3,000	$27,500	$1,015,653
2	1 Bed 1 Bath ADA	$67,650	$87,526	$3,000	$33,000	$247,051
21	2 Bed 1 Bath	$66,413	$85,925	$3,000	$33,000	$2,560,428
3	2 Bed 1 Bath ADA	$72,350	$93,606	$3,000	$38,500	$405,319
10	3 Bed 2 Bath	$77,330	$100,050	$5,000	$38,500	$1,435,496
2	3 Bed 2 Bath ADA	$91,750	$118,706	$5,000	$44,000	$335,412
					Total	$5,999,360

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

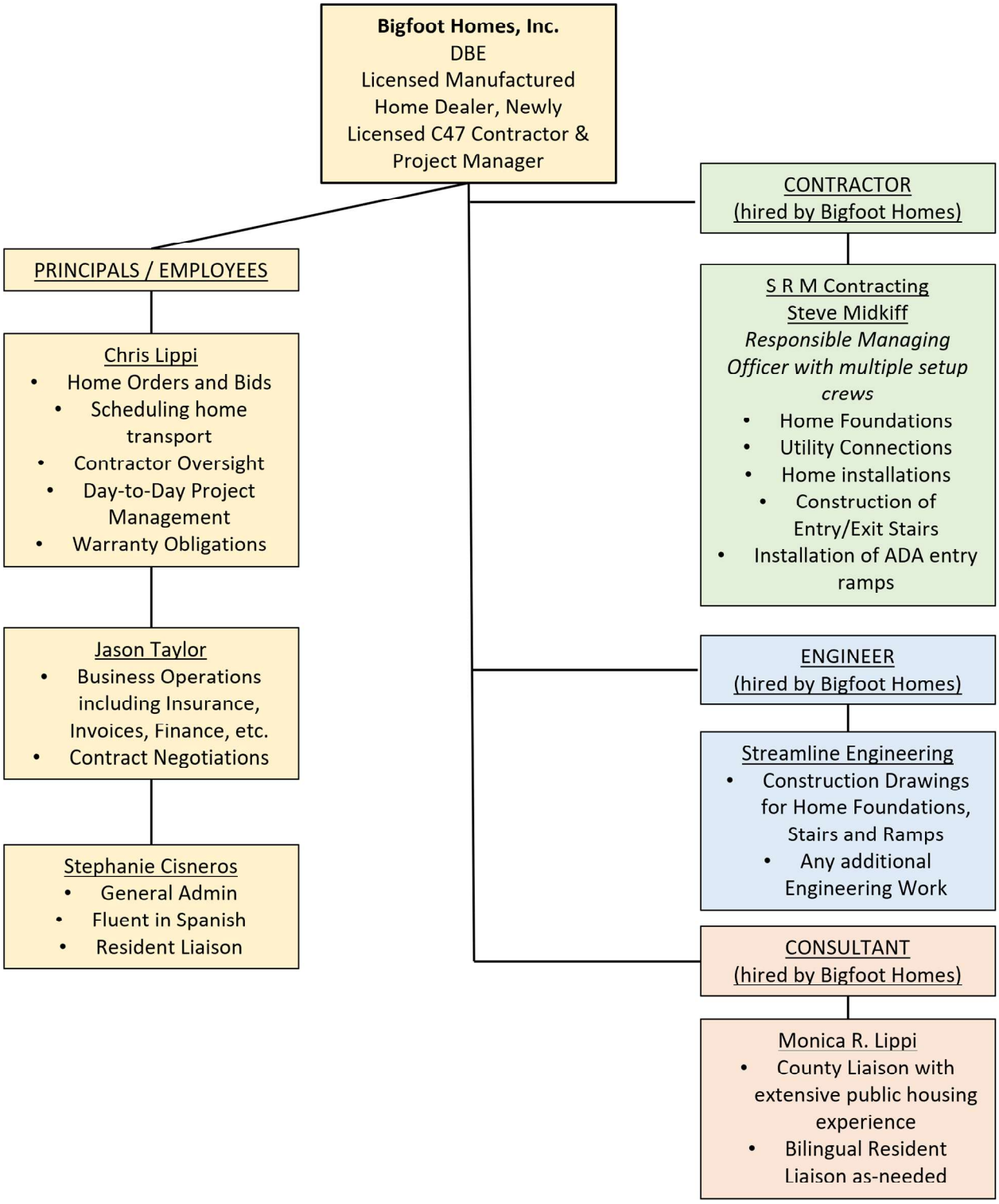
Exhibit 5

PERSONNEL AND EQUIPMENT

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Section 5
Technical Proposal

Part 1. Proposed Project Team and Expertise – *A. Organizational Chart:*



DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

CHRISTOPHER K. LIPPI

(415) 309-8846 • Chris@Bigfoot.Homes • HCD DLR #1593637

EXPERIENCE OVERVIEW

Manufactured home seller, builder, licensed C-47 manufactured housing contractor and business owner with a long history in Mathematics education including curriculum development and instruction.

LICENSES HELD

- Manufactured Home Dealer – Key Person. HCD DLR #159637
- CSLB C47 License – Manufactured Housing Contractor. Responsible Managing Officer - New License Holder (license number pending)

PROFESSIONAL EXPERIENCE

Bigfoot Homes / Bigfoot Homes, Inc. Santa Cruz, CA
COO, Cofounder *January 2021 – Present*

- HUD and MOD code home sales, construction, and installation
- Mobile home parks, single family homes, ADUs and duplexes
- Project Management - Responsible for full scope of building activities from planning, permits, manufactured home sales, manufactured home installations, site construction.
- Full cycle from permits to certificate of occupancy on numerous manufactured home projects.

Khan Lab School / Khan Academy Mountain View, CA
Math Specialist *2020-2022*

Math specialist at online and on-ground educational nonprofit. Identify gaps in content, create curriculum and content. Collaborate on projects to build peer tutoring models, playtest problems, and determine efficient ways to integrate Khan Academy into in-person and hybrid classrooms.

California State University Monterey Bay Seaside, CA
Quantitative Reasoning Scholar, Instructor, and Curriculum Designer *2014-2020*

Developed and implemented an online, open-source Learning Management System framework into the Statistics department as part of a Gates Foundation grant with Stanford University. Designed curriculum, exams, and training materials. Used learning analytics to improve course materials, engagement, and assessments. Member of quantitative reasoning grant team to improve analytical reasoning skills of our learners. Course instructor for statistics and calculus.

EDUCATION

San Francisco State University San Francisco, CA
Master of Arts - Mathematics May 2005

University of California, Santa Cruz Santa Cruz, CA
Bachelor of Arts – Mathematics, minor in Economics May 2000

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

JASON TAYLOR

(310) 562-1993 • Jason@Bigfoot.Homes • DRE License #01478938

EXPERIENCE OVERVIEW

Seasoned 20+ year real estate professional with expertise in manufactured homes, communities, finance and real estate investments.

PROFESSIONAL EXPERIENCE

Bigfoot Homes, Inc. / Bigfoot Homes Santa Cruz and Los Angeles, CA
CEO, Cofounder *January 2021 – Present*

- HUD and MOD code home sales, construction, and installation
- Mobile home parks, single family homes, ADUs and duplexes
- Primary responsibilities of business operations, finance, and real estate investments

Isla Bonita Management / Real Estate Investments Manhattan Beach, CA
Principal *October 2022 – Present*

- Isla Bonita is a real estate management company specializing in Manufactured Housing Communities and Industrial Properties.
- Management portfolio consists of two (2) mobile home parks (77 sites), five (5) single family rental/investment properties, three (3) industrial properties and several raw land sites.

Walker & Dunlop (f/k/a George Elkins Mortgage Banking) Torrance, CA
Director of Capital Markets *November 2010 – May 2023 (13 years)*

- Commercial real estate debt brokerage with a subspecialty in Manufactured Housing.
- $1.5 Billion in loan closings throughout career (GEMB and Walker & Dunlop Combined).
- Responsibilities span the entire process of commercial real estate finance and fund raising.

The Mindlin Companies (now called Oro Capital) Los Angeles, CA
Associate Director of Asset Management and Acquisitions November 2006 – June 2010 (4 years)

- Family Office - Acquisitions and Asset Management functions across a portfolio of 2 million square feet of office, industrial and retail properties. Experience with both distressed and stabilized assets.

EDUCATION

University of Southern California Los Angeles, CA
Master of Real Estate Development, Honors in Finance May 2007

University of California, Berkeley Berkeley, CA
Bachelor of Arts, Economics, Graduated with Honors May 2003

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Stephanie Cisneros

Employment History

Bigfoot Homes – Manufactured Home Sales
November 2023 – Present; Remote
Duties: Bilingual administrative and sales work including screening buyer leads online and over the phone. Assistance with general business matters, building permits and assistant project manager.

Property Management – Mobile Home Parks
December 2021 – Present; Oroville, CA
Duties: Bilingual property manager; excel book keeping, meeting interpreter, facilitate the addition of new member to the park community, draft letters for residents, enforce regulations and maintain state/local county property laws. Provide extra resources, apply through online portals, set up online banking info for rent payments

Registered Behavioral Tech
August 2021- Present; Oroville, CA
Duties: Provide supervision for students of different ages, high-risk youth or adults, and/or very low-income families, help implement the behavioral plan with BCBA, help students with learning new bx concepts, take data, run trails, modify based on behavior, help supervise students while developing and building rapport. Model appropriate behavior as well as assign peer models, provide R+, provide redirections based on individuals' needs and wants, and always provide a positive learning environment for students, keep an open line of communication about behavior and any need-to-know information. Up to date on CPR/First Aid certificate.

Online Tutoring
2016- Present; Remote
Duties: *BILINGUAL online tutoring,* ages 5- 15 Tk-9th grade

Behavioral Interventionist/Therapist
March 2019- 2021; Remote
Duties: Provide supervision for students of different ages, high-risk youth or adults, and/or very low-income families, create a behavioral plan with BCBA, help teachers with learning new bx concepts, take data, run trails, modify based on behavior, help supervise students while developing. Model appropriate behavior as well as assign peer models, providing R+. Help talk parents through technical issues as well as guide students on taking better pictures and using features on Zoom/Google hangout.

Education

- ***Woodland Community College A.A (08/2014 - 12/19)***
  - *A.A Social & Bx Science*
  - *Child Devel. Certificate of Achievement Associate Teacher*

  2300 E. Gibson Rd., Woodland CA 95776, Phone: 530-661-5700

- ***South East Senior High School Graduate of 2014***

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

MONICA LIPPI

lippi.r.monica@gmail.com | 831-331-7228 | Santa Cruz, California 95060

PROFESSIONAL SUMMARY

Experienced County government professional with a strong background in program management, policy analysis, and community development. Demonstrated leadership in overseeing and optimizing homeless service programs, managing budgets, and ensuring contract compliance. Skilled in partnership development and fostering collaborative relations with County departments, local organizations, and government entities. A results-oriented and collaborative leader committed to enhancing program effectiveness and addressing the diverse needs of people experiencing homelessness.

SKILLS

- Policy and Program Development
- Government Relations
- Strategic Planning
- Contract and Budget Management
- Partner Relationships
- Performance Improvement
- Homeless Services and Housing Program Leadership

WORK HISTORY

Oct 2021 - Current
Housing for Health Manager
Santa Cruz County Human Services Department - Santa Cruz, CA

Program Management: Manage Housing for Health Division's Connection Services Programs, overseeing homeless prevention, outreach, shelter, and Coordinated Entry initiatives.
Partnership Development: Establish strategic partnerships with local organizations and County departments to enhance access to essential homeless services within the community.
Financial Resource Management: Effectively manage budgets and financial resources for homeless service prorgrams, ensuring optimal allocation of funds, maximizing impact on homeless services and maintaining fiscal responsibility.
Continuum of Care: Staff to the Santa Cruz County Continuum of Care Policy Board and Operations Committee, contributed recommendations to policy discussions, decision-making processes, and coordinated efforts to address homelessness.
Contract Management: Serve as the lead program point of contact for shelter and outreach contracts.
Monitor spending trends to ensure adherence to allocated

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

budgets and contract compliance. Develop strategies to address any identified non-compliance issues.
Shelter Standards Oversight: Developed comprehensive shelter and Coordinated Entry standards to enhance quality and effectiveness of services. Monitor and evaluated compliance with established standards, providing support and guidance to contracted partners to maintain high-quality service delivery.
Support and Collaboration: Collaborate with homeless service partners to understand their needs and challenges, offering support and resources as needed.

Feb 2020 - Jul 2022
Lead Manager, COVID Hotel Sheltering System
Santa Cruz County Human Services Department - Santa Cruz, CA

Project Roomkey Oversight: Led the management and coordination of Santa Cruz County's Project Roomkey initiative, providing shelter to over 300 individuals experiencing homelessness during the COVID-19 pandemic.
Collaborative Partnerships: Established and maintained successful collaborations with various entities to support the shelter program's success. Worked closely with County leadership, housing partners, County Counsel, General Services Department, County Administrative Office, and various service vendors.
Contract Management: Secured the procurement of vendor agreements and maintained relationships with hotel owners to ensure program continuity.
Team Supervision: Supervised a diverse team, including a shelter management, behavioral health specialists, referral specialists, drivers, and data specialists.
Communication and Reporting: Facilitated transparent communication channels among team members and external partners. Provided regular reports and updates to relevant stakeholders and the media.

Aug 2018 - Feb 2020
Sr. Human Services Analyst
Santa Cruz County Human Services Department - Santa Cruz, CA

Referral Management: Managed all Coordinated Entry housing and shelter referrals.
Outcome Tracking: Tracked participant outcomes for accurate program assessment. Used data to analyze trends and measure the success of housing and shelter initiatives.
Program Leadership: Led program redesign efforts for improved efficiency and impact. Conducted training sessions and fostered collaboration with partner providers.
Reporting and Transparency: Developed reports on program results and data. Disseminated information to County leadership, Board of Supervisors, and the public.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Continuous Improvement: Implemented ongoing improvements based on data analysis and feedback. Actively sought opportunities to refine Coordinated Entry systems for increased effectiveness.

Oct 2013 - Aug 2018
Associate Human Services Analyst
Santa Cruz County Human Services Department - Santa Cruz, CA

Policy Analysis and Research: Served as the CalWORKs and Welfare to Work Policy Analyst/Subject Matter Expert. Researched and interpreted complex program regulations and developed policies and procedures to comply.
Legislation and Training: Analyzed legislation and prepared staff training materials. Kept current on relevant laws and regulations impacting program implementation.
Reporting and Assessment: Prepared detailed reports, assessing community resources for low-income and homeless families. Evaluated and recommended improvements to human service programs.

Aug 2010 - Oct 2013
Community Health Project Manager
Providence Health And Services - Los Angeles, CA

Educational Wellness Program: Planned and implemented an educational wellness program in an underserved primarily immigrant community. Developed and executed initiatives to address mental health awareness and well-being within the community.
Outreach: Supervised outreach staff in conducting surveys of 500+ primarily Latinx residents to assess mental health needs.
Community Engagement: Engaged with residents to ensure the program's relevance and responsiveness to their mental health needs.

EDUCATION

Master of Arts: International Policy
Middlebury Institute of International Studies | Monterey

BASSC Executive Development Program: Social Services
University of California, Berkeley | Berkeley, CA

Bachelor of Arts: Sociology And Spanish
San Diego State University | San Diego, CA

LANGUAGES

Spanish
Native or Bilingual

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

STEPHEN R. MIDKIFF

(530) 218-0733 • stevemidkiff2013@gmail.com • CSLB License #534976

EXPERIENCE OVERVIEW

Over 30 years' experience in manufactured housing including warranty repairs, home installations and general contracting. Stephen is an industry expert in manufactured home installations and foundations.

- Over 60 home setups per year on average, including homes in mobile home parks and manufactured single family residences on private land.
- Active in the rebuilding of Paradise, California, a community significantly affected by the 2018 Camp Fire.
- Long History of full park home installations including recently completed Blue Haven Mobile Home Park (34 homes) – work included poured concrete driveways, car ports, utility connections, home set and seal, home foundation, stairs, etc.
- Clients Served: Clayton Homes, BoaVida Communities, Bigfoot Homes and a number of other investors serving the manufactured housing market.

LICENSES HELD

- CSLB License #534976
- License Classifications:
  - B – General Building
  - C47 – Manufactured Housing

PROFESSIONAL EXPERIENCE

S R M Contracting Yankee Hill, CA
Sole Owner *1988 to Present*

- 30-year operating history
- Manufactured Home Warranty Repairs
- Manufactured Home Foundations & Installations
- Accessory Buildings and Structures, including porches, stairs, carports, sheds and garages

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Home Manufacturer

Skyline Champion is one of the largest manufactured home builders in the United States and will be the manufacturer of the homes built for the San Mateo Farmworkers project. *Homes for San Mateo will be built in both the Skyline factory in Woodland, California and the Redman Homes factory in Lindsay, California. Skyline Champion is the parent company for both Skyline Homes and Redman Homes.*

- NYSE: SKY
- Market Capitalization: $4.11 billion
- Gross Income in 2023: $2.61 billion
- Employees: over 8,600 with 47 manufacturing facilities throughout the United States and Canada.

- Factory Location: 840 Palm St, Lindsay, CA 93247
- The Redman Homes brand was originally started in Lindsay, California in 1965 before later acquisition by Champion Homes. Redman has built more than 47,700 mobile and manufactured homes and serves home buyers and dealers in all of the California housing markets, plus parts of Nevada and Oregon. Redman has built single section manufactured homes for over 55 years and is well suited to building homes for this project.

- Factory Location: 1720 E Beamer St, Woodland, CA 95776
- Skyline is a premium home builder that serves North and Central California, with a sister factory in Southern California. Skyline has built single section manufactured homes for over 70 years and is well suited to build homes for this project.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

January 16, 2024

RE: Statement of Qualifications 2024

To Whom It May Concern,

Thank you for the opportunity to provide you with this statement of qualifications for Streamline Engineering to provide structural engineering services for the foundations supporting single-wide manufactured homes in central California. If you have any questions, please contact Jeff Richelieu at (530) 892-1100.

A. Executive Summary

Streamline Engineering, Inc. was founded in Chico, California in October 2005 by Jim Peterson and Jeff Richelieu. Since inception, we have provided architectural and engineering consulting services for all phases of building construction for new and existing buildings. These services have included providing structural calculations, and the preparation of construction documents for permitting.

We have worked on projects for government agencies, commercial owners, agricultural and industrial businesses, and residential owners. We have provided design and structural engineering for retaining walls, light standards, signs, boat docks, and bridges. We have designed structures built from concrete, steel, masonry, and wood. These projects have been located in numerous counties throughout California including the Bay Area, but most of our projects have been located in Plumas, Tehama, Butte, and Glenn Counties.

Streamline's designs are cost effective because they are easy to construct and not over engineered. A commitment to communication has always been a trademark of our company. We communicate closely with everyone involved with the project in order to best achieve the goals of the end user. We have a solid reputation for quality plans and engineering which is evidenced by our large and diverse group of loyal clients that we have had for years in the area that know our work. Most of our new clients come to us as referrals from existing clients.

B. Project Team

Jeff Richelieu will be the primary contacts for any projects involving Streamline Engineering. By communicating directly with one of the owners, the Client will be assured of receiving a high level of service. Jeff will also be personally overseeing any work provided by Streamline Engineering. We can typically be on site as needed within a week of being notified of a need.

2571 California Park Drive, Ste. 210 • Chico, CA 95928 • (530) 892-1100

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

C. Technological Ability

It is easy to communicate with Streamline Engineering throughout the consulting process as needed. We can be reached by cell phone, office phone, email, or text. We can receive or submit plans electronically as needed as well. We are fluent with AutoCAD2023, Chief Architect, Microsoft Office, and Excel. We use Enercalc for retaining wall, beam, column, ledger, and footing calculations. We use Simpson Strong-Tie Anchor Design to check the design of anchor bolts embedded in concrete.

D. Individuals Qualifications and Experience

Jeff has been a licensed civil engineer in California for over 30 years. Jeff has provided structural engineering services including design, on-site consulting, construction documents. Before becoming an engineer, Jeff worked in construction pouring concrete and framing buildings, so he has an excellent understanding of how things go together in the field and how to communicate with contractors. During his time as an engineer, he has provided a high level of service in a timely manner for the clients.

E. Statement of Understanding and Scope of Work

We understand that Bigfoot Homes needs a qualified company to provide on-call structural engineering services for designing the foundations to support single-wide manufactured homes. We have demonstrated our abilities to provide these services since our inception, and hope to have the opportunity to continue doing so working with Bigfoot Homes.

We understand that a timely response to issues that arise is essential to meet the needs of the Client. As a small company, Streamline Engineering has the ability to be very responsive when the need arises.

Please contact me with any questions you may have at (530) 892-1100.

Thank you for your consideration of Streamline Engineering.

Sincerely,

Jeff Richelieu, PE 53,590
President
Streamline Engineering, Inc.

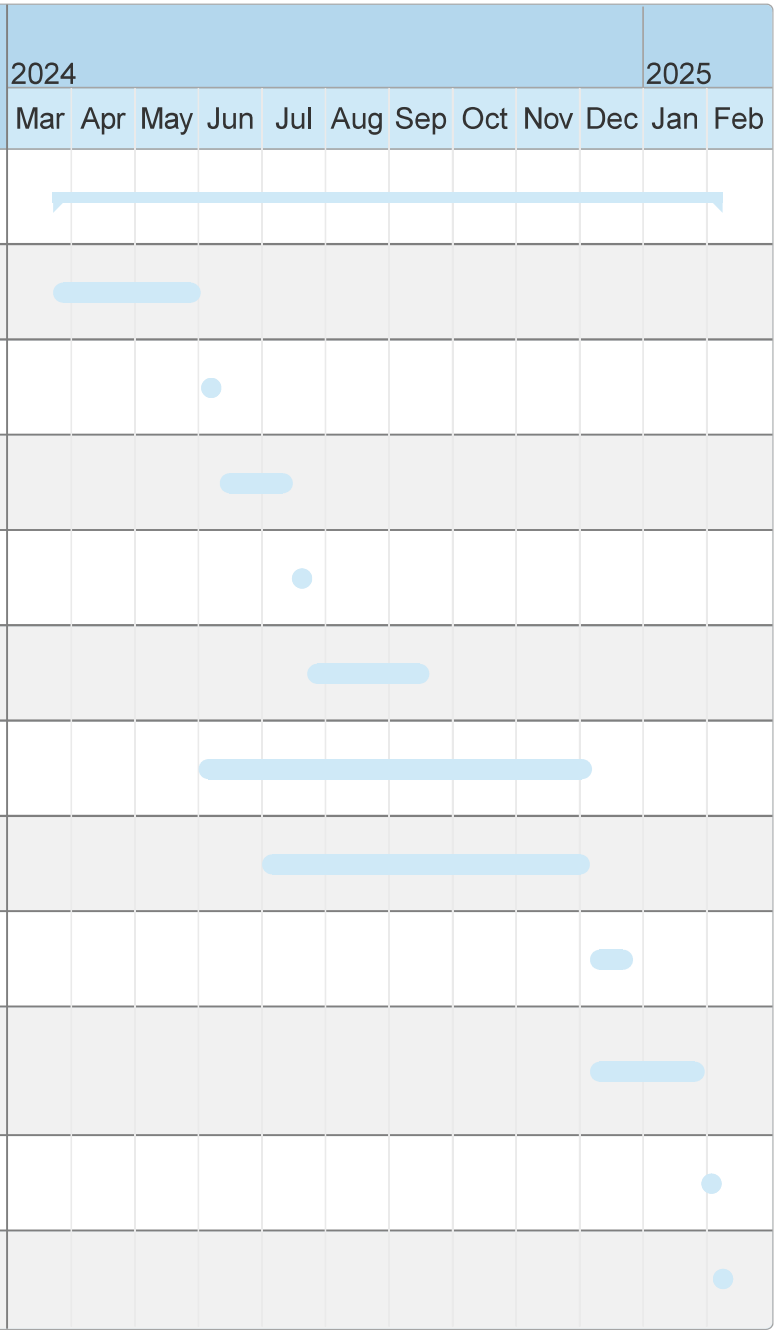
DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhibit 6

SCHEDULE AND SITE LOGISTICS PLAN

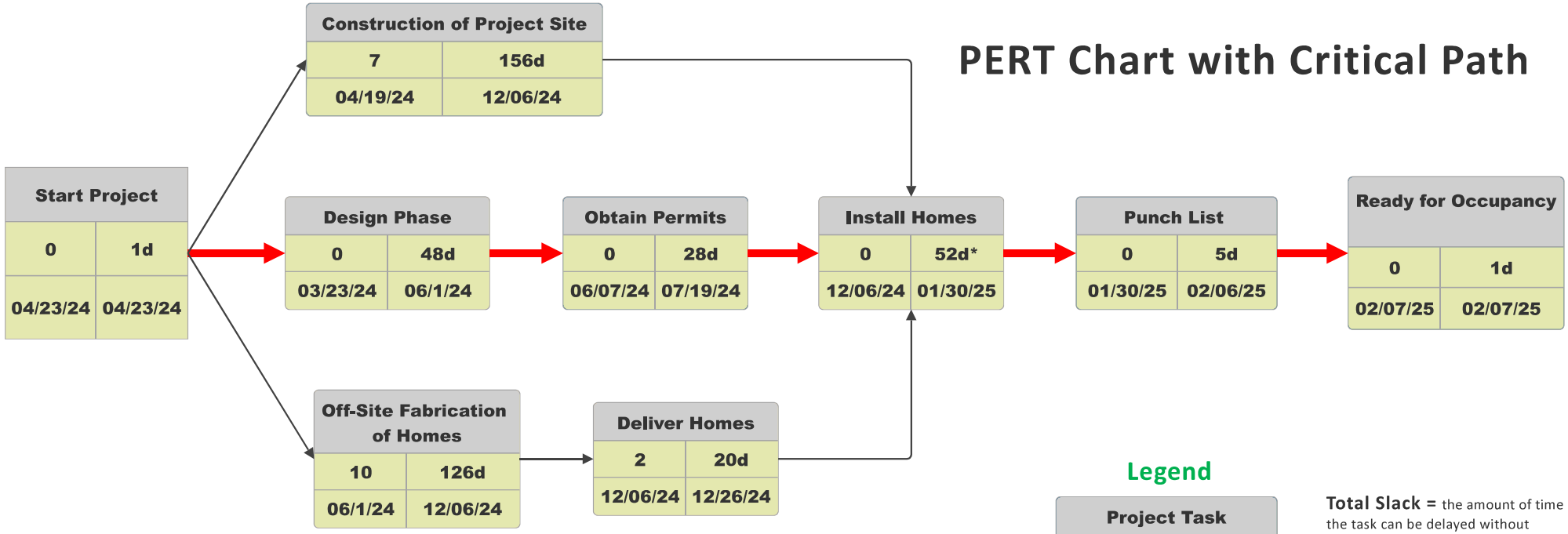
DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

	Task	Start	End
	Bigfoot Homes DBE Project Schedule	3/23/24	2/7/25
1	Design Phase	3/23/24	6/1/24
2	County Review and Approval	6/3/24	6/10/24
3	Construction Document Phase	6/11/24	7/15/24
4	County Review and Approval	7/17/24	7/23/24
5	Prepare and Obtain Permits	7/23/24	9/19/24
6	Off-Site Fabrication of Homes	6/1/24	12/6/24
7	Store Homes off Site Ready for Delivery	7/1/24	12/5/24
8	Deliver Homes to Project Site	12/6/24	12/26/24
9	Install Homes Per Zone - Includes: Foundation, Utilities, Stairs/Ramps, Interior/Exterior Work	12/6/24	1/30/25
10	Punch List / Corrective Work / Final Inspections	1/30/25	2/6/25
11	Ready to Occupy Homes	2/7/25	2/7/25



DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

PERT Chart with Critical Path



Legend

Project Task	
Total Slack	Days to Complete
Start Date	End Date

Total Slack = the amount of time the task can be delayed without pushing the end date of the project

Additional Activities:

Design Team Coordination: Continuous communication and collaboration between DBE and San Mateo County maintains project integrity and optimizes workflow.
Budget Monitoring: Track expenditures against the $6,249,360 budget

Considerations:

Weather delays, material shortages, and unforeseen permitting challenges are potential risks for contingency planning. It's vital to regularly update San Mateo County to ensure project awareness and promptly address any issues that may arise.

* includes a seven-day work week excluding Christmas, New Year's Day, and Martin Luther King Jr holidays; all other "Days to Complete are based on five-day work weeks excluding major holidays

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhibit 7

SCHEMATIC DESIGN DOCUMENTS

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Elevations 1 Bed 1 Baths

Section 8
Proposed Conceptual Designs



Conceptual Rendering - 1 Bed / 1 Bath with ADA Ramp (Ramp will need engineering refinements)

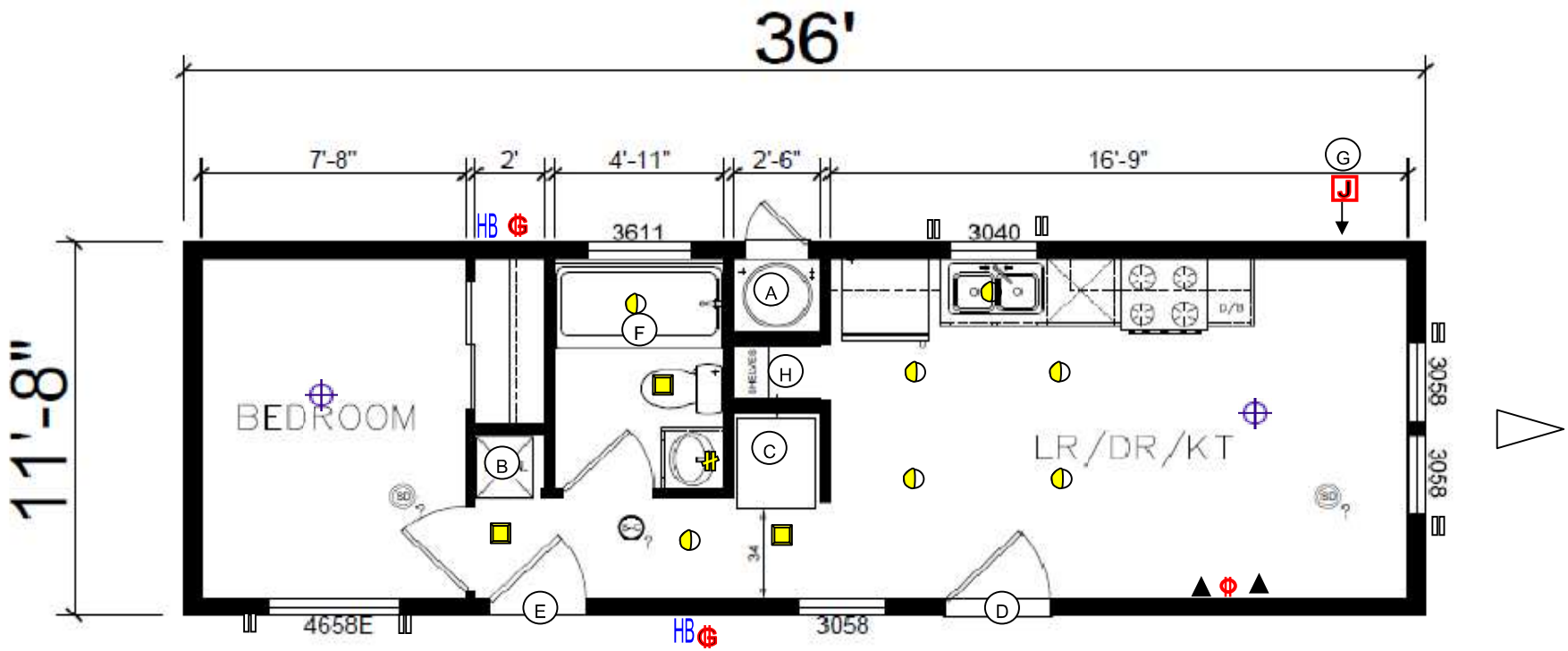


Conceptual Rendering - 1 Bed / 1 Bath

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhaust Fan Light	Can Light	J-Box	Bank of Drawers	Dlx Porch Light
Switch	Ceiling Fan	USB recept	Rollout Shelves	Dlx mirror light
Recept	TV Conduit	Solar Tube	Hose Bib	Shutters
GFCI	Phone Jack	Pendant Light	Paddle fan prep	Chandlier

DEALERSHIP: BIG FOOT		
SALES AGENT: CHRIS		
MODEL: 12x36		
35816	SAN MATEO	420 sqft



AWNING READY

1 bed 1 bath
non-ADA Floor Plan

- **A** *30 GAL ELECTRIC WH*
- **B** *ELECTRIC FURNACE*
- **C** *PREP FOR ELECTRIC STACKABLE W/D*
- **D** *36" EXT DOOR w/ 4" CEM PANEL TRIM*
- **E** *32" 9-LITE DOOR w/ 4" CEM PANEL TRIM*
- **F** *TUB/SHOWER w/ ENCLOSURE*
- **G** *30 AMP JBOX DEDICATED CIRCUIT UNDER FLOOR*
- **H** *LINEN SHELVES*

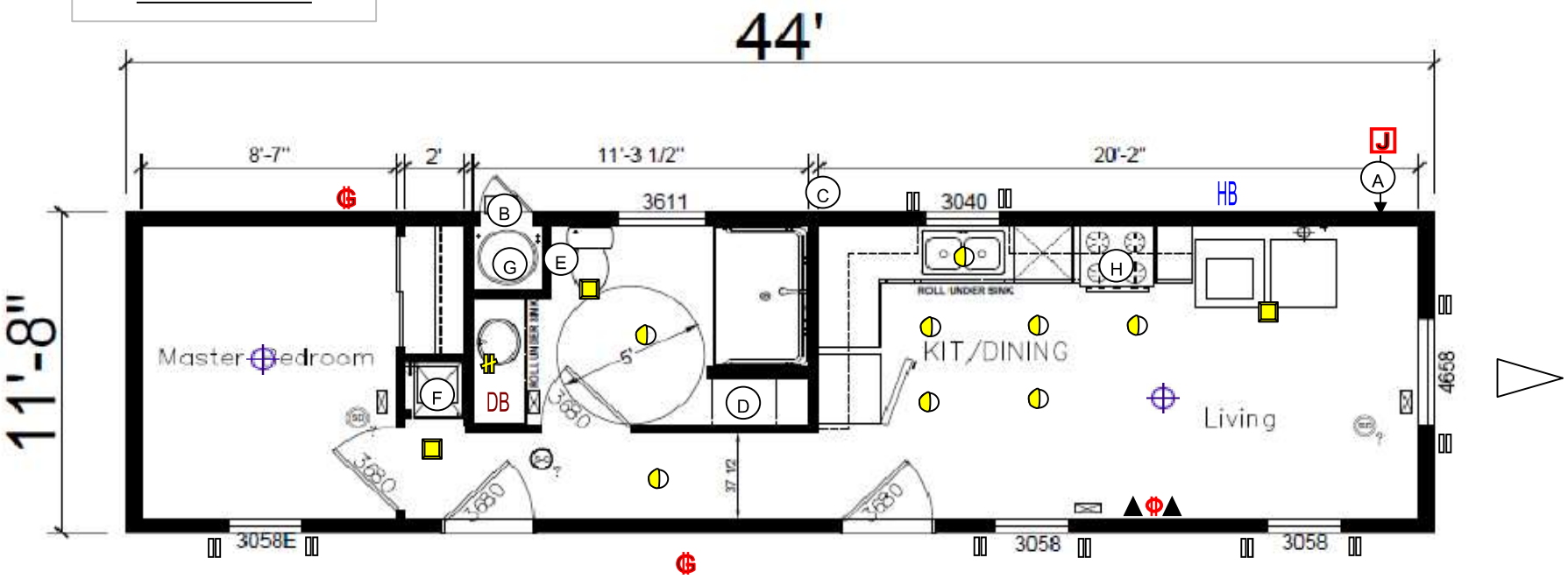
-OMIT LINO/CARPET THROUGHOUT HOME
-SHIP BASEBOARD LOOSE
-OSB SHEATHING & HOUSE WRAP UNDER SIDING

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhaust Fan Light	Can Light	J-Box	DB Bank of Drawers	Dlx Porch Light
$ Switch	Ceiling Fan	USB recept	RS Rollout Shelves	Dlx mirror light
Recept	TV Conduit	Solar Tube	HB Hose Bib	Shutters
GFCI	Phone Jack	Pendant Light	Paddle fan prep	Chandlier

DEALERSHIP: BIG FOOT		
SALES AGENT: CHRIS LIPPI		
MODEL: CM 1482D		
35881	ADA 12 x 44	513 sqft

ADA FRIENDLY



AWNING READY

- **A** *DEDICATED 30 AMP JBOX UNDER FLOOR*
- **B** *WATER UTILITY*
- **C** *E PANEL 200 AMP*
- **D** *3-DOOR HARDWOOD PANEL*
- **E** *HORIZONTAL GRAB BAR*
- **F** *ELECTRIC FURNACE*
- **G** *30 GAL ELECTRIC WH*
- **H** *PREP FOR ELECTRIC RANGE ONLY*
  INSTALL STD RANGE HOOD ABOVE

LOWER ALL BASE CABS
-OMIT TOE KICK & TOE KICK REGISTERS
LOWER OH CABS EQUAL DISTANCE AS BASE CABS

1 bed 1 bath
ADA Floor Plan

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Elevations 2 Bed 1 Baths



Conceptual Rendering - 2 Bed / 1 Bath w ADA Ramp (Ramp will need engineering refinements)

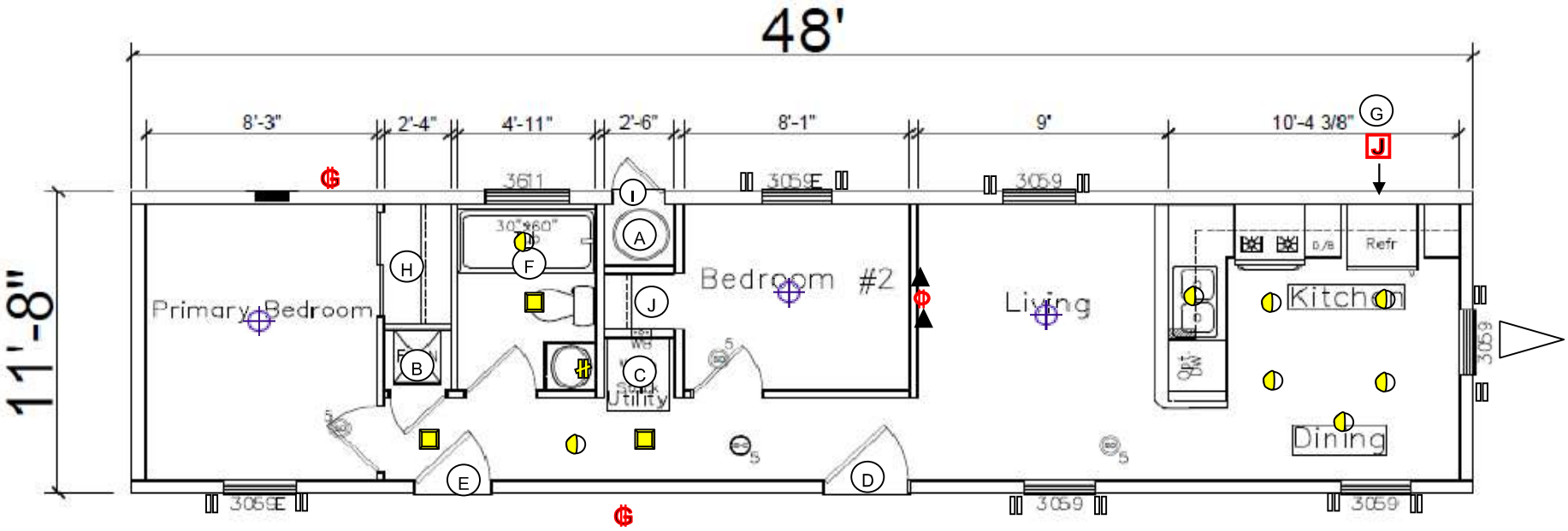


Conceptual Rendering - 2 Bed / 1 Bath

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhaust Fan Light	Can Light	J-Box	DB Bank of Drawers	Dlx Porch Light
Switch	Ceiling Fan	USB recept	RS Rollout Shelves	Dlx mirror light
Recept	TV Conduit	Solar Tube	HB Hose Bib	Shutters
GFCI	Phone Jack	Pendant Light	Paddle fan prep	Chandlier

DEALERSHIP: BIG FOOT		
SALES AGENT: CHRIS LIPPI		
MODEL: 12x48		
35818	SAN MATEO	560 sqft



AWNING READY

2 bed 1 bath non-ADA Floor Plan

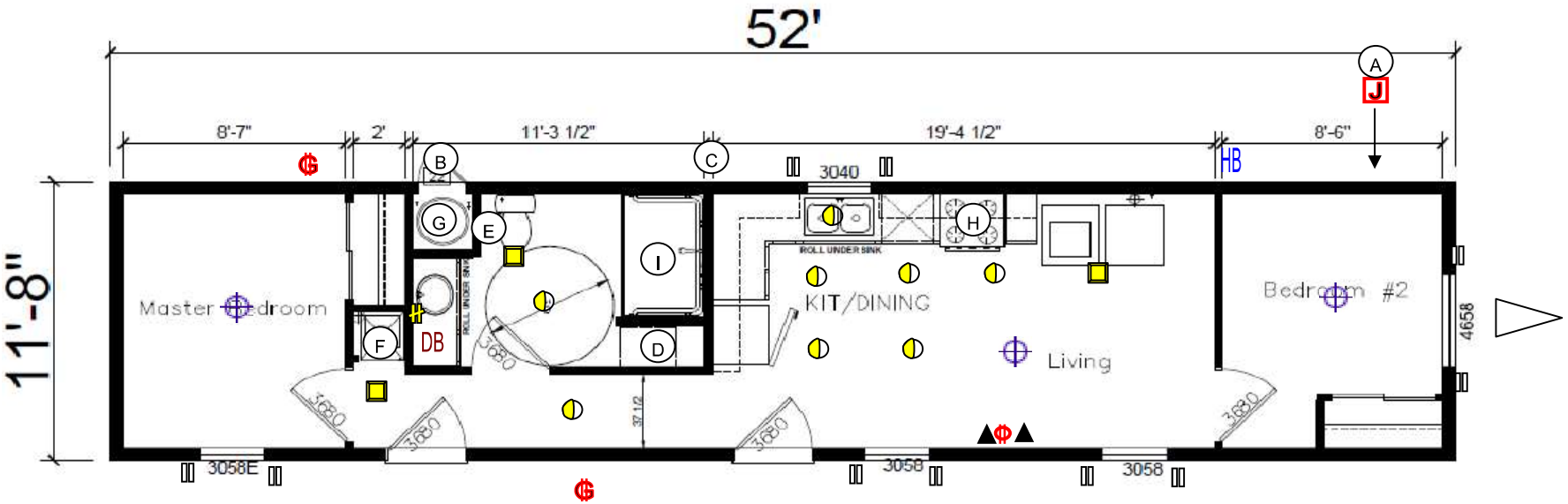
- **A** *30 GAL ELECTRIC WH*
- **B** *ELECTRIC FURNACE*
- **C** *PREP FOR ELECTRIC STACKABLE W/D*
- **D** *36" EXT DOOR*
- **E** *32" 9-LITE DOOR*
- **F** *TUB/SHOWER w/ ENCLOSURE*
- **G** *30 AMP JBOX DEDICATED CIRCUIT UNDER FLOOR*
- **H** *BYPASS DOORS*
- **I** *WATER UTILITY*
- **J** *CLOSET SHELVES ONLY*

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhaust Fan Light	Can Light	J-Box	DB Bank of Drawers	Dlx Porch Light
$ Switch	Ceiling Fan	USB recept	RS Rollout Shelves	Dlx mirror light
Recept	TV Conduit	Solar Tube	HB Hose Bib	Shutters
GFCI	Phone Jack	Pendant Light	Paddle fan prep	Chandlier

DEALERSHIP: BIG FOOT		
SALES AGENT: CHRIS LIPPI		
MODEL: CM 1482D		
35882	ADA 12 x 52	607 sqft

ADA FRIENDLY



A *DEDICATED 30 AMP JBOX UNDER FLOOR*
B *WATER UTILITY*
C *E PANEL 200 AMP*
D *3-DOOR HARDWOOD PANEL*
E *HORIZONTAL GRAB BAR*
F *ELECTRIC FURNACE*
G *30 GAL ELECTRIC WH*
H *PREP FOR ELECTRIC RANGE ONLY*
INSTALL STD RANGE HOOD ABOVE
I *SPECIAL NEEDS SHOWER*

LOWER ALL BASE CABS
-OMIT TOE KICK & TOE KICK REGISTERS
LOWER OH CABS EQUAL DISTANCE AS BASE CABS

2 bed 1 bath ADA Floor Plan

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Elevations 3 Bed 2 Baths



Conceptual Rendering – 3 Bed / 2 Bath with ADA Ramp (Ramp will need engineering refinements)

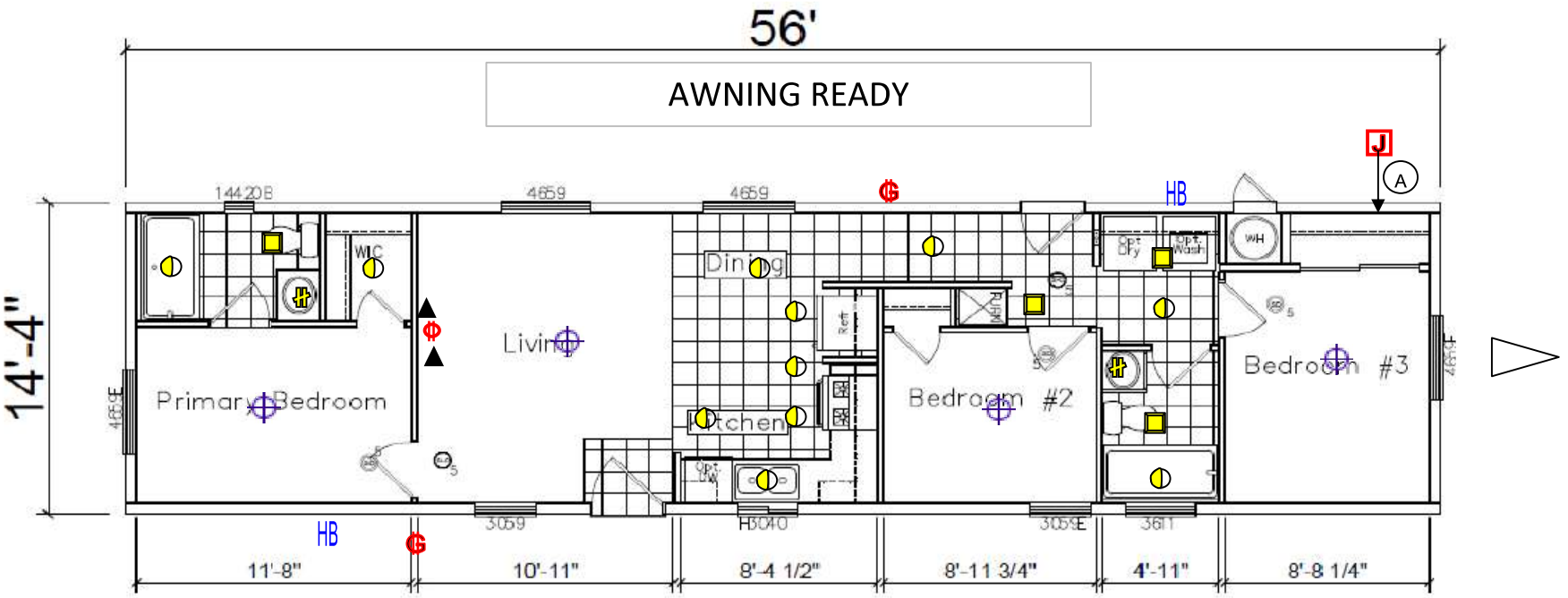


Conceptual Rendering – 3 Bed / 2 Bath

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhaust Fan Light	Can Light	J-Box	DB Bank of Drawers	Dlx Porch Light
$ Switch	Ceiling Fan	USB recept	RS Rollout Shelves	Dlx mirror light
Recept	TV Conduit	Solar Tube	HB Hose Bib	Shutters
GFCI	Phone Jack	Pendant Light	Paddle fan prep	Chandlier

DEALERSHIP: BIG FOOT		
SALES AGENT: CHRIS LIPPI		
MODEL: CM 6563B		
35819	SAN MATEO 14'4 x 56' 3/2	802



3 bed 2 bath
non-ADA Floor Plan

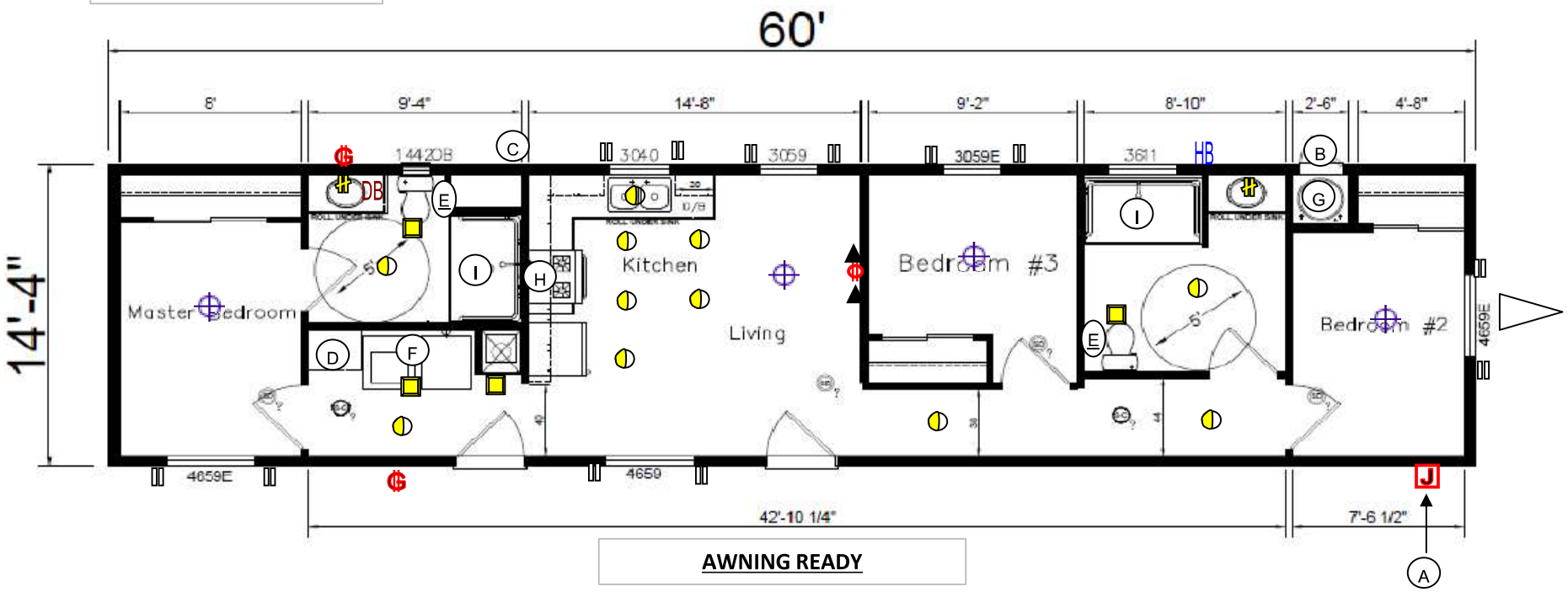
A *DEDICATED 30 AMP JBOX UNDER FLOOR*
B
C

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhaust Fan Light | Can Light | J-Box | Bank of Drawers | Dlx Porch Light
Switch | Ceiling Fan | USB recept | Rollout Shelves | Dlx mirror light
Recept | TV Conduit | Solar Tube | Hose Bib | Shutters
GFCI | Phone Jack | Pendant Light | Paddle fan prep | Chandlier

DEALERSHIP: BIG FOOT		
SALES AGENT: CHRIS LIPPI		
MODEL: CM 6563B		
35986	ADA 3/2	607 sqft

ADA FRIENDLY



AWNING READY

- **A** *DEDICATED 30 AMP JBOX UNDER FLOOR*
- **B** *WATER UTILITY*
- **C** *E PANEL 200 AMP*
- **D** *6-DOOR HARDWOOD PANEL*
- **E** *HORIZONTAL GRAB BAR*
- **F** *ELECTRIC FURNACE*
- **G** *30 GAL ELECTRIC WH*
- **H** *PREP FOR ELECTRIC RANGE ONLY*
  INSTALL STD RANGE HOOD ABOVE
- **I** *SPECIAL NEEDS SHOWER*

3 bed 2 bath
ADA Floor Plan

LOWER ALL BASE CABS
-OMIT TOE KICK & TOE KICK REGISTERS
LOWER OH CABS EQUAL DISTANCE AS BASE CABS

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Refer to Fixed Fee Price Proposal for GOOD, BETTER, BEST Pricing

PROJECT STANDARDS - Good

STD EXT DOORS & PORCH LIGHTS





STD VERTICAL SIDING & SHUTTERS

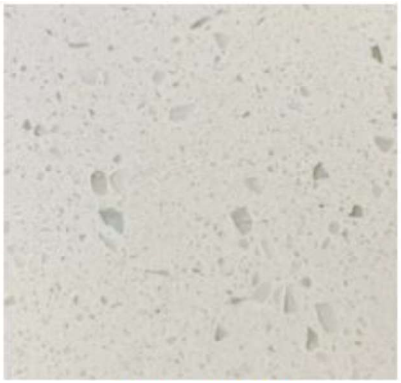


BASIC HARDWOOD CABINETS



Beech Alder Cabinets

QUARTZ or ThinScape (solid surface) COUNTERTOPS



STANDARD LINOLEUM FLOORING



LX275 Barn Wood White



LX311 European Oak



LX277 Barnwood Greige



LX150 Honeytone

16OZ WINDSTONE CARPET



Canvas



Earthy



Pine Trail



Smoke

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

PROJECT STANDARDS - BETTER

CRAFTSMAN FRONT DOOR w/ DLX PORCH LT:

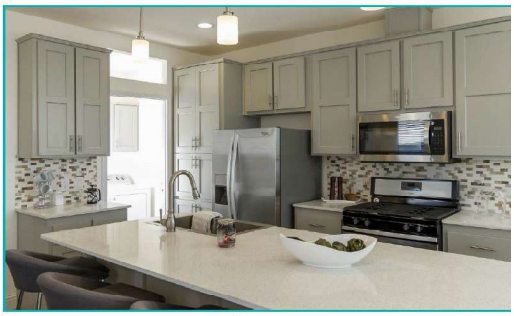
Craftsman Door



UPGRADED CABINETS



White Glazed Cabinets



Grey Cabinets



New Lance Cabinets



Colombian Walnut Cabinets

25OZ BROADCREEK TWEED CARPET BEDROOMS



Blended Tan



Brentwood



Greige



Warm Almond

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

PROJECT STANDARDS - BEST

Board and Batten Siding Hitch and Door Side



3-ROWS LAP ACCENT HITCH & DOOR SIDE



38OZ HARTLEY CARPET BEDROOMS



DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhibit 8

DESIGN-BUILDER'S PROPOSAL

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Stone Pine Cove Farmworker Housing Project Proposal



D.B.E. - Bigfoot Homes, Inc.

Address: 2460 17th Ave # 1002, Santa Cruz, CA 95062
Phone: (415) 309-8846
Email: jason@bigfoot.homes
Email: chris@bigfoot.homes

BIGFOOT
HOMES

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

1. Cover Letter

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Bigfoot Homes, Inc.
2460 17th Ave Number 1002
Santa Cruz, CA 95062

County of San Mateo
Attn: Iliana Rodriguez
555 County Center, 2nd Floor
Redwood City, CA 94063

February 6, 2024

Dear Ms. Rodriguez,

Bigfoot Homes, Inc., a California corporation as a Design-Build Entity is providing the enclosed detailed proposal in response to the following project documents:

- Request for Proposal Design-Build Services for Stone Pine Cove Farmworker Housing Project dated 12/20/2023; and,
- Addendums 1 through 4 dated: 1/17/2024, 1/23/2024, 1/26/2024, and 2/2/2024.

Our team is ready to meet the County's request for the procurement and installation of 47 manufactured homes. We are experienced professionals with expertise in manufactured home procurement, construction, home installation, engineering, project management, county government dynamics, and contract compliance.

We stand as the optimal choice to undertake this project, aiming to create a vibrant community of safe and affordable housing for the farmworkers of San Mateo County. Our commitment to excellence and passion for community development uniquely positions us to deliver a new high quality housing project that meets the needs of the County and its residents.

Bigfoot Homes, Inc. will procure homes from two (2) factories owned by Skyline Champion, one of the largest home manufacturers in the United States. Manufactured homes will be installed by S R M Contracting, a B & C-47 licensed contractor with over 30 years' experience building communities and installing manufactured homes. Bigfoot Homes, Inc. is a licensed manufactured home dealer, project manager and will hold its own C-47 license (see CSLB application # 20230111374).

Authorized Individuals for proposal questions and contract negotiations:

- Chris Lippi, Bigfoot Homes, Inc. – Phone: (415) 309-8846; Email: Chris@Bigfoot.Homes
- Jason Taylor, Bigfoot Homes, Inc – Phone: (310) 562-1993; Email: Jason@Bigfoot.Homes

All information in this proposal is true and correct to the best of my knowledge.

Sincerely,

Jason Taylor
Chief Executive Officer
Bigfoot Homes, Inc

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

2. Table of Contents

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Section 2
Table of Contents

Section Number	Section	Page Number
1	Cover Letter	1
2	Table of Contents	2
3	Exceptions	3
4	Updated Prequalification Submittal	Allowed Appendix Content - 1
5	Technical Proposal	5
6	Supplementary Documents	13
7	Review Comments to Agreement	23
8	Proposed Conceptual Design	24
9	Proposed Schedule	36
10	Fixed Fee Price Proposal	38

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

3. Exceptions

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Section 3
Exceptions to the Solicitation

Bigfoot Homes, Inc., as DBE, is seeking the following exceptions to the Request for Proposal:

1.) Prequalification
   a. Appendix D; Prequalification Submittal Template C. Financial Capacity: "Attach an audited financial statement with accompanying notes and supplemental information for the past 2 full fiscal years for DBE and each entity Member (not individual Members). A letter verifying availability of a line of credit may also be attached; however, it will be considered supplemental information only, and is not a substitute for the required financial statement."
      i. Exception Requested: Bigfoot Homes, Inc. and S R M Construction do not produce audited financials, but can sign any certifications requested by the County including "Certified to be True and Correct". Please see Notes to Financial Statement for Bigfoot Homes, Inc., and certified financial statements for Bigfoot Homes, Inc. and S R M Contracting contained within the Appendix.

2.) Bonds and Insurance
   a. Request for Proposal Section IV. Bond and Insurance; A. Bonds of the County's: "Attach a notarized statement from an admitted surety insurer (approved by the California Department of Insurance and authorized to issue bonds in the State of California), which states the current bonding capacity of the DBE (both single job limit and aggregate limit). Note: DBE must have capacity to provide 100% payment bond and 100% performance bond, each issued by an admitted surety insurer, without bonding subcontractors."
      i. Exception Requested: Bigfoot Homes, Inc. in conjunction with S R M Contracting has explored this request with a bonding agent. A bond covering the manufactured homes (procurement) will not be available, however, an escrow system can be established whereby money is released once homes are delivered and installed if the county should request this. A bond covering the home setup, foundations, stairs, etc (not the homes) will be available, but a notarized statement from an admitted surety insurer will only be applied for, collateral posted, etc if Bigfoot Homes, Inc. is awarded this contract.

   b. Request for Proposal Section IV. Insurance (page 17)
      i. General Liability requirement and answer:
         1. $2,000,000 per occurrence (implied $4,000,000 in aggregate)
         2. Exception Requested: Bigfoot Homes, Inc. and S R M Contracting *will each provide a GL policy, which taken together should meet the County's requirement. S R* M Contracting holds a $1,000,000 per occurrence and $2,000,000 in aggregate *per project*. Bigfoot Homes, Inc. holds a $1,000,000 per occurrence and $2,000,000 in aggregate *per policy. Insurance certificates are contained within the Appendix.*

      ii. Automobile Liability requirement and answer:
         1. $2,000,000 limit
         2. Exception Requested: Currently S R M Contracting carries a $1,000,000 automobile policy. Bigfoot Homes, Inc. doesn't currently carry Auto

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Liability (outside of individual auto policies), however, Bigfoot Homes, Inc. can acquire an additional automobile policy to meet County requirements.

iii. Employers Liability requirement and answer:
    1. $2,000,000 per occurrence
    2. Exception Requested: Bigfoot Homes, Inc.'s insurance agent is advising this risk is covered by our general liability policies. This may require further examination and Bigfoot Homes, Inc. will put forward best efforts to meet the County's requirements.

iv. Professional Liability requirement and answer:
    1. $2,000,000 in aggregate
    2. Exception Requested: Bigfoot Homes, Inc.'s insurance agent has taken this policy request to market for bids and it appears that we can bind a $1,000,000 in aggregate policy only. This $1,000,000 E&O policy will be bound if Bigfoot Homes, Inc. is awarded the contract.

3.) Energy Star
- a. Request for Proposal Appendix B Project Design Criteria, General Requirements; 9. "Homes must be ENERGY STAR Manufactured New Homes Version 3 compliant."
    - i. Exception Requested: Our manufacturers can only build to Version 2 compliant as of today. Version 3 compliance may become available at a later date, however, details are not yet available.

4.) Floor Finishes
- a. Request for Proposal Appendix B Project Design Criteria, Floor Finishes; 5a. "Provide Luxury Vinyl Tile (LVT) plank flooring in all rooms"
    - i. Exception Requested: LVT will only be offered in the "Best" level of finish. Please reference our Fixed Fee Price Proposal.

5.) Cabinetry
- a. Request for Proposal Appendix B Project Design Criteria, Kitchen/Bath Cabinetry; 7a. "All cabinetry is to be KCMA Certified and constructed of hardwood"
    - i. Exception Requested: All cabinetry will be constructed of hardwood to County's specifications, however, KCMA certification is not available. Bigfoot Homes, Inc. has checked with two (2) of our manufacturers and this KCMA certification cannot be met due to factory constraints.

6.) ADA Units
- a. Request for Proposal Appendix B Project Design Criteria, Accessibility Requirements for ADA Units; 1. "Units need to meet all requirements of California Building Code and Americans with Disabilities Act"
    - i. Exception Requested: These homes are factory built, manufactured homes, built to HUD standards, not California Building Code. In addition, homes will not be built to full ADA requirements, however, Bigfoot Homes, Inc. will endeavor to meet all specific requirements as listed in the Project Design Criteria.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

4. Updated Prequalification Submittal

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

APPENDIX D

COUNTY OF SAN MATEO – COUNTY EXECUTIVE OFFICE

PREQUALIFICATION SUBMITTAL TEMPLATE

DESIGN-BUILD ENTITIES

This standard prequalification submittal template should be completed by design-build entities or design-build teams seeking to prequalify for a County of San Mateo ("County") design-build project.

As used in here:

- "DBE" refers to both design-build entities and design-build teams.
- "Member" refers to individuals or entities identified as members of the DBE, including the general contractor and, if utilized in the design of the project, all electrical, mechanical, and plumbing subcontractors and other trade partners.
- "Associates" refers to all current officers, owners, and/or partners of DBE and of any Member.

Wherever additional space is needed to answer a question fully and accurately, attach additional copies of the template pages and/or additional signed sheets as needed.

I. BUSINESS INFORMATION

Please **attach an introductory paragraph** describing your DBE team's composition. Name each DBE member, its role and responsibility for this project, and describe the entity's form of organization (sole proprietor, limited liability, corporation, partnership, etc.).

A. Contact Information

1. DBE Name: Bigfoot Homes, Inc., a California corporation
2. Primary contact Person: Chris Lippi
3. Principal office address: 127 Pryce St., Santa Cruz, CA 95060
4. Phone: 415-309-8846
5. Fax: N/A
6. Email: Chris@Bigfoot.Homes

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

B. Form of Organization

1. If the DBE or any Member is a **corporation**:

   a. Date incorporated: 09/12/2022

   b. Under laws of what state: California

   c. If a privately held corporation, list all shareholders who will perform work on the project:

Name	Ownership Percentage
Christopher K. Lippi	10%
Jason W. Taylor	90%

   d. Attach a copy of the articles of incorporation. *see Allowed Appendix Content - 25

2. If the DBE or any Member is a **limited liability company**:

   a. Date formed: N/A

   b. Under laws of what state: N/A

   c. List all LLC members who will perform work on the project:

Name	Ownership Percentage
N/A	

   d. Attach a copy of the articles of organization.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

3. If the DBE or any Member is a **partnership**:

   a. Date formed: N/A

   b. Under laws of what state: N/A

   c. List all partners who will perform work on the project:

Name	Ownership Percentage
N/A	

   d. Attach a copy of the partnership agreement.

4. If the DBE or any Member is a **joint venture**:

   a. Date formed: N/A

   b. Under laws of what state: N/A

   c. List all joint venture members who will perform work on the project:

Name	Ownership Percentage
N/A	

   d. Attach a copy of the joint venture agreement.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5. If the DBE or any Member is a **sole proprietorship**:

   a. Date formed: 1988

   b. Under laws of what state: California

   c. List owner: Stephen Midkiff DBA S R M Contracting

   d. Attach a copy of organizational documents, if any.

C. Financial Capacity

1. Attach an audited financial statement with accompanying notes and supplemental information for the past 2 full fiscal years for DBE and each entity Member (not individual Members). A letter verifying availability of a line of credit may also be attached; however, it will be considered supplemental information only, and is not a substitute for the required financial statement. *see Allowed Appendix Content - 26 through 32

2. Is DBE or any Member currently, or has DBE or any Member within the last 5 years been, the debtor in a bankruptcy case?

   ___ Yes _X_ No

   If "yes," please attach a copy of the bankruptcy petition and a copy of the bankruptcy court's discharge or any other document that ended the case, if any.

II. LICENSING AND REGISTRATION

A. General Contractor

1. Name of license holder exactly as on file with the Contractors State License Board ("CSLB"): S R M Contracting
2. License classification(s): B and C-47
3. License #: 534976
4. Issue Date: 7/14/1988
5. Expiration Date: 7/31/2024
6. Public Works Contractor Registration # on file with the Department of Industrial Relations ("DIR"): PW-LR-1001134873 (for Bigfoot Homes, Inc.) SRM can also seek a DIR registration if required
7. Has any CSLB license held by the general contractor or its qualifying individual been suspended or revoked within the last 5 years?

   ___ Yes X No

   If "yes," explain on a separate signed sheet.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

8. Has the general contractor changed names or license numbers within the past 5 years?

   ___ Yes X No

   If "yes," explain on a separate signed sheet.

B. Architect of Record

The architect of record is the architect whose stamp will appear on the project Construction/Contract Documents.

1. Name of license holder exactly as on file with the California Architects Board ("CAB"): _____
   N/A - Licensed architect is not required. All design work handled in-house by home manufacturer.
2. License #: _____
3. Issue Date: _____
4. Expiration Date: _____
5. Has any CAB license held by the architect of record been suspended or revoked within the last 5 years?

   ___ Yes ___ No

   If "yes," explain on a separate signed sheet.

6. Has the architect of record changed names or license numbers within the past 5 years?

   ___ Yes ___ No

   If "yes," explain on a separate signed sheet.

C. Engineer(s)

Engineering services will be dictated by the nature of the project. The DBE should respond for all "in house" engineers or consulting engineers that will provide services on the project. If relevant, use additional signed sheets to respond for multiple engineering disciplines.

1. Name of license holder exactly as on file with the Board of Professional Engineers, Land Surveyors, and Geologists ("BPELSG"): _____
   Jeffrey Martin Richelieu as CEO of Streamline Engineering, Inc.
2. License Type: Civil Engineer
3. Licenses #: 53590
4. Issue Date: 02/10/1995

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5. Has any BPELSG license held by the engineer been suspended or revoked within the last 5 years?

   Typ text he

   ___ Yes X No

   If "yes," explain on a separate signed sheet.

6. Has the engineer changed names or license numbers within the past 5 years?

   ___ Yes X No

   If "yes," explain on a separate signed sheet.

D. Mechanical, Electrical, Plumbing Subcontractor(s), or other Trade Partners

If utilized in the design of the project, respond for all Member electrical, or plumbing ("MEP") contractors. If relevant, use additional signed sheets to respond for multiple MEP contractors.

1. Name of license holder exactly as on file with the Contractors State License Board ("CSLB"): N/A - S R M Contracting can perform all required work without subcontrators.
2. License classification(s): _____
3. License #: _____
4. Issue Date: _____
5. Expiration Date: _____
6. Public Works Contractor Registration # on file with the Department of Industrial Relations ("DIR"): _____
7. Has any CSLB license held by the MEP contractor or its qualifying individual been suspended or revoked within the last 5 years?

   ___ Yes ___ No

   If "yes," explain on a separate signed sheet.

8. Has the general contractor changed names or license numbers within the past 5 years?

   ___ Yes ___ No

   If "yes," explain on a separate signed sheet.

III. PERFORMANCE HISTORY

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

1. Has DBE or any Member or Associate ever been found liable in a civil suit, or found guilty in a criminal action, for making any false claim or material misrepresentation to any public agency or entity?

   ___ Yes X No

   If "yes," explain on a separate signed sheet, including identifying who was found liable or guilty, the court and case number, the name of the public entity, the civil or criminal verdict, the date, and the basis for the finding.

2. Has DBE or any Member or Associate ever been convicted of a crime involving any federal, state, or local law related to construction or any crime involving fraud, theft, or any other act of dishonesty?

   ___ Yes X No

   If "yes," explain on a separate signed sheet, including identifying who was convicted, the name of the victim, the date of the conviction, the court and case number, the crimes, and the grounds for the conviction.

3. At any time in the last 10 years, has DBE or any Member been assessed liquidated damages under a construction contract?

   ___ Yes X No

   If "yes," explain on a separate signed sheet, including the project, owner, owner's address, date of completion, and amount of liquidated damages.

4. At any time in the last 5 years, has DBE or any Member or Associate been debarred, disqualified, removed or otherwise prevented from bidding on, or completing, any public works project?

   ___ Yes X No

   If "yes," explain on a separate signed sheet, including the project, the year of the event, owner, owner's address, and basis for the action.

5. At any time in the last 5 years, has a public agency found that DBE or any Member was not a responsible bidder?

   ___ Yes X No

   If "yes," explain on a separate signed sheet, including the project, the year of the event, owner, owner's address, and basis for the finding.

6. In the past 5 years, has any claim exceeding $50,000 been filed by or against DBE or any Member in court or arbitration concerning work or payment on a construction project?

   ___ Yes X No

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

If "yes," explain on a separate signed sheet, including the project name, court or arbitration case name and number, and a brief description of the status of the claim.

7. In the past 5 years, has there been more than one occasion in which DBE or any DBE member was required to pay either back wages or penalties for failure to comply with California prevailing wage laws or federal Davis-Bacon prevailing wage requirements?

___ Yes ☒ No

If "yes," explain on a separate signed sheet, describing the nature of the violation(s), project, owner, and amount paid, if any.

8. At any time during the past 5 years, has DBE or any Member been found to have violated any provision of California apprenticeship laws or regulations, or laws pertaining to use of apprentices on public works projects?

___ Yes ☒ No

If "yes," explain on a separate signed sheet, including date(s) of such findings and attaching the DAS' final decision(s).

IV. BONDS AND INSURANCE

A. Bonds

1. Attach a notarized statement from an admitted surety insurer (approved by the California Department of Insurance and authorized to issue bonds in the State of California), which states the current bonding capacity of the DBE (both single job limit and aggregate limit). Note: DBE must have capacity to provide 100% payment bond and 100% performance bond, each issued by an admitted surety insurer, without bonding subcontractors. See addendum to this document

2. Provide the name, address, and telephone number of the surety agent: David Weeks with Orr & Associates Insurance Services at 951-973-0969 and dweeks@orrandandassociates.com License #0D80642 located at 28780 Single Oak Dr., Ste 255, Temecula, CA 92590

3. List all sureties that have written bonds to the DBE or any Member during the last 5 years:

Name	Address	Date of Bond
Hudson Insurance Company	1035 Greenwood Blvd., Ste 265, Lake Mary, FL	1/1/2023
Hudson Insurance Company	1035 Greenwood Blvd., Ste 265, Lake Mary, FL	5/25/2022
Western Surety Company	151 N Franklin St., Chicago, IL	5/25/2020
Hudson Insurance Company	1035 Greenwood Blvd., Ste 265, Lake Mary, FL	5/25/2016

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

4. In the last 5 years, has any surety paid on behalf of the DBE or any Member a result of a default to satisfy any claims made against a payment or performance bond?

   ___ Yes _X_ No

   If "yes," explain on a separate signed sheet, including the amount of each claim, name and telephone number of claimant, date of and grounds for the claim, and present status.

5. If DBE or any Member was required to pay a premium of more than 1 percent for a performance and payment bond on any project in the last 5 years, state the percentage: 2-3%

   Explain on a separate signed sheet why DBE or Member was required to pay the premium of more than 1 percent. See addendum to this application for response

6. In the last 5 years, has DBE or any Member been denied bond coverage by a surety company or had no surety bond in place when once was required?

   ___ Yes _X_ No

   If "yes," explain on a separate signed sheet, including the name of the surety company and/or period during which DBE or Member had no bond in place.

B. <u>Insurance</u>

1. Does DBE have liability insurance with a policy limit of at least $2,000,000 per occurrence and $4,000,000 aggregate for a California admitted company?

   ___ Yes _X_ No

   If "no," provide on a separate signed sheet what policy limits are available to DBE.

2. Does DBE have current workers' compensation insurance as required by the California Labor Code or is DBE legally self-insured pursuant the California Labor Code? Contractor and Dealer carry Workers Comp

3. Does DBE have professional liability (errors and omissions) insurance with a policy limit of at least $2,000,000 aggregate from a California admitted company?

   ___ Yes _X_ No

   If "no," provide on a separate signed sheet what policy limits are available to DBE. *see Allowed Appendix Content - 22-23

4. Will you maintain a Builder's Risk, Course of Construction or similar first party property coverage that will be issued on a full replacement cost value basis consistent with the total

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

replacement cost of all insurable Work and the Project, as outlined within the Contract Documents?

X Yes ___ No

5. In the last 5 years, has any insurance carrier, for any form of insurance, refused to renew an insurance policy for DBE or any Member?

___ Yes X No

If "yes," explain on a separate signed sheet, including the name of the insurance carrier, form of insurance, and year of the refusal.

V. SAFETY

1. Attach a description, not to exceed 1 page, of DBE's worker safety program as applicable to this project. See addendum to this document

2. Within the past 5 years, has the California or federal Occupation Safety and Health Administration ("OSHA") cited and assessed penalties against DBE or any Member, for "serious," "willful" or "repeat" violations of its safety or health regulations?

___ Yes X No

If "yes," explain on a separate signed sheet, identifying the citation(s), nature of the violation(s), project, and amount of penalty paid, if any.

3. Within the past 5 years, has the Environmental Protection Agency ("EPA") or any Air Quality Management or any Regional Water Quality Control Board cited and assessed penalties against DBE or any Member or the owner of the project on which DBE/Member was the contractor?

___ Yes X No

If "yes," explain on a separate signed sheet, identifying the citation(s), nature of the violation(s), project, and amount of penalty paid, if any.

4. State the Workers' Compensation Experience Modification Rate ("EMR") for DBE and each Member for the past 3 premium years:

Year	EMR
2023	1.00
2022	1.00
2021	1.00

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

If EMR was 1.00 or higher in any of 3 years, attach a letter of explanation. See addendum to this document

5. State the total recordable injury or illness rate and the lost work rate for DBE and each Member for the past 3 years:

Year	Incident Rate	Lost Work Rate
2023	0	0
2022	0	0
2021	0	0

6. Within the past 5 years, has there ever been a period when DBE or any Member had employees but was without workers' compensation insurance or state-approved self-insurance?

___ Yes _X_ No

If "yes," explain on separate signed sheet, including the date(s) and reason(s) for the absence of workers' compensation insurance.

VI. PROJECT EXPERIENCE AND REFERENCES

1. How many local design-build projects have the general contractor and architect of record involved in this DBE completed together? n/a - no architect of record, however, S R M Contracting and Bigfoot Homes, Inc. have worked together on three (3) higher-end manufactured home set-ups.
2. For the completed local design-build projects identified in the preceding answer, state:
   a. Total dollar value of all contracts: See project references. S R M Contracting and Bigfoot Homes, Inc. have worked together on a $120,000 contract involving the set and seal of three (3) 1,500 sf double-wide manufactured homes.
   b. Dollar value of single largest contract: _____
3. How many Manufactured Housing construction projects (both under construction and completed) has/have:
   a. The general contractor for the DBE built in the past 5 years? GC - three (3) full parks and numerous single family build sites.
   b. The architect of record for the DBE designed in the past 5 years? These are manufactured HUD code homes. No architect of record
   c. The engineer(s) for the DBE designed in the past 5 years? Engineer has designed over 100 manufactured home foundations, stairs and decks over the last 5 years.
   d. The MEP contractor(s)/trade partners for the DBE worked on in the past 5 years? n/a - no MEP contrator identified as this project does not require AC units.
4. Describe the DBE's ability to self-perform work, and if so, state the trades. Answer: DBE consists of a licensed B and C-47 general contractor (S R M Contracting)

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5. Attach an organizational chart and include resumes or similar documents, not to exceed 1 page each, showing the experience, training, and qualifications for up to 6 proposed key personnel of the DBE. See org chart contained in the "Technical Proposal" portion of this submission

6. Complete **both** project reference forms attached hereto as **Exhibits A-1 and A-2**. The County may, in its discretion, contact project references. See attached

VII. SKILLED AND TRAINED WORKFORCE COMPLIANCE

1. By this submittal, DBE hereby acknowledges, agrees, and hereby provides an enforceable commitment to the County that:

   a. DBE and its subcontractors at every tier will use a skilled and trained workforce to perform all work on the project or contract that falls within an apprenticeable occupation in the building and construction trades, in accordance with Public Contract Code section 2600 et seq.

VIII. CERTIFICATION

DBE and all Members must sign. Copy this certification page as needed for each Member.

I certify and declare that I have read all the foregoing answers to this prequalification submittal template; that all answers are correct and complete of my own knowledge and belief. I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date: 2/4/2024, ~~2023~~

Name of DBE or Member: Bigfoot Homes, Inc

Signature by authorized individual: DocuSigned by: 36A041A855184E2...

Print Name: Christopher K. Lippi

Title: Chief Operating Officer - Head of Project Management

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5. Attach an organizational chart and include resumes or similar documents, not to exceed 1 page each, showing the experience, training, and qualifications for up to 6 proposed key personnel of the DBE. See org chart contained in the "Technical Proposal" portion of this submission

6. Complete **both** project reference forms attached hereto as **Exhibits A-1 and A-2**. The County may, in its discretion, contact project references. See attached

VII. SKILLED AND TRAINED WORKFORCE COMPLIANCE

1. By this submittal, DBE hereby acknowledges, agrees, and hereby provides an enforceable commitment to the County that:

   a. DBE and its subcontractors at every tier will use a skilled and trained workforce to perform all work on the project or contract that falls within an apprenticeable occupation in the building and construction trades, in accordance with Public Contract Code section 2600 et seq.

VIII. CERTIFICATION

DBE and all Members must sign. Copy this certification page as needed for each Member.

I certify and declare that I have read all the foregoing answers to this prequalification submittal template; that all answers are correct and complete of my own knowledge and belief. I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date: 2/4/2024, ~~2023~~

Name of DBE or Member: Bigfoot Homes, Inc.

Signature by authorized individual: DocuSigned by: JASON TAYLOR 0471E29B89BC49F...

Print Name: Jason W. Taylor

Title: Chief Executive Officer

5. Attach an organizational chart and include resumes or similar documents, not to exceed 1 page each, showing the experience, training, and qualifications for up to 6 proposed key personnel of the DBE. See org chart contained in the "Technical Proposal" portion of this submission

6. Complete **both** project reference forms attached hereto as **Exhibits A-1 and A-2**. The County may, in its discretion, contact project references. See attached

VII. SKILLED AND TRAINED WORKFORCE COMPLIANCE

1. By this submittal, DBE hereby acknowledges, agrees, and hereby provides an enforceable commitment to the County that:

   a. DBE and its subcontractors at every tier will use a skilled and trained workforce to perform all work on the project or contract that falls within an apprenticeable occupation in the building and construction trades, in accordance with Public Contract Code section 2600 et seq.

VIII. CERTIFICATION

DBE and all Members must sign. Copy this certification page as needed for each Member.

I certify and declare that I have read all the foregoing answers to this prequalification submittal template; that all answers are correct and complete of my own knowledge and belief. I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date: 2/4/2024, ~~2023~~

Name of DBE or Member: S R M Contracting

Signature by authorized individual: DocuSigned by: Steve Midkiff 2EC55CE2E1BC414...

Print Name: Stephen R. Midkiff

Title: Sole Owner

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5. Attach an organizational chart and include resumes or similar documents, not to exceed 1 page each, showing the experience, training, and qualifications for up to 6 proposed key personnel of the DBE. See org chart contained in the "Technical Proposal" portion of this submission

6. Complete **both** project reference forms attached hereto as **Exhibits A-1 and A-2**. The County may, in its discretion, contact project references. See attached

VII. SKILLED AND TRAINED WORKFORCE COMPLIANCE

1. By this submittal, DBE hereby acknowledges, agrees, and hereby provides an enforceable commitment to the County that:

   a. DBE and its subcontractors at every tier will use a skilled and trained workforce to perform all work on the project or contract that falls within an apprenticeable occupation in the building and construction trades, in accordance with Public Contract Code section 2600 et seq.

VIII. CERTIFICATION

DBE and all Members must sign. Copy this certification page as needed for each Member.

I certify and declare that I have read all the foregoing answers to this prequalification submittal template; that all answers are correct and complete of my own knowledge and belief. I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date: 2/5/2024, ~~2023~~

Name of DBE or Member: Streamine Engineering, Inc.

Signature by authorized individual: DocuSigned by: Jeff R. 46684D99AAEF490...

Print Name: Jeffrey M. Richelieu

Title: Chief Executive Officer

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

EXHIBIT A-1 Blue Haven MHP - S R M Contracting

Design-Build Project References

List the three most recent design-build manufactured home projects, each with a contract price over $1 million, completed by the general contractor for the DBE. The projects may be public or private. Contact information must be current and viable. (Copy additional sheets.)

1. Project Name: Blue Haven Mobile Home Park
2. Project Address: 5510 Clark Rd., Paradise, CA 95969
3. Owner (name and tel. #): BoaVida Communities at (916) 432-3298
4. Architect (name and tel. #): None required - designed by Civil Engineer
5. Construction Manager (name and tel. #): S R M Contracting serves as Construction Manager
6. Scope of Work: 34 new home installation. Work included poured concrete drive-ways, compaction and utility connections, manufactured home installations including foundations and home set and seal and stairs AC Unit installations and awnings.
7. Original Completion Date: 2023
8. Actual Complete Date: _____
9. Time Extensions Granted (# of days): _____
10. Initial Contract Value: _____
11. Final Contract Value: $1,258,000 ($37,000 per site)

Date: 2/4/2024, ~~2023~~

Signature by authorized individual: DocuSigned by: Steve Midkiff 2EC5CE2E518C414...

Print Name: Stephen Midkiff

Title: Sole Owner of S R M Contracting

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Design-Build Project References

List the three most recent design-build manufactured home projects, each with a contract price over $1 million, completed by the general contractor for the DBE. The projects may be public or private. Contact information must be current and viable. (Copy additional sheets.)

1. Project Name: Sandpiper Park
2. Project Address: 115 G Street, Arcata, CA 95521
3. Owner (name and tel. #): Resident Owned Community built from ground up by S R M Contracting
4. Architect (name and tel. #):
5. Construction Manager (name and tel. #): S R M Contracting
6. Scope of Work: Resident owned community - old park demolished and completely rebuilt by S R M Contracting in conjuction with City of Arcata and led by Resident Owned Properties (aka Resident Owned Communities - ROC). S R M performed full park rebuild inlcuding placing homes on permanent concrete stem wall foundations.
7. Original Completion Date:
8. Actual Complete Date: 2013
9. Time Extensions Granted (# of days):
10. Initial Contract Value:
11. Final Contract Value: $1,040,000 (estimated)

Date: 2/4/2024, ~~2023~~

Signature by authorized individual: DocuSigned by: Steve Midkiff 2EC5CE2E518C414...

Print Name: Steve Midkiff

Title: President

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Design-Build Project References

List the three most recent design-build manufactured home projects, each with a contract price over $1 million, completed by the general contractor for the DBE. The projects may be public or private. Contact information must be current and viable. (Copy additional sheets.)

1. Project Name: Paradise Ridge Mobile Home Community
2. Project Address: 6656 Pentz Rd., Paradise, CA 95969
3. Owner (name and tel. #): BoaVida Communities at (916) 432-3298
4. Architect (name and tel. #): None required - designed by Civil Engineer
5. Construction Manager (name and tel. #): S R M Contracting serves as Construction Manager
6. Scope of Work: 54 mobile home sites and 10 RV Sites. Poured concrete drive-ways, site compaction and utility connections, manufactured home installations including foundations and home set and seal and stairs AC Unit installations and carports.
7. Original Completion Date: 2024 - Work underway
8. Actual Complete Date: _____
9. Time Extensions Granted (# of days): _____
10. Initial Contract Value: _____
11. Final Contract Value: Under Construction - $2,100,000 estimated final cost

Date: 2/4/2024, 2023

Signature by authorized individual: DocuSigned by: Steve Midkiff 2EC5CE2E518C414...

Print Name: Stephen Midkiff

Title: Sole Owner of S R M Contracting

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

EXHIBIT A-1 - Idlewild Estates - Bigfoot homes

Design-Build Project References

List the three most recent design-build manufactured home projects, each with a contract price over $1 million, completed by the general contractor for the DBE. The projects may be public or private. Contact information must be current and viable. (Copy additional sheets.)

1. Project Name: Idlewild Estates f/k/a Idlewild Mobile Estates
2. Project Address: 5393 Sawmill Rd., Paradise, CA
3. Owner (name and tel. #): Idlewild Estates, LLC (owned/controlled by Jason Taylor)
Bigfoot Homes, Inc. Jason - 310-562-1993 and jason@bigfoot.homes
4. Architect (name and tel. #): None - project designed by owner and a Civil Engineer
Engineer - Hansen Engineering in Chico, California
5. Construction Manager (name and tel. #): AGS Construction - George Sperske
George Sperske at 925-788-5694
6. Scope of Work: 37 site mobile home park completely destroyed in the 2018 Camp Fire that destroyed most of Paradise, CA. Complete rebuild of septic, water lines, utility pedestals, driveways and installation of new homes. Rebuild underway.
7. Original Completion Date: Project underway - completion in 5 months (estimate)
8. Actual Complete Date: Under Construction
9. Time Extensions Granted (# of days): _____
10. Initial Contract Value: Total rebuild cost is in excess of $1 million excluding home cost.
11. Final Contract Value: $4,500,000 including home cost

Date: November 29, 2023

Signature by authorized individual: 

Print Name: Jason Taylor

Title: Managing Member of Idlewild Estates, LLC

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

EXHIBIT A-1 Multiple Job Sites - Bigfoot Homes

Design-Build Project References

List the three most recent design-build manufactured home projects, each with a contract price over $1 million, completed by the general contractor for the DBE. The projects may be public or private. Contact information must be current and viable. (Copy additional sheets.)

1. Project Name: Multiple Job Sites
2. Project Address: 6083-6088 Marty Ct., 5550 Feather River, Paradise, CA; 630 Sunnyside, St. Helena and more
3. Owner (name and tel. #): Bigfoot Homes, Inc. and Bigfoot Ventures, LLC - Bigfoot has acted as developer or fee developer on multple single family home sites utilizing manufactured homes.
4. Architect (name and tel. #):
5. Construction Manager (name and tel. #):
6. Scope of Work: Acquire sites, grading, foundation, manufactued home installation home set and seal, garage construction, driveways, sidewalks, decks, fencing, etc. These are higher-end manufactured homes built for rent or re-sale and placed on permanent foundations
7. Original Completion Date: 4 completed homes in 2023 and several projects underway
8. Actual Complete Date:
9. Time Extensions Granted (# of days):
10. Initial Contract Value:
11. Final Contract Value: In excess of $2,000,000

Date: Nov 29, 2023

Signature by authorized individual:

Print Name: Jason Taylor

Title: President

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

EXHIBIT A-2

Public Construction Project References

List the three most recent public construction projects, each with a contract price over $1 million, completed by the general contractor for the DBE. Contact information should be current and viable. (Copy additional sheets.)

1. Project Name: No history with public projects
2. Project Address: _____
3. Owner (name and tel. #): _____

_____

4. Architect (name and tel. #): _____

_____

5. Construction Manager (name and tel. #): _____

_____

6. Scope of Work: _____

_____

_____

7. Was this a design-build project? N/A
8. Original Completion Date: _____
9. Actual Complete Date: _____
10. Time Extensions Granted (# of days): _____
11. Initial Contract Value: _____
12. Final Contract Value: _____

Date: February 6, 2024, ~~2023~~

Signature by authorized individual: _____

Print Name: Jason Taylor

Title: CEO of Bigfoot Homes, Inc.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Explanations and Additional Detail to Prequalification Submittal Template

I. BUSINESS INFORMATION

C. Financial Capacity

1. Attach an audited financial statement with accompanying notes and supplemental information for the past 2 full fiscal years for DBE and each entity Member (not individual Members). A letter verifying availability of a line of credit may also be attached; however, it will be considered supplemental information only, and is not a substitute for the required financial statement.
    a. *Answer – 1: Members of DBE do not produce audited financial statements, instead a signed certification is provided on each statement.*
    b. *Answer – 2: No financial statements provided for Civil Engineer. If County determines they need financial statement for Engineer, they will be provided at a later date.*

IV. BONDS AND INSURANCE

A. Bonds

1. Attach a notarized statement from an admitted surety insurer (approved by the California Department of Insurance and authorized to issue bonds in the State of California), which states the current bonding capacity of the DBE (both single job limit and aggregate limit). Note: DBE must have the capacity to provide 100% payment bond and 100% performance bond, each issued by an admitted surety insurer, without bonding subcontractors.

    a. *Answer: DBE is seeking an exception to this requirement as addressed in the exception portion of this proposal. A bond covering the home setup, foundations, stairs, etc. (not the homes) will be available in conjunction with a home escrow system, but a notarized statement from an admitted surety insurer will only be applied for, collateral posted, etc if Bigfoot Homes, Inc. is awarded this contract.*

2. If DBE or any Member was required to pay a premium of more than 1 percent for a performance and payment bond on any project in the last 5 years, state the percentage: _____N/A_____. Explain on a separate signed sheet why DBE or Member was required to pay the premium of more than 1 percent.

    a. *Answer: S R M Contracting and Bigfoot Homes, Inc.'s insurance agent has advised there will be a 2-3% premium for the County's requested bond (subject to our exception request). S R M Contracting and Bigfoot Homes experience is primarily in the private sector on projects with limited bonding requests. As such, this bond premium will be higher than the 1% noted in the Prequalification Submittal Template.*

B. Insurance

1. Does DBE have liability insurance with a policy limit of at least $2,000,000 per occurrence and $4,000,000 aggregate for a California admitted company?

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

a. *Answer: No – Bigfoot Homes, Inc. holds $2,000,000 aggregate and $1,000,000 per occurrence alongside S R M Contracting who also holds a separate $2,000,000 aggregate fand $1,000,000 per occurrence policy.*

2. Does DBE have professional liability (errors and omissions) insurance with a policy limit of at least $2,000,000 aggregate from a California admitted company?
   a. *Answer: No – Bigfoot Homes, Inc. has taken this request to market through its insurance agent and a maximum of $1,000,000 aggregate policy is available, however, DBE will not be acquiring this insurance policy unless awarded this contract.*

V. SAFETY

1. Attach a description, not to exceed 1 page, of DBE's worker safety program as applicable to this project.
   a. *Answer: The below is a standard safety program which will be implemented via weekly site meetings (during the construction phase of the project):*

Stone Pine Cove Farmworker Housing Project: Worker Safety Program

Responsibilities: • *The General Contractor oversees implementation.* • *Subcontractors comply on their sites.* • *Supervisors enforce safety rules.* • *Employees attend or participate in training, wear PPE, and report hazards.*	***Hazard Identification and Abatement:*** • *Regular job site inspections.* • *Document and address hazards promptly.* • *Encourage hazard reporting.* • *Use fall protection, train on prevention*
Personal Protective Equipment (PPE): • *Provide appropriate PPE for all tasks.* • *Train on PPE selection, use, and maintenance.* • *Inspect PPE regularly.*	***Training and Education:*** • *General safety training for all workers.* • *Task-specific training for high-risk activities.* • *Training in English and other spoken languages.* • *Refresher training as needed.*
Emergency Preparedness and Response: • *Develop and communicate emergency procedures.* • *Provide first aid kits.* • *Train on basic first aid and CPR.*	***Heat Illness Prevention:*** • *Follow Cal/OSHA's Heat Illness Prevention Standard.* • *Provide hydration stations.* • *Utilize shade whenever possible.* • *Train on heat illness recognition and response.*

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Communication and Recordkeeping: • *Regular safety meetings, task-specific training, and training in multiple languages as needed.* • *Document and investigate incidents and near misses.* • *Maintain safety records.*	***Additional Considerations:*** • *Pre-task inspections: Conduct before starting any task* • *Address high-risk activities (confined space, electrical, heights).* • *Review and update the program regularly.* • *Incorporate employee feedback.*

4. If EMR was 1.00 or higher in any of the 3 years, attach a letter of explanation:
    a. *Answer: The EMR has been 1.00 due to premium size and there have been no losses. A larger premium will bring the EMR below 1.00.*

Certified true and correct to the best of my actual knowledge.

Sincerely,

Jason Taylor
Chief Executive Officer
Bigfoot Homes, Inc.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5243030

B1091-7089 09/12/2022 10:03 AM Received by California Secretary of State

STATE OF CALIFORNIA
Office of the Secretary of State
ARTICLES OF INCORPORATION
CA GENERAL STOCK CORPORATION

California Secretary of State
1500 11th Street
Sacramento, California 95814
(916) 653-3516

For Office Use Only

-FILED-

File No.: 5243030

Date Filed: 9/12/2022

Corporation Name	
Corporation Name	Bigfoot Homes Inc.
Initial Street Address of Principal Office of Corporation	
Principal Address	205 MOONSTONE ST. MANHATTAN BEACH, CA 90266
Initial Mailing Address of Corporation	
Mailing Address	205 MOONSTONE ST. MANHATTAN BEACH, CA 90266
Attention	
Agent for Service of Process	
California Registered Corporate Agent (1505)	LEGALZOOM.COM, INC. Registered Corporate 1505 Agent

Shares

The total number of shares the corporation is authorized to issue is: 10,000

Does the corporation have more than one class or series of shares? No

Purpose Statement

The purpose of the corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of California other than the banking business, the trust company business or the practice of a profession permitted to be incorporated by the California Corporations Code.

Additional information and signatures set forth on attached pages, if any, are incorporated herein by reference and made part of this filing.

Electronic Signature

☒ By checking this box, I acknowledge that I am electronically signing this document as the incorporator of the Corporation and that all information is true and correct.

Legalzoom.com, Inc., By: Cheyenne Moseley, Asst. Secretary — Incorporator Signature

09/12/2022 — Date

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SRM CONTRACTING

61 LUMBERJACK LANE

YANKEE HILL CA.95965

ST. LIC # 534976

(530) 218-0733

PROFIT AND LOSS FOR 2022

TOTAL GROSS RECEIPTS.....$ 1,798,678.00

PAYROLL/SUB CONTRACTORS.....$ 375,565.00

MATERIALS.....$ 301,787.00

INSURANCE.....$ 21,950.00

EQUIPMENT .....$ 66,875.00

PHONE/INTERNET.....$ 6,944.00

MILAGE 46,345 @ $ .45 PER MILE.....$ 20,855.00

TOTAL EXPENSES .....$ 793,976.00

TOTAL PROFIT.....$ 1.,004,702.00

Certified True and Correct:

DocuSigned by:
Steve Midkiff
2EC5CE2E518C414...

2/4/2024

Steven R. Midkiff DBA S R M Contracting DATE

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

SRM CONTRACTING

61 LUMBERJACK LANE

YANKEE HILL CA.95965

ST. LIC # 534976

(530) 218-0733

PROFIT AND LOSS FOR 2021

TOTAL GROSS RECEIPTS.....$ 1,346,775.00

PAYROLL/SUB CONTRACTORS.....$ 315,986.00

MATERIALS.....$ 289,732.00

INSURANCE.....$ 18,788.00

EQUIPMENT .....$ 68,955.00

PHONE/INTERNET.....$ 5,785.00

MILAGE 45,450 @ $ .40 PER MILE.....$ 18,180.00

TOTAL EXPENSES .....$ 717,426.00

TOTAL PROFIT.....$ 629,349.00

Certified True and Correct:

DocuSigned by:
Steve Midkiff
2EC5CE2E518C414...

2/4/2024

Steven R. Midkiff DBA S R M Contracting DATE

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Notes to Financial Statements – Bigfoot Homes, Inc.

- Bigfoot Homes, Inc. was formed in September, 2022 as a start-up manufactured home developer and home dealer. Financials provided are a partial year.

- 2022 Year End Financial Statement has been reviewed and finalized with bookkeeper and CPA.

- 2023 Year End Financial Statement is self-prepared and has not yet been finalized by bookkeeper and CPA.

- Year-to-date 2024 Financial Statement is self-prepared and has been provided to show increased profitability with a growing pipeline of transactions.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Bigfoot Homes, Inc.

Profit and Loss

January 1 - February 4, 2024

	TOTAL
Income	
Sales	21,325.00
Services	96,481.00
Total Income	**$117,806.00**
GROSS PROFIT	**$117,806.00**
Expenses	
Bank fees & service charges	15.00
Contract labor	21,900.00
Employee benefits	
Workers' compensation insurance	531.00
Total Employee benefits	**531.00**
Insurance	84.00
Liability insurance	4,256.51
Total Insurance	**4,340.51**
Interest paid	
Mortgage interest	5,583.33
Total Interest paid	**5,583.33**
Office expenses	
Software & apps	90.00
Total Office expenses	**90.00**
Payroll expenses	
Salaries & wages	13,358.17
Total Payroll expenses	**13,358.17**
Professional Fees	3,925.00
Property taxes	-217.28
Utilities	152.81
Total Expenses	**$49,678.54**
NET OPERATING INCOME	**$68,127.46**
Other Income	
Interest earned	22.21
Total Other Income	**$22.21**
NET OTHER INCOME	**$22.21**
NET INCOME	**$68,149.67**

I hereby certify that, to the best of my knowledge, the provided information is true and accurate.

By: _____

Name: Jason Taylor
Title: Chief Executive Officer of Bigfoot Homes, Inc.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Bigfoot Homes, Inc.

Profit and Loss

January - December 2023

	TOTAL
Income	
Sales	107,970.42
Services	53,078.00
Total Income	**$161,048.42**
Cost of Goods Sold	
Cost of goods sold	
Equipment rental - COGS	123.91
Freight in - COGS	6,597.50
Total Cost of goods sold	**6,721.41**
Total Cost of Goods Sold	**$6,721.41**
GROSS PROFIT	**$154,327.01**
Expenses	
Advertising & marketing	2,605.40
Bank fees & service charges	374.50
Business licenses	245.00
Contract labor	9,910.89
Fees & Permits	7,960.92
General business expenses	1,105.00
Insurance	1,390.00
Interest paid	11,875.00
Legal & accounting services	1,500.00
Meals	
Travel meals	779.45
Total Meals	**779.45**
Office expenses	1,194.34
Office supplies	680.00
Shipping & postage	1,264.77
Software & apps	16,367.90
Total Office expenses	**19,507.01**
Payroll expenses	241.84
Salaries & wages	94,778.66
Total Payroll expenses	**95,020.50**
Property taxes	1,188.44
Rent	
Equipment rental	1,419.67
Total Rent	**1,419.67**
Repairs & maintenance	700.00
Taxes paid	-250.77
Travel	
Hotels	1,736.05
Total Travel	**1,736.05**

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

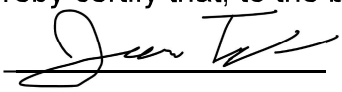
Bigfoot Homes, Inc.

Profit and Loss

January - December 2023

	TOTAL
Utilities	1,382.44
Total Expenses	**$158,449.50**
NET OPERATING INCOME	**$ -4,122.49**
Other Income	
Credit card rewards	1,717.70
Interest earned	-72.92
Total Other Income	**$1,644.78**
Other Expenses	
Vehicle expenses	
Vehicle gas & fuel	1,286.30
Total Vehicle expenses	**1,286.30**
Total Other Expenses	**$1,286.30**
NET OTHER INCOME	**$358.48**
NET INCOME	**$ -3,764.01**

I hereby certify that, to the best of my knowledge, the provided information is true and accurate.

By: 

Name: Jason Taylor

Title: Chief Executive Officer of Bigfoot Homes, Inc.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Bigfoot Homes, Inc.

Profit and Loss

October - December, 2022

	TOTAL
Income	
Total Income	
GROSS PROFIT	**$0.00**
Expenses	
Bank fees & service charges	34.95
Interest paid	1,110.99
Office expenses	576.00
Officers' salaries	20,833.35
Payroll Fees	4,748.26
Payroll taxes	1,734.91
Professional Fees	1,080.00
Property taxes	494.54
Total Expenses	**$30,613.00**
NET OPERATING INCOME	**$ -30,613.00**
Other Income	
Interest earned	59.98
Total Other Income	**$59.98**
NET OTHER INCOME	**$59.98**
NET INCOME	**$ -30,553.02**

I hereby certify that, to the best of my knowledge, the provided information is true and accurate.

By: _____

Name: Jason Taylor

Title: Chief Executive Officer of Bigfoot Homes, Inc.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

CONTRACTORS STATE LICENSE BOARD

Contractor's License Detail for License # 534976

DISCLAIMER: A license status check provides information taken from the CSLB license database. Before relying on this information, you should be aware of the following limitations.

- CSLB complaint disclosure is restricted by law (B&P 7124.6) If this entity is subject to public complaint disclosure click on link that will appear below for more information. Click here for a definition of disclosable actions.
- Only construction related civil judgments reported to CSLB are disclosed (B&P 7071.17).
- Arbitrations are not listed unless the contractor fails to comply with the terms.
- Due to workload, there may be relevant information that has not yet been entered into the board's license database.

Data current as of 1/24/2024 1:16:35 PM

Business Information

S R M CONTRACTING
61 LUMBENJACK LANE
YANKEE HILL, CA 95965
Business Phone Number:(530) 218-0733

Entity Sole Ownership
Issue Date 07/14/1988
Expire Date **07/31/2024**

License Status

This license is current and active.

All information below should be reviewed.

Classifications

- B - GENERAL BUILDING
- C47 - MANUFACTURED HOUSING

Bonding Information

Contractor's Bond
This license filed a Contractor's Bond with HUDSON INSURANCE COMPANY.
Bond Number: 30052459
Bond Amount: $25,000
Effective Date: 01/01/2023
Contractor's Bond History

Workers' Compensation

This license has workers compensation insurance with the SIRIUSPOINT AMERICA INSURANCE COMPANY
Policy Number:WC8189602
Effective Date: 10/15/2023
Expire Date: 10/15/2024
Workers' Compensation History

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Contractor's License Detail (Personnel List)

Contractor License #	534976
Contractor Name	S R M CONTRACTING

Click on the person's name to see a more detailed page of information on that person

Licenses Currently Associated With

Name	STEPHEN ROY MIDKIFF
Title	SOLE OWNER
Association Date	07/14/1988
Classification	B
Additional Classification	There are additional classifications that can be viewed by selecting this link.

Licenses No Longer Associated With

Back to Top
Conditions of Use
Privacy Policy
Accessibility
Accessibility Certification

Copyright © 2024 State of California

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

STATE OF CALIFORNIA
Business, Consumer Services and Housing Agency
Department of Housing and Community Development
Division of Codes and Standards
Occupational Licensing Program
P.O. Box 278690
Sacramento, CA 95827-8690
Telephone (916) 323-9803

OCCUPATIONAL LICENSE

License Number	License Type		Issue Date	Expiration Date
DL1593637	Dealer	Manufactured Home New, Used	Nov 13, 2023	Nov 30, 2025

VALID ONLY WHEN DISPLAYED AT:

BIGFOOT HOMES INC
2460 17TH AVE NUMBER 1002
SANTA CRUZ, CA 95062

BIGFOOT HOMES
127 PRYCE ST
SANTA CRUZ, CA 95060

NOTE: THIS LICENSE SHALL BE POSTED IN A PLACE CONSPICUOUS TO THE PUBLIC.

The license described herein will expire on the date shown. Renewal of the license prior to the expiration date is the RESPONSIBILITY OF THE LICENSEE. Applications for renewal must be received by the Department before the expiration date. Expired licenses may be reinstated provided an application is submitted with renewal and reinstatement fees within 60 days of expiration. Licenses expired over 60 days may not be reinstated.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Application Status Detail for 2023 01 11374

PLEASE NOTE: The license application status information shown below represents information taken from the CSLB application database at the time of your query.

- Applicants cannot contract until an appropriate contractor's license has been issued.
- Application status may not reflect pending updates or documents that have been submitted and received but not yet processed. The status will be updated after those processes are completed.

We are currently working on original license applications received on 01/16/24

Business Information

BIGFOOT HOMES INC
127 PRYCE STREET
SANTA CRUZ, CA 95060

Entity Corporation
Application Type Original Application

Application Status

Application is pending

- 12/11/2023 - APPLICATION RECEIVED
- 12/15/2023 - PRINTED ACKNLDGMNT LTTR TO APPLCNT
- 12/21/2023 - APPLICATION POSTED
- 01/24/2024 - ASBESTOS OPEN BOOK REQUIREMENT MET
- 01/25/2024 - WORKERS COMP CERT RECEIVED

Classifications

C47 - MANUFACTURED HOUSING

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Bonding Information

Contractor's Bond

This application filed a Contractor's Bond with AMERICAN CONTRACTORS INDEMNITY COMPANY .

Bond Number: 100830633

Bond Amount: $25,000

Effective Date: 01/22/2024

Bond of Qualifying Individual

A Bond of Qualifying Individual is not required for CHRISTOPHER KING LIPPI.

This qualifier certified that he/she owns 10% or more of the voting stock or equity of this company.

Personnel List

Copyright © 2024 State of California

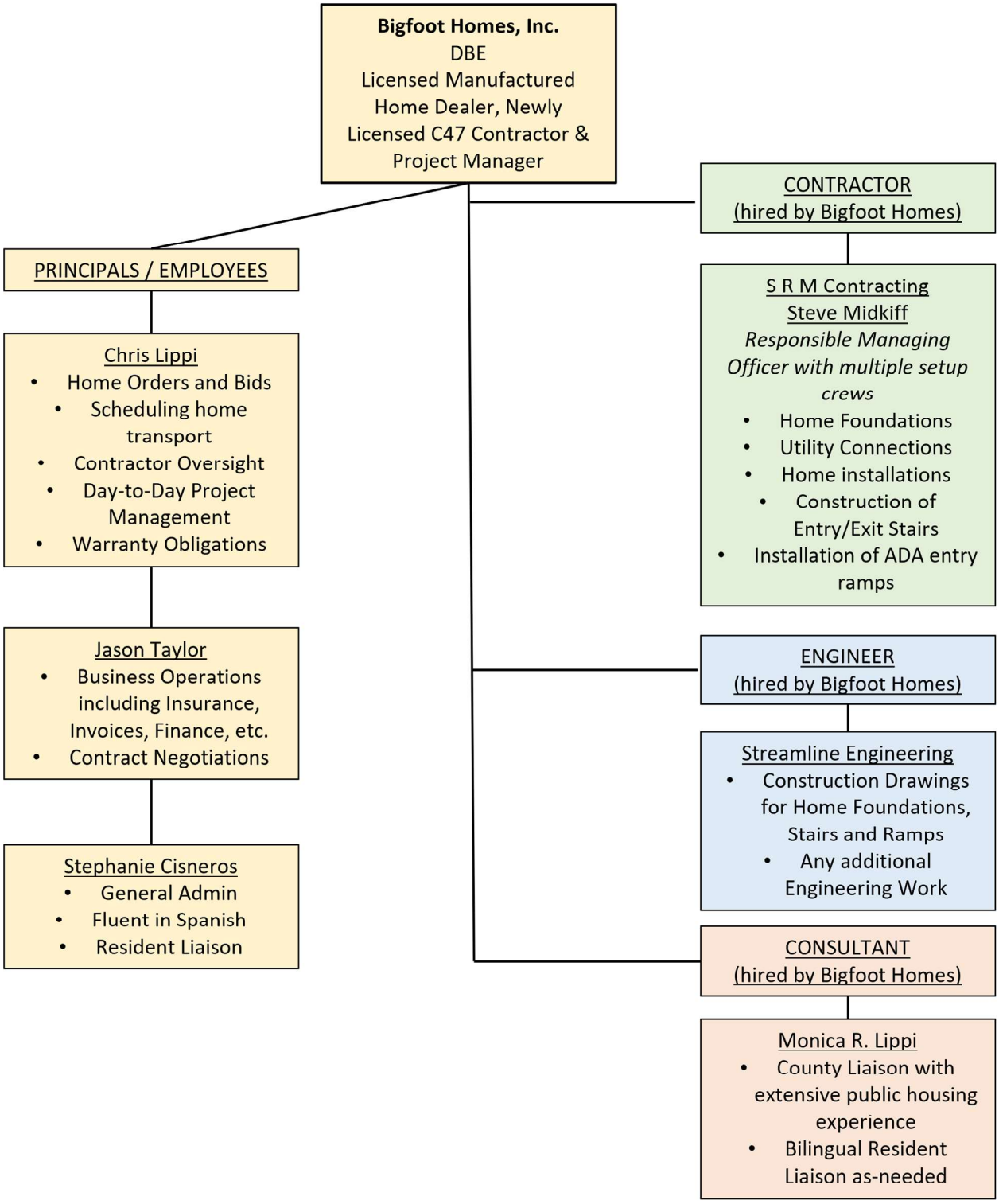
DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

5. Technical Proposal

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Section 5
Technical Proposal

Part 1. Proposed Project Team and Expertise – *A. Organizational Chart:*



DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Part 1. Proposed Project Team and Expertise – B. *Describe the proposed Project team including resumes*:

Bigfoot Homes, Inc.
Licensed manufactured home dealer, C-47 license holder (awaiting license number), project manager and a real estate investment and development company. Bigfoot Homes, Inc. consists of three key employees: Christopher Lippi, Jason Taylor, and Stephanie Cisneros. Resumes included in Section 6 - Supplementary Documents.

Bigfoot Homes, Inc. will be responsible for procuring homes and project management.

S R M Contracting
Licensed B and C-47 contractor with a long history of full park home installations. S R M Contracting is run by Stephen Midkiff, an industry expert in manufactured housing. Resume included in Section 6 - Supplementary Documents.

S R M Contracting will be responsible for installing homes including stairs, ramps, foundations, etc.

Monica R. Lippi
Consultant with over 10 years of experience in County leadership positions focused on housing and homeless services. Resume included in Section 6 - Supplementary Documents.

Monica R. Lippi will advise Bigfoot Homes, Inc. on contract compliance and will support mitigation and stakeholder concerns, if any.

Streamline Engineering
Engineering and Architectural consulting services with a 20 year operating history. Streamline is led by Jeff Richelieu, a licensed professional engineer (PE) with over 30 years of experience in civil engineering. Statement of qualifications included in Section 6 - Supplementary Documents.

Streamline Engineering will be responsible for engineering and construction documentation.

Key Vendors – Not Members of DBE:

Home Manufacturers (not member of DBE)
Bigfoot Homes, Inc. will procure homes for the subject project from Skyline/Champion Homes (Woodland, CA) and Redman/Champion Homes (Lindsay, CA). Skyline and Redman each have over 50 years of manufactured home building experience and are owned by Champion Homes. Additional info included in Section 6 – Supplementary Information.

Trucking Vendor #1 – Bennett Truck Transport,LLC (not a member of DBE)
Homes will be delivered to the site primarily by Bennett Truck Transport, LLC, part of the Bennett Family of Companies, a trucking company with 50 years of experience and over 1,000 employees nationwide. Bigfoot Homes, Inc. has a longstanding relationship with Bennett Truck Transport and is a trusted partner on many projects. Bigfoot Homes, Inc. intends to use Bennett for most of the deliveries but will also rely on Vendor #2 for additional support.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Trucking Vendor #2 – Tenhet & Sons (not a member of DBE)

Due to the volume of homes purchased and the timing requested by the County, Bigfoot Homes, Inc. intends to use Tenhet & Sons as a secondary home delivery company. Tenhet & Sons is located in Central California adjacent to the Redman manufacturing facility. The company was founded in the 1970s and specializes in the delivery of HUD code homes and carries sufficient insurance and a long track record of success.

Part 1. Proposed Project Team and Expertise – C. *Demonstrate how the proposed Project team will communicate, collaborate, and work together and with the County:*

Bigfoot Homes, Inc. will endeavor to meet the County's needs regarding communication and collaboration via:

1.) Dedicated Project Manager and Primary Contact for County
2.) Regular Meetings to ensure that project dynamics meet County expectations.
3.) Proactive collaboration and engagement with relevant stakeholders, County inspectors and key people.
4.) Consultant involvement with expertise in public housing and county dynamics.

Dedicated Project Manager – Primary Contact

To facilitate efficient communications with the County, Bigfoot Homes, Inc. will assign Chris Lippi as a dedicated Project Manager and a first point of contact. Chris Lippi lives within driving distance of the subject site and can regularly visit the project site and provide in-person and telephonic oversight. Chris will also work directly with Bigfoot's home manufacturers regarding quality control, home orders and delivery.

Head of Construction – Home Installations

Stephen Midkiff at S R M Contracting will act as the responsible party for his construction crews and will work closely with Chris Lippi to ensure project timelines are met, County timelines are adhered to, safety meetings are held and guidelines are addressed.

Secondary Project Manager – Business Operations

Jason Taylor will act as secondary project manager with responsibilities regarding manufactured home orders and timing and will act as lead on business operations, insurance, bonding and other financial matters.

County Liaison & Bilingual Consultant

Monica Lippi will act as an additional secondary contact and will assist Bigfoot Homes, Inc. with navigating County dynamics and addressing relevant stakeholders and community expecations. Monica is also bilingual and familiar with direct involvement in public housing matters and meeting resident expectations.

Assistant Project Manager and Bilingual Resident Liaison

Stephanie Cisneros of Bigfoot Homes, Inc. will provide administrative support to both Project Management and work with residents on warranty repair requests and other resident matters.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Part 1. Proposed Project Team and Expertise –D. *Summarize Respondent's design and construction experience as relevant to this Project. Emphasize work on similar projects:*

Bigfoot Homes, Inc. will source the homes for this project from two (2) different factories owned by Champion Homes to meet the County's timeline. We believe at least two (2) factories will be required to complete this order; however, Bigfoot is a dealer for additional factories in Sacramento and Southern California if the need arises. Champion homes is comprised of a number of different brands, and we will procure the County's home order through the Skyline/Champion factory in Woodland, California and the Redman/Champion factory in Lindsay, California.

Champion Homes

Founded in 1953, Champion is one of the largest home manufacturers in the United States encompassing 40 factories across North America with a combined 8,400 employees. Since inception, Champion has built more than 3 million manufactured and modular homes.

- Skyline/Champion – Woodland, California
  The Skyline brand was originally started in 1951 before later being acquired by Champion homes. Skyline is a premium home builder that serves North and Central California, with a sister factory in Southern California. Skyline has built single section manufactured homes for over 70 years and is well-suited to build homes for this project.

- Redman/Champion – Lindsay, California
  The Redman Homes brand was originally started in Lindsay, California in 1965 before later acquired by Champion Homes. Redman has built more than 47,700 mobile and manufactured homes and serves home buyers and dealers in all of the California housing markets, plus parts of Nevada and Oregon. Redman has built single section manufactured homes for over 55 years and is well-suited to building homes for this project.

S R M Contracting

S R M is a manufactured home installation expert with over 30 years experience in all aspects of manufactured home service, warranty repairs, installations, and general contracting work. S R M is actively rebuilding mobile home parks in Paradise, California that were destroyed in the 2018 Camp Fire. S R M is well versed in both rebuilding entire mobile home parks and multi-home installations.

Project Manager / Home Dealer

Bigfoot Homes, Inc. is a manufactured home dealer and licensed C-47 Manufactured Home Contractor that began business operations in late 2022. The Company was initially focused on rebuilding Paradise, California, and has expanded its footprint across Northern California. Bigfoot has rebuilt several single-family home sites utilizing manufactured homes, is currently rebuilding a 37-site manufactured home park in Paradise, CA and is executing an improvement plan for a 41-site manufactured home community in Oroville, California. The CEO of Bigfoot Homes, Inc. has over 17 years experience in real estate related finance and investment including mobile home parks and manufactured homes. Bigfoot will lean on this experience, proximity to San Mateo County, its relationship with S R M, and key consultants to effectively meet County expectations.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Part 1. Proposed Project Team and Expertise – E. *Explain how the proposed Project team's collective expertise will translate into a better value for the County*:

Better value for the County will be achieved via:

1.) Communication and Proximity to San Mateo – The Project Manager, Chris Lippi of Bigfoot Homes, Inc., lives in Santa Cruz, CA, driving distance from the subject site and will be the primary contact for the County to streamline communication.

2.) Experience in home installations **for entire parks** (vs individual homes) – S R M Contracting is one of the few contractors in the State with a large resume of full park installations, not just individual homes. S R M has multiple installation crews that can properly staff this project.

3.) County Dynamics – Bigfoot Homes, Inc. will utilize its public housing consultant, Monica R. Lippi, to ensure we are appropriately addressing the various stakeholders in this project.

4.) Multilingual – Bigfoot Homes, Inc. will utilize a language line service to communicate with any residents whose primary language is not English or Spanish. The administrative assistant and junior salesperson for Bigfoot Homes, Inc. is a fluent Spanish speaker and can communicate with residents regarding warranty repairs or other matters. In addition, consultant Monica R. Lippi is also a Spanish speaker and can assist Bigfoot Homes, Inc. as needed.

5.) Business Operations and Communications – Jason Taylor of Bigfoot Homes, Inc. is an experienced entrepreneur and operations specialist that can assist the team in contracts, business operations, staffing and other project business needs.

Part 1. Proposed Project Team and Expertise – F. *Explain how the required "skilled and trained workforce requirements" will be met*:

S R M Contracting has a highly skilled and trained labor force that specializes in manufactured home installation and related tasks. Within California's skilled and trained workforce requirements there doesn't appear to be applicability to manufactured home installation, however, S R M Contracting in conjunction with Bigfoot Homes, Inc. will consult with all relevant bodies on this requirement, define how many journeypersons are required to take additional certificate programs and ensure those programs are completed prior to start of work.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Part 2. Method and Strategic Plan – A. ***The technical and managerial approach to Respondent's partnership with the County. Consider the County's goals for the Project and the general functions required. Respondent may identify additional necessary tasks and discuss these in its proposed method to accomplish the work.***

Bigfoot Homes, Inc. is committed to adopting a holistic approach that emphasizes collaborative partnerships, effective communication, and adaptability to County dynamics.

Our priority is to establish open lines of communication with all stakeholders involved in the project, including the County of San Mateo, Project Manager, County staff, technical consultants, the criteria architect, project inspectors, and any other committees identified by County partner leads. Regular meetings will be scheduled to foster collaboration, address concerns, and ensure that every party is aligned with the overarching project goals. Bigfoot Homes, Inc. is dedicated to making itself available for meetings and actively participating in discussions to strengthen these partnerships.

From a technical perspective, Bigfoot Homes, Inc. will collaborate closely with our engineer, contractor and County inspectors to ensure the project adheres to all technical specifications and regulatory requirements. Regular updates will be provided to County staff and the Project Manager, seeking their input and approval at key project milestones.

A key component of our plan is to work closely with project inspectors to maintain high-quality standards throughout the construction process. We will implement a robust quality assurance program, conducting regular assessments to identify and address any issues promptly.

Recognizing the dynamic nature of government projects, Bigfoot Homes, Inc. is committed to flexibility and adaptability. We will stay informed about changes in County requirements or regulations and be prepared to adjust the project plan as needed, ensuring ongoing compliance.

To ensure a timely and professional completion of the project, the project timeline will be regularly updated with input from the County staff and the Project Manager. Regular reviews of progress against the timeline will be conducted, and proactive measures will be taken to address any potential delays.

Chris Lippi, Bigfoot Home's dedicated project manager, will work in collaboration with the assigned Project Manager for the County and will provide consistent oversight and coordination. Seamless communication among all team members and stakeholders will be maintained through regular status updates and reports.

Lastly, our strategic plan emphasizes continuous improvement. We will foster a culture that encourages feedback from all project leads and regularly assess and refine strategies based on lessons learned and emerging opportunities.

Through this comprehensive strategic plan, Bigfoot Homes, Inc. aims to position itself as a reliable and collaborative leader, ensuring the success of the Farmworker Housing Project through effective partnerships, community engagement, and adaptability to County dynamics.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Part 2. Method and Strategic Plan – B. ***Design capabilities and description of professional services to be provided by Respondent:***

Design Capabilities

- Champion Homes (manufacturer) will build homes to meet County specifications this includes home-specific engineering work and some architectural drawings. Champion will provide a "base" model which is modified in collaboration with Bigfoot Homes, Inc. in order to meet County standards.

- Bigfoot Homes, Inc. engages third party vendors to produce additional home elevations and renderings not provided by Champion Homes.

- Streamline Engineering will provide engineering work and construction drawings for home foundations, stairs and ramps.

- Streamline Engineering can provide additional engineering and design services as required.

- Bigfoot Homes, Inc. will engage other design and architectural consultants as needed.

Professional Services

- Bigfoot Homes, Inc. will provide the following professional services:
  - Construction Contract Administration
  - Manufactured Home Procurement
  - Coordinating Home Deliveries and Home Installations
  - Coordinating Home Inspections
  - Management of owner purchases as required by the County
  - Adherence and management of warranty repair requests

- Bigfoot Homes, Inc. AND S R M Contracting will provide the following services:
  - Safety program implementation
  - Managing prevailing wage requirement adherence
  - Compliance with skilled and trained workforce requirements

- S R M Contracting will provide the following services
  - Home installations and on-site construction

- Monica R. Lippi
  - Consultant to Bigfoot Homes, Inc., she will be ensuring proper adherence to County requirements and expectations.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Part 2. Method and Strategic Plan – C. Construction means and methods Respondent intends to utilize on the Project:

- Labor: S R M Contracting has a 30+ year operating history that started in the Bay Area. Over its history the Company's principal, Stephen R. Midkiff, has developed relationships and work crews across northern California. S R M Contracting will also draw on its labor force in Butte County to complete the project.

- Materials: Materials for foundations, skirting, stairs, utility connections and ramps will be procured from Westland Distributing, a manufactured housing supplies specialist, and other regional suppliers as required to meet project needs.

- Temporary Structures – There will be one (1) temporary job site trailer placed on the site, location is to-be-determined.

- Tools & Equipment - All tools & equipment will be the sole property of S R M Contracting, Bigfoot Homes, Inc. or one of our trucking vendors that will deliver homes to the construction site. Any equipment that is not the existing property of the parties will be rented as appropriate.

- Plant – All homes will be produced at either Skyline/Champion in Woodland, California or Redman/Champion in Lindsay, California.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

6. Supplementary Documents

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Home Manufacturer

Skyline Champion is one of the largest manufactured home builders in the United States and will be the manufacturer of the homes built for the San Mateo Farmworkers project. *Homes for San Mateo will be built in both the Skyline factory in Woodland, California and the Redman Homes factory in Lindsay, California. Skyline Champion is the parent company for both Skyline Homes and Redman Homes.*

- NYSE: SKY
- Market Capitalization: $4.11 billion
- Gross Income in 2023: $2.61 billion
- Employees: over 8,600 with 47 manufacturing facilities throughout the United States and Canada.

- Factory Location: 840 Palm St, Lindsay, CA 93247
- The Redman Homes brand was originally started in Lindsay, California in 1965 before later acquisition by Champion Homes. Redman has built more than 47,700 mobile and manufactured homes and serves home buyers and dealers in all of the California housing markets, plus parts of Nevada and Oregon. Redman has built single section manufactured homes for over 55 years and is well suited to building homes for this project.

- Factory Location: 1720 E Beamer St, Woodland, CA 95776
- Skyline is a premium home builder that serves North and Central California, with a sister factory in Southern California. Skyline has built single section manufactured homes for over 70 years and is well suited to build homes for this project.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

STEPHEN R. MIDKIFF

(530) 218-0733 • stevemidkiff2013@gmail.com • CSLB License #534976

EXPERIENCE OVERVIEW

Over 30 years' experience in manufactured housing including warranty repairs, home installations and general contracting. Stephen is an industry expert in manufactured home installations and foundations.

- Over 60 home setups per year on average, including homes in mobile home parks and manufactured single family residences on private land.
- Active in the rebuilding of Paradise, California, a community significantly affected by the 2018 Camp Fire.
- Long History of full park home installations including recently completed Blue Haven Mobile Home Park (34 homes) – work included poured concrete driveways, car ports, utility connections, home set and seal, home foundation, stairs, etc.
- Clients Served: Clayton Homes, BoaVida Communities, Bigfoot Homes and a number of other investors serving the manufactured housing market.

LICENSES HELD

- CSLB License #534976
- License Classifications:
  - B – General Building
  - C47 – Manufactured Housing

PROFESSIONAL EXPERIENCE

S R M Contracting Yankee Hill, CA
Sole Owner *1988 to Present*

- 30-year operating history
- Manufactured Home Warranty Repairs
- Manufactured Home Foundations & Installations
- Accessory Buildings and Structures, including porches, stairs, carports, sheds and garages

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

CHRISTOPHER K. LIPPI

(415) 309-8846 • Chris@Bigfoot.Homes • HCD DLR #1593637

EXPERIENCE OVERVIEW

Manufactured home seller, builder, licensed C-47 manufactured housing contractor and business owner with a long history in Mathematics education including curriculum development and instruction.

LICENSES HELD

- Manufactured Home Dealer – Key Person. HCD DLR #159637
- CSLB C47 License – Manufactured Housing Contractor. Responsible Managing Officer - New License Holder (license number pending)

PROFESSIONAL EXPERIENCE

Bigfoot Homes / Bigfoot Homes, Inc. Santa Cruz, CA
COO, Cofounder *January 2021 – Present*

- HUD and MOD code home sales, construction, and installation
- Mobile home parks, single family homes, ADUs and duplexes
- Project Management - Responsible for full scope of building activities from planning, permits, manufactured home sales, manufactured home installations, site construction.
- Full cycle from permits to certificate of occupancy on numerous manufactured home projects.

Khan Lab School / Khan Academy Mountain View, CA
Math Specialist *2020-2022*

Math specialist at online and on-ground educational nonprofit. Identify gaps in content, create curriculum and content. Collaborate on projects to build peer tutoring models, playtest problems, and determine efficient ways to integrate Khan Academy into in-person and hybrid classrooms.

California State University Monterey Bay Seaside, CA
Quantitative Reasoning Scholar, Instructor, and Curriculum Designer *2014-2020*

Developed and implemented an online, open-source Learning Management System framework into the Statistics department as part of a Gates Foundation grant with Stanford University. Designed curriculum, exams, and training materials. Used learning analytics to improve course materials, engagement, and assessments. Member of quantitative reasoning grant team to improve analytical reasoning skills of our learners. Course instructor for statistics and calculus.

EDUCATION

San Francisco State University San Francisco, CA
Master of Arts - Mathematics May 2005

University of California, Santa Cruz Santa Cruz, CA
Bachelor of Arts – Mathematics, minor in Economics May 2000

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

JASON TAYLOR

(310) 562-1993 • Jason@Bigfoot.Homes • DRE License #01478938

EXPERIENCE OVERVIEW

Seasoned 20+ year real estate professional with expertise in manufactured homes, communities, finance and real estate investments.

PROFESSIONAL EXPERIENCE

Bigfoot Homes, Inc. / Bigfoot Homes Santa Cruz and Los Angeles, CA
CEO, Cofounder *January 2021 – Present*

- HUD and MOD code home sales, construction, and installation
- Mobile home parks, single family homes, ADUs and duplexes
- Primary responsibilities of business operations, finance, and real estate investments

Isla Bonita Management / Real Estate Investments Manhattan Beach, CA
Principal *October 2022 – Present*

- Isla Bonita is a real estate management company specializing in Manufactured Housing Communities and Industrial Properties.
- Management portfolio consists of two (2) mobile home parks (77 sites), five (5) single family rental/investment properties, three (3) industrial properties and several raw land sites.

Walker & Dunlop (f/k/a George Elkins Mortgage Banking) Torrance, CA
Director of Capital Markets *November 2010 – May 2023 (13 years)*

- Commercial real estate debt brokerage with a subspecialty in Manufactured Housing.
- $1.5 Billion in loan closings throughout career (GEMB and Walker & Dunlop Combined).
- Responsibilities span the entire process of commercial real estate finance and fund raising.

The Mindlin Companies (now called Oro Capital) Los Angeles, CA
Associate Director of Asset Management and Acquisitions November 2006 – June 2010 (4 years)

- Family Office - Acquisitions and Asset Management functions across a portfolio of 2 million square feet of office, industrial and retail properties. Experience with both distressed and stabilized assets.

EDUCATION

University of Southern California Los Angeles, CA
Master of Real Estate Development, Honors in Finance May 2007

University of California, Berkeley Berkeley, CA
Bachelor of Arts, Economics, Graduated with Honors May 2003

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Stephanie Cisneros

Employment History

Bigfoot Homes – Manufactured Home Sales
November 2023 – Present; Remote
Duties: Bilingual administrative and sales work including screening buyer leads online and over the phone. Assistance with general business matters, building permits and assistant project manager.

Property Management – Mobile Home Parks
December 2021 – Present; Oroville, CA
Duties: Bilingual property manager; excel book keeping, meeting interpreter, facilitate the addition of new member to the park community, draft letters for residents, enforce regulations and maintain state/local county property laws. Provide extra resources, apply through online portals, set up online banking info for rent payments

Registered Behavioral Tech
August 2021- Present; Oroville, CA
Duties: Provide supervision for students of different ages, high-risk youth or adults, and/or very low-income families, help implement the behavioral plan with BCBA, help students with learning new bx concepts, take data, run trails, modify based on behavior, help supervise students while developing and building rapport. Model appropriate behavior as well as assign peer models, provide R+, provide redirections based on individuals' needs and wants, and always provide a positive learning environment for students, keep an open line of communication about behavior and any need-to-know information. Up to date on CPR/First Aid certificate.

Online Tutoring
2016- Present; Remote
Duties: *BILINGUAL online tutoring,* ages 5- 15 Tk-9th grade

Behavioral Interventionist/Therapist
March 2019- 2021; Remote
Duties: Provide supervision for students of different ages, high-risk youth or adults, and/or very low-income families, create a behavioral plan with BCBA, help teachers with learning new bx concepts, take data, run trails, modify based on behavior, help supervise students while developing. Model appropriate behavior as well as assign peer models, providing R+. Help talk parents through technical issues as well as guide students on taking better pictures and using features on Zoom/Google hangout.

Education

- ***Woodland Community College A.A (08/2014 - 12/19)***
  - *A.A Social & Bx Science*
  - *Child Devel. Certificate of Achievement Associate Teacher*

  2300 E. Gibson Rd., Woodland CA 95776, Phone: 530-661-5700

- ***South East Senior High School Graduate of 2014***

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

MONICA LIPPI

lippi.r.monica@gmail.com | 831-331-7228 | Santa Cruz, California 95060

PROFESSIONAL SUMMARY

Experienced County government professional with a strong background in program management, policy analysis, and community development. Demonstrated leadership in overseeing and optimizing homeless service programs, managing budgets, and ensuring contract compliance. Skilled in partnership development and fostering collaborative relations with County departments, local organizations, and government entities. A results-oriented and collaborative leader committed to enhancing program effectiveness and addressing the diverse needs of people experiencing homelessness.

SKILLS

- Policy and Program Development
- Government Relations
- Strategic Planning
- Contract and Budget Management
- Partner Relationships
- Performance Improvement
- Homeless Services and Housing Program Leadership

WORK HISTORY

Oct 2021 - Current
Housing for Health Manager
Santa Cruz County Human Services Department - Santa Cruz, CA

Program Management: Manage Housing for Health Division's Connection Services Programs, overseeing homeless prevention, outreach, shelter, and Coordinated Entry initiatives.
Partnership Development: Establish strategic partnerships with local organizations and County departments to enhance access to essential homeless services within the community.
Financial Resource Management: Effectively manage budgets and financial resources for homeless service prorgrams, ensuring optimal allocation of funds, maximizing impact on homeless services and maintaining fiscal responsibility.
Continuum of Care: Staff to the Santa Cruz County Continuum of Care Policy Board and Operations Committee, contributed recommendations to policy discussions, decision-making processes, and coordinated efforts to address homelessness.
Contract Management: Serve as the lead program point of contact for shelter and outreach contracts.
Monitor spending trends to ensure adherence to allocated

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

budgets and contract compliance. Develop strategies to address any identified non-compliance issues.
Shelter Standards Oversight: Developed comprehensive shelter and Coordinated Entry standards to enhance quality and effectiveness of services. Monitor and evaluated compliance with established standards, providing support and guidance to contracted partners to maintain high-quality service delivery.
Support and Collaboration: Collaborate with homeless service partners to understand their needs and challenges, offering support and resources as needed.

Feb 2020 - Jul 2022
Lead Manager, COVID Hotel Sheltering System
Santa Cruz County Human Services Department - Santa Cruz, CA

Project Roomkey Oversight: Led the management and coordination of Santa Cruz County's Project Roomkey initiative, providing shelter to over 300 individuals experiencing homelessness during the COVID-19 pandemic.
Collaborative Partnerships: Established and maintained successful collaborations with various entities to support the shelter program's success. Worked closely with County leadership, housing partners, County Counsel, General Services Department, County Administrative Office, and various service vendors.
Contract Management: Secured the procurement of vendor agreements and maintained relationships with hotel owners to ensure program continuity.
Team Supervision: Supervised a diverse team, including a shelter management, behavioral health specialists, referral specialists, drivers, and data specialists.
Communication and Reporting: Facilitated transparent communication channels among team members and external partners. Provided regular reports and updates to relevant stakeholders and the media.

Aug 2018 - Feb 2020
Sr. Human Services Analyst
Santa Cruz County Human Services Department - Santa Cruz, CA

Referral Management: Managed all Coordinated Entry housing and shelter referrals.
Outcome Tracking: Tracked participant outcomes for accurate program assessment. Used data to analyze trends and measure the success of housing and shelter initiatives.
Program Leadership: Led program redesign efforts for improved efficiency and impact. Conducted training sessions and fostered collaboration with partner providers.
Reporting and Transparency: Developed reports on program results and data. Disseminated information to County leadership, Board of Supervisors, and the public.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Continuous Improvement: Implemented ongoing improvements based on data analysis and feedback. Actively sought opportunities to refine Coordinated Entry systems for increased effectiveness.

Oct 2013 - Aug 2018
Associate Human Services Analyst
Santa Cruz County Human Services Department - Santa Cruz, CA

Policy Analysis and Research: Served as the CalWORKs and Welfare to Work Policy Analyst/Subject Matter Expert. Researched and interpreted complex program regulations and developed policies and procedures to comply.
Legislation and Training: Analyzed legislation and prepared staff training materials. Kept current on relevant laws and regulations impacting program implementation.
Reporting and Assessment: Prepared detailed reports, assessing community resources for low-income and homeless families. Evaluated and recommended improvements to human service programs.

Aug 2010 - Oct 2013
Community Health Project Manager
Providence Health And Services - Los Angeles, CA

Educational Wellness Program: Planned and implemented an educational wellness program in an underserved primarily immigrant community. Developed and executed initiatives to address mental health awareness and well-being within the community.
Outreach: Supervised outreach staff in conducting surveys of 500+ primarily Latinx residents to assess mental health needs.
Community Engagement: Engaged with residents to ensure the program's relevance and responsiveness to their mental health needs.

EDUCATION

Master of Arts: International Policy
Middlebury Institute of International Studies | Monterey

BASSC Executive Development Program: Social Services
University of California, Berkeley | Berkeley, CA

Bachelor of Arts: Sociology And Spanish
San Diego State University | San Diego, CA

LANGUAGES

Spanish
Native or Bilingual

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

January 16, 2024

RE: Statement of Qualifications 2024

To Whom It May Concern,

Thank you for the opportunity to provide you with this statement of qualifications for Streamline Engineering to provide structural engineering services for the foundations supporting single-wide manufactured homes in central California. If you have any questions, please contact Jeff Richelieu at (530) 892-1100.

A. Executive Summary

Streamline Engineering, Inc. was founded in Chico, California in October 2005 by Jim Peterson and Jeff Richelieu. Since inception, we have provided architectural and engineering consulting services for all phases of building construction for new and existing buildings. These services have included providing structural calculations, and the preparation of construction documents for permitting.

We have worked on projects for government agencies, commercial owners, agricultural and industrial businesses, and residential owners. We have provided design and structural engineering for retaining walls, light standards, signs, boat docks, and bridges. We have designed structures built from concrete, steel, masonry, and wood. These projects have been located in numerous counties throughout California including the Bay Area, but most of our projects have been located in Plumas, Tehama, Butte, and Glenn Counties.

Streamline's designs are cost effective because they are easy to construct and not over engineered. A commitment to communication has always been a trademark of our company. We communicate closely with everyone involved with the project in order to best achieve the goals of the end user. We have a solid reputation for quality plans and engineering which is evidenced by our large and diverse group of loyal clients that we have had for years in the area that know our work. Most of our new clients come to us as referrals from existing clients.

B. Project Team

Jeff Richelieu will be the primary contacts for any projects involving Streamline Engineering. By communicating directly with one of the owners, the Client will be assured of receiving a high level of service. Jeff will also be personally overseeing any work provided by Streamline Engineering. We can typically be on site as needed within a week of being notified of a need.

2571 California Park Drive, Ste. 210 • Chico, CA 95928 • (530) 892-1100

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

C. Technological Ability

It is easy to communicate with Streamline Engineering throughout the consulting process as needed. We can be reached by cell phone, office phone, email, or text. We can receive or submit plans electronically as needed as well. We are fluent with AutoCAD2023, Chief Architect, Microsoft Office, and Excel. We use Enercalc for retaining wall, beam, column, ledger, and footing calculations. We use Simpson Strong-Tie Anchor Design to check the design of anchor bolts embedded in concrete.

D. Individuals Qualifications and Experience

Jeff has been a licensed civil engineer in California for over 30 years. Jeff has provided structural engineering services including design, on-site consulting, construction documents. Before becoming an engineer, Jeff worked in construction pouring concrete and framing buildings, so he has an excellent understanding of how things go together in the field and how to communicate with contractors. During his time as an engineer, he has provided a high level of service in a timely manner for the clients.

E. Statement of Understanding and Scope of Work

We understand that Bigfoot Homes needs a qualified company to provide on-call structural engineering services for designing the foundations to support single-wide manufactured homes. We have demonstrated our abilities to provide these services since our inception, and hope to have the opportunity to continue doing so working with Bigfoot Homes.

We understand that a timely response to issues that arise is essential to meet the needs of the Client. As a small company, Streamline Engineering has the ability to be very responsive when the need arises.

Please contact me with any questions you may have at (530) 892-1100.

Thank you for your consideration of Streamline Engineering.

Sincerely,

Jeff Richelieu, PE 53,590
President
Streamline Engineering, Inc.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

7. Review Comments to Agreement

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Section 7

Standard Agreement Template

Review Comments

2.2 Licensing – Manufactured homes should be acquired by a licensed manufactured home dealer and installed by a C-47 General Manufactured Housing Contractor. The Design-Build Team will consist of a licensed home dealer (Bigfoot Homes, Inc.) and a licensed C-47 and B contractor (S R M Contracting). Bigfoot Homes, Inc. has completed all requirements and paid all fees for the C-47 license and that license number should be available within the next 5-10 days. Bigfoot Homes, Inc. will utilize S R M Contracting for home installation, foundations, stairs, etc despite holding it's own C-47 license.

5.2.1 – These homes will be built and designed by home manufacturers with design cues and specs chosen by Bigfoot Homes, Inc. to meet the County's requirements. An Architect is not required for home purchasing and installation.

5.2.4 – These are manufactured HUD code homes – permitting is per HUD code in the factory. Home construction documents can be provided to meet County review requirements; however, HUD code homes are not subject to local permitting of the home itself. Please note that engineered foundation plans and plans for stairs, ramps and decks will be provided to the County for permitting.

5.3 and 5.14 – 100% construction documents will only be provided for foundations, ramps, decks and stairs. HUD code homes can have all required design and engineering drawings per County's request, but not for permitting purposes as HUD code homes are not typically under the purview of local municipalities.

7.2 – Individual escrows may be required for manufactured home purchases per HCD rules.

10.1 – Invoice payments should occur within 30 days, not 45 days.

12.2.2 Commercial General Liability – Bigfoot Homes, Inc. will carry a $2M aggregate / $1 M per occurrence and S R M Contracting will also carry a separate $2M aggregate / $1M per occurrence.

12.2.6 – Contractors Pollution Liability Insurance – Bigfoot Homes, Inc. will acquire Contractors Pollution Liability Insurance if required, however, this requirement appears to be better suited for the general contractor building the community, not the home dealer and installer.

12.27 – Our professional Error & Omissions insurance will be $1M per claim / $1M aggregate

12.3 – Bond – Bigfoot will utilize a bond for the installation and construction portion of the assignment and an escrow system for homes purchased.

14.3 – Confidentiality – Bigfoot Homes, Inc. would like to utilize this project in its portfolio for marketing purposes while also respecting the County's confidentiality needs. Bigfoot Homes, Inc. would like to disclose limited information including the number of homes installed, name of project and limited site imagery – a few street scenes and an aerial photo taken before residents move into the project.

Supplemental Conditions Paragraph 7.1 – Bigfoot Homes, Inc. will acquire a land survey if required, however, this will likely be ordered by the general contractor building the community or the County itself, prior to installation of homes.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

8. Proposed Conceptual Design

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Elevations 1 Bed 1 Baths

Section 8
Proposed Conceptual Designs



Conceptual Rendering - 1 Bed / 1 Bath with ADA Ramp (Ramp will need engineering refinements)

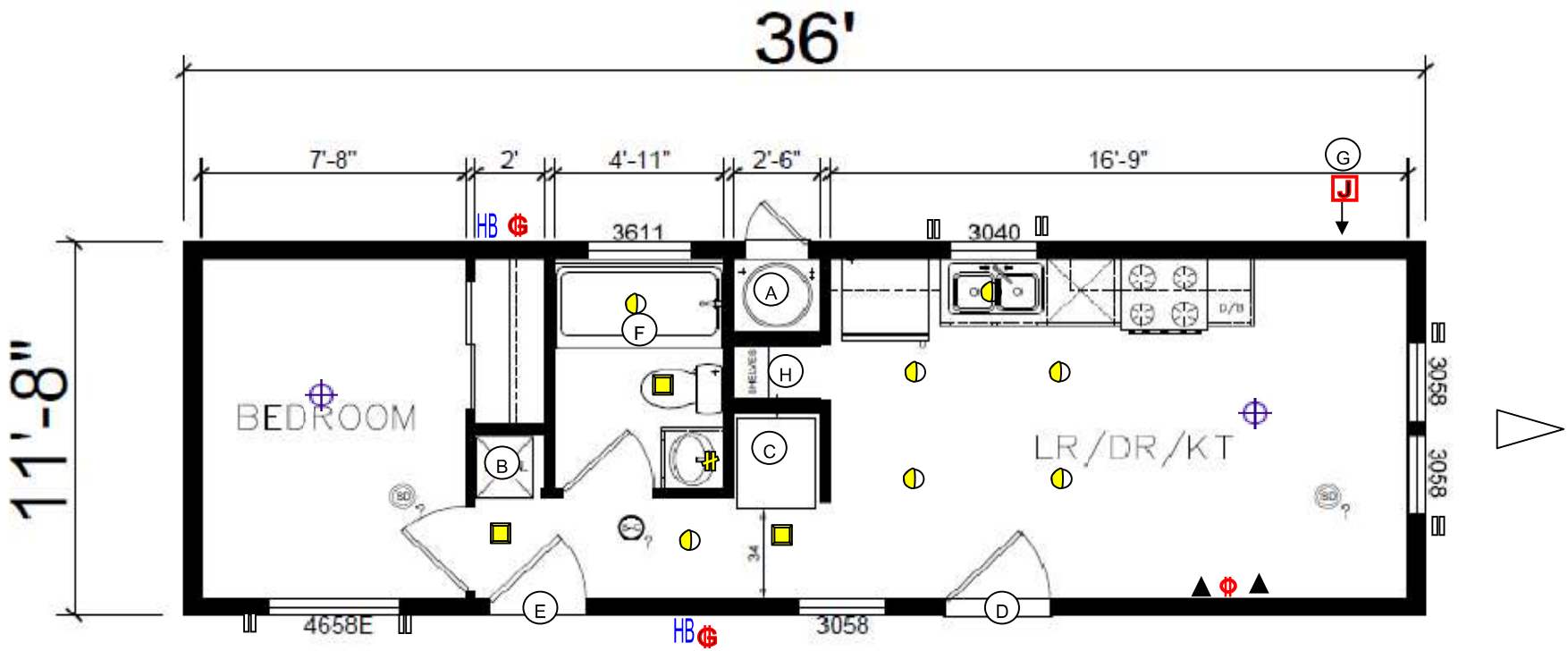


Conceptual Rendering - 1 Bed / 1 Bath

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhaust Fan Light	Can Light	J-Box	Bank of Drawers	Dlx Porch Light
Switch	Ceiling Fan	USB recept	Rollout Shelves	Dlx mirror light
Recept	TV Conduit	Solar Tube	Hose Bib	Shutters
GFCI	Phone Jack	Pendant Light	Paddle fan prep	Chandlier

DEALERSHIP: BIG FOOT		
SALES AGENT: CHRIS		
MODEL: 12x36		
35816	SAN MATEO	420 sqft



AWNING READY

1 bed 1 bath
non-ADA Floor Plan

- **A** *30 GAL ELECTRIC WH*
- **B** *ELECTRIC FURNACE*
- **C** *PREP FOR ELECTRIC STACKABLE W/D*
- **D** *36" EXT DOOR w/ 4" CEM PANEL TRIM*
- **E** *32" 9-LITE DOOR w/ 4" CEM PANEL TRIM*
- **F** *TUB/SHOWER w/ ENCLOSURE*
- **G** *30 AMP JBOX DEDICATED CIRCUIT UNDER FLOOR*
- **H** *LINEN SHELVES*

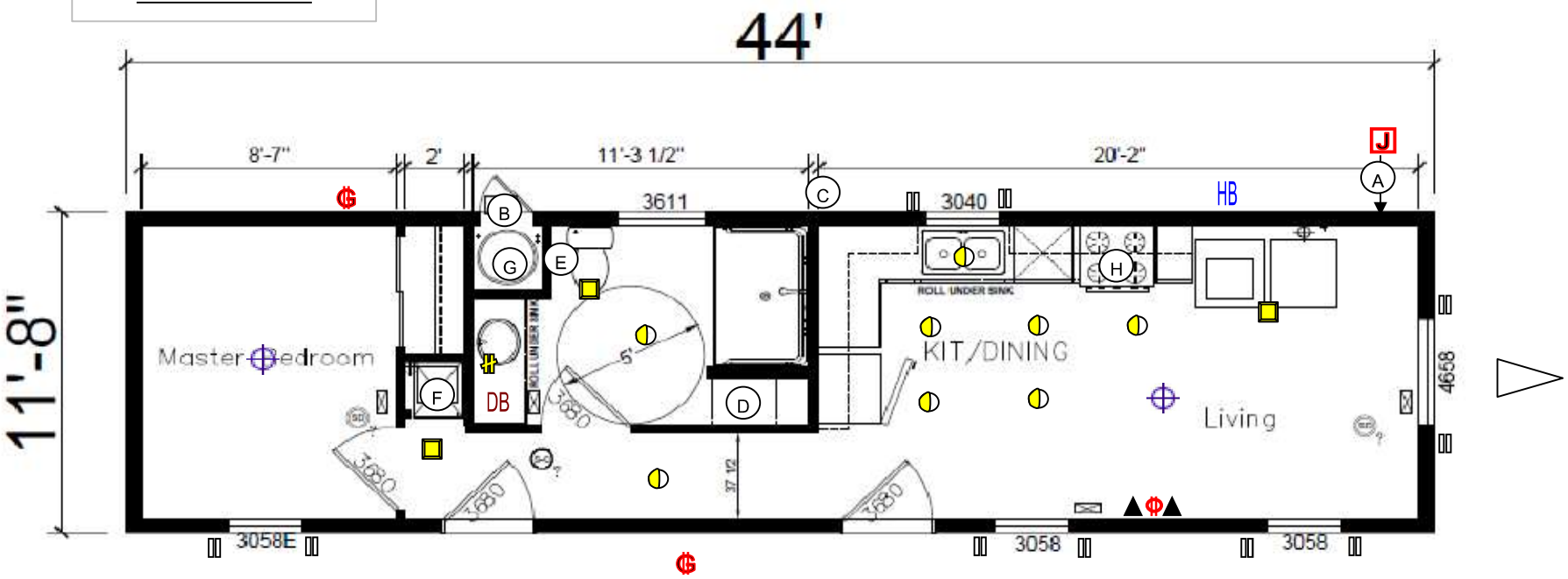
-OMIT LINO/CARPET THROUGHOUT HOME
-SHIP BASEBOARD LOOSE
-OSB SHEATHING & HOUSE WRAP UNDER SIDING

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhaust Fan Light	Can Light	J-Box	DB Bank of Drawers	Dlx Porch Light
$ Switch	Ceiling Fan	USB recept	RS Rollout Shelves	Dlx mirror light
Recept	TV Conduit	Solar Tube	HB Hose Bib	Shutters
GFCI	Phone Jack	Pendant Light	Paddle fan prep	Chandlier

DEALERSHIP: BIG FOOT		
SALES AGENT: CHRIS LIPPI		
MODEL: CM 1482D		
35881	ADA 12 x 44	513 sqft

ADA FRIENDLY



AWNING READY

- **A** *DEDICATED 30 AMP JBOX UNDER FLOOR*
- **B** *WATER UTILITY*
- **C** *E PANEL 200 AMP*
- **D** *3-DOOR HARDWOOD PANEL*
- **E** *HORIZONTAL GRAB BAR*
- **F** *ELECTRIC FURNACE*
- **G** *30 GAL ELECTRIC WH*
- **H** *PREP FOR ELECTRIC RANGE ONLY*
  INSTALL STD RANGE HOOD ABOVE

LOWER ALL BASE CABS
-OMIT TOE KICK & TOE KICK REGISTERS
LOWER OH CABS EQUAL DISTANCE AS BASE CABS

1 bed 1 bath
ADA Floor Plan

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Elevations 2 Bed 1 Baths



Conceptual Rendering - 2 Bed / 1 Bath w ADA Ramp (Ramp will need engineering refinements)

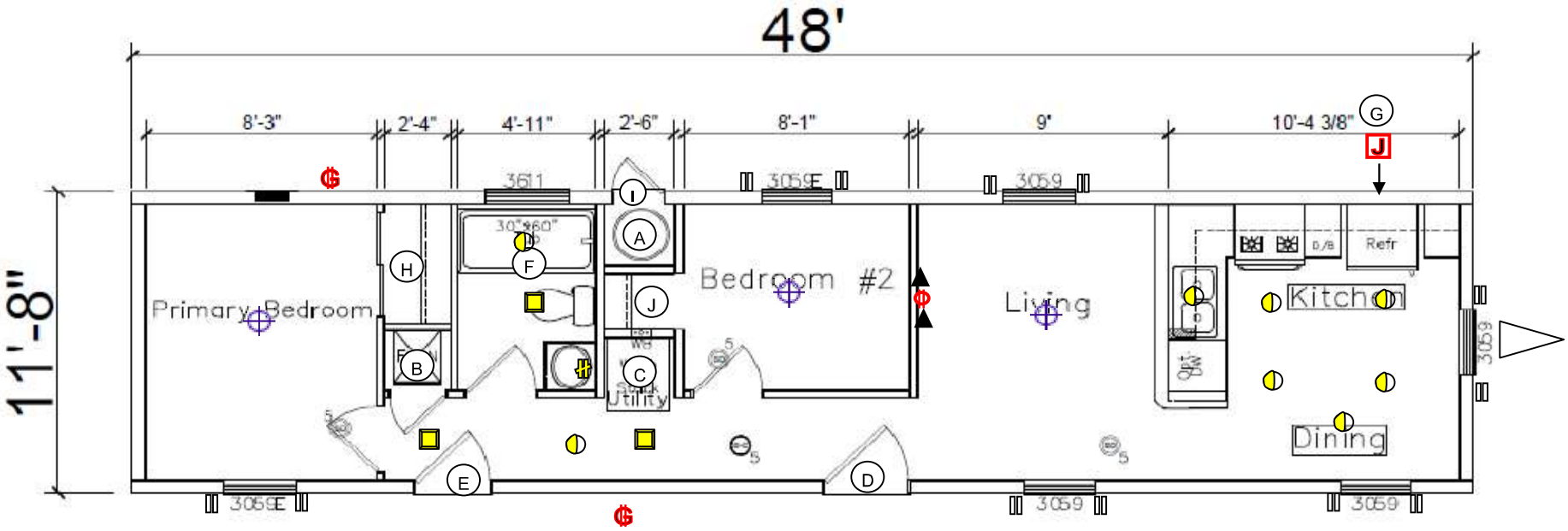


Conceptual Rendering - 2 Bed / 1 Bath

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhaust Fan Light	Can Light	J-Box	DB Bank of Drawers	Dlx Porch Light
Switch	Ceiling Fan	USB recept	RS Rollout Shelves	Dlx mirror light
Recept	TV Conduit	Solar Tube	HB Hose Bib	Shutters
GFCI	Phone Jack	Pendant Light	Paddle fan prep	Chandlier

DEALERSHIP: BIG FOOT		
SALES AGENT: CHRIS LIPPI		
MODEL: 12x48		
35818	SAN MATEO	560 sqft



AWNING READY

2 bed 1 bath non-ADA Floor Plan

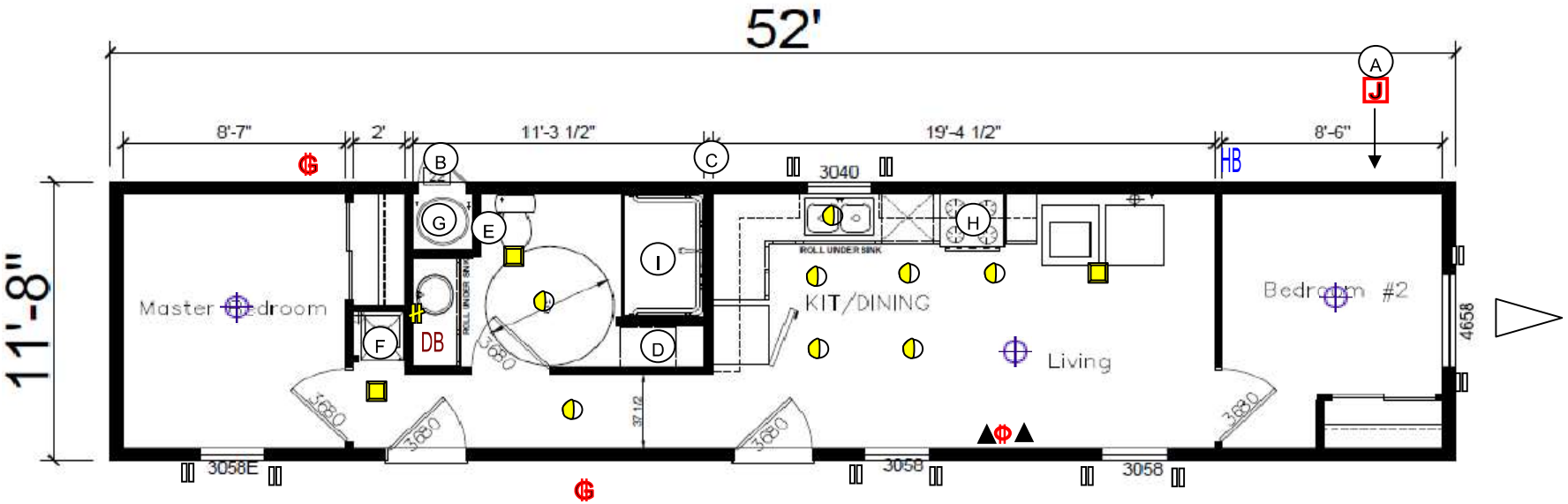
- **A** *30 GAL ELECTRIC WH*
- **B** *ELECTRIC FURNACE*
- **C** *PREP FOR ELECTRIC STACKABLE W/D*
- **D** *36" EXT DOOR*
- **E** *32" 9-LITE DOOR*
- **F** *TUB/SHOWER w/ ENCLOSURE*
- **G** *30 AMP JBOX DEDICATED CIRCUIT UNDER FLOOR*
- **H** *BYPASS DOORS*
- **I** *WATER UTILITY*
- **J** *CLOSET SHELVES ONLY*

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhaust Fan Light	Can Light	J-Box	DB Bank of Drawers	Dlx Porch Light
$ Switch	Ceiling Fan	USB recept	RS Rollout Shelves	Dlx mirror light
Recept	TV Conduit	Solar Tube	HB Hose Bib	Shutters
GFCI	Phone Jack	Pendant Light	Paddle fan prep	Chandlier

DEALERSHIP: BIG FOOT		
SALES AGENT: CHRIS LIPPI		
MODEL: CM 1482D		
35882	ADA 12 x 52	607 sqft

ADA FRIENDLY



A *DEDICATED 30 AMP JBOX UNDER FLOOR*
B *WATER UTILITY*
C *E PANEL 200 AMP*
D *3-DOOR HARDWOOD PANEL*
E *HORIZONTAL GRAB BAR*
F *ELECTRIC FURNACE*
G *30 GAL ELECTRIC WH*
H *PREP FOR ELECTRIC RANGE ONLY*
INSTALL STD RANGE HOOD ABOVE
I *SPECIAL NEEDS SHOWER*

LOWER ALL BASE CABS
-OMIT TOE KICK & TOE KICK REGISTERS
LOWER OH CABS EQUAL DISTANCE AS BASE CABS

2 bed 1 bath ADA Floor Plan

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Elevations 3 Bed 2 Baths



Conceptual Rendering – 3 Bed / 2 Bath with ADA Ramp (Ramp will need engineering refinements)

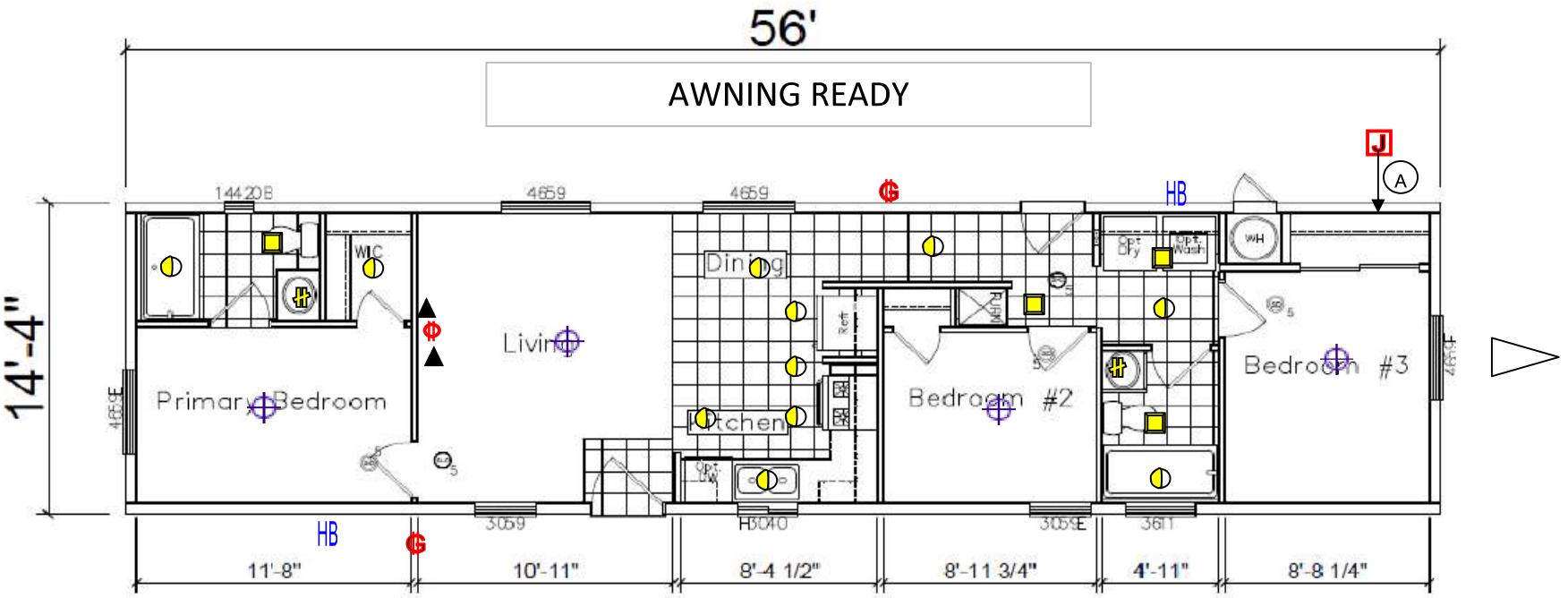


Conceptual Rendering – 3 Bed / 2 Bath

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhaust Fan Light	Can Light	J-Box	DB Bank of Drawers	Dlx Porch Light
$ Switch	Ceiling Fan	USB recept	RS Rollout Shelves	Dlx mirror light
Recept	TV Conduit	Solar Tube	HB Hose Bib	Shutters
GFCI	Phone Jack	Pendant Light	Paddle fan prep	Chandlier

DEALERSHIP: BIG FOOT		
SALES AGENT: CHRIS LIPPI		
MODEL: CM 6563B		
35819	SAN MATEO 14'4 x 56' 3/2	802



3 bed 2 bath
non-ADA Floor Plan

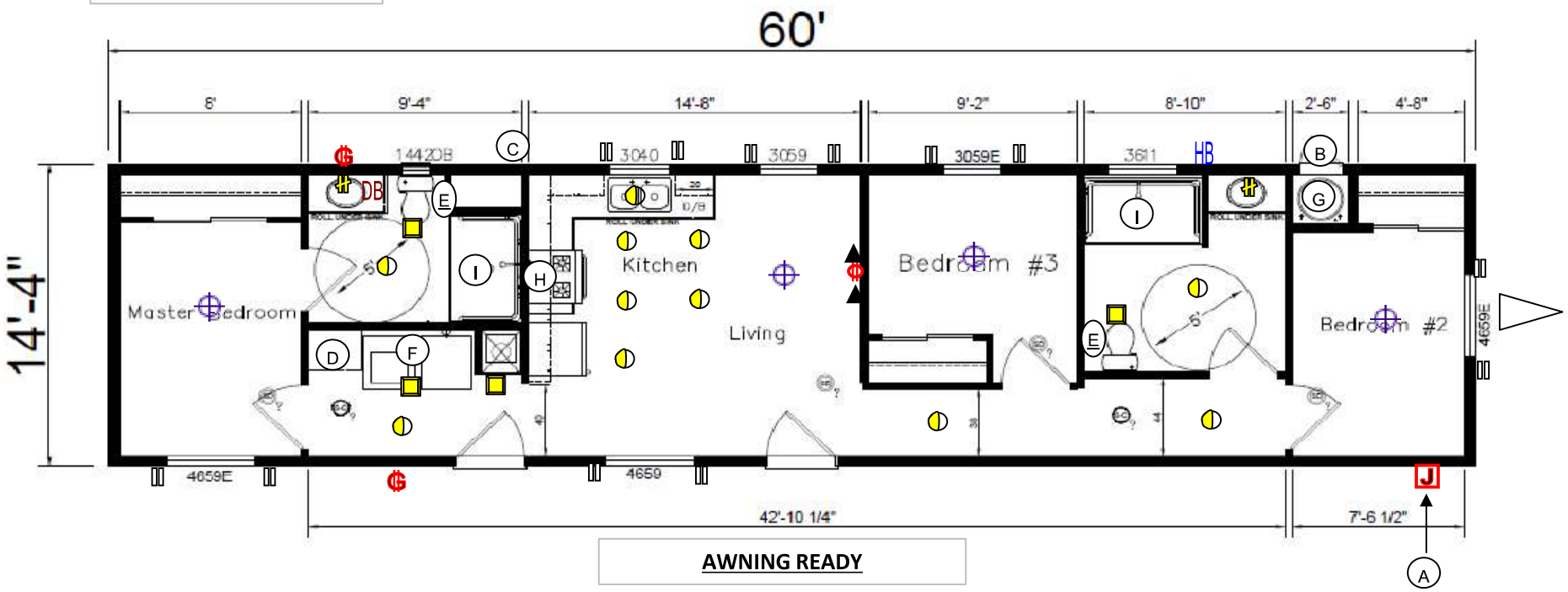
A *DEDICATED 30 AMP JBOX UNDER FLOOR*
B
C

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Exhaust Fan Light | Can Light | J-Box | Bank of Drawers | Dlx Porch Light
Switch | Ceiling Fan | USB recept | Rollout Shelves | Dlx mirror light
Recept | TV Conduit | Solar Tube | Hose Bib | Shutters
GFCI | Phone Jack | Pendant Light | Paddle fan prep | Chandlier

DEALERSHIP: BIG FOOT		
SALES AGENT: CHRIS LIPPI		
MODEL: CM 6563B		
35986	ADA 3/2	607 sqft

ADA FRIENDLY



AWNING READY

- **A** *DEDICATED 30 AMP JBOX UNDER FLOOR*
- **B** *WATER UTILITY*
- **C** *E PANEL 200 AMP*
- **D** *6-DOOR HARDWOOD PANEL*
- **E** *HORIZONTAL GRAB BAR*
- **F** *ELECTRIC FURNACE*
- **G** *30 GAL ELECTRIC WH*
- **H** *PREP FOR ELECTRIC RANGE ONLY*
  INSTALL STD RANGE HOOD ABOVE
- **I** *SPECIAL NEEDS SHOWER*

3 bed 2 bath
ADA Floor Plan

LOWER ALL BASE CABS
-OMIT TOE KICK & TOE KICK REGISTERS
LOWER OH CABS EQUAL DISTANCE AS BASE CABS

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Refer to Fixed Fee Price Proposal for GOOD, BETTER, BEST Pricing

PROJECT STANDARDS - Good

STD EXT DOORS & PORCH LIGHTS





STD VERTICAL SIDING & SHUTTERS

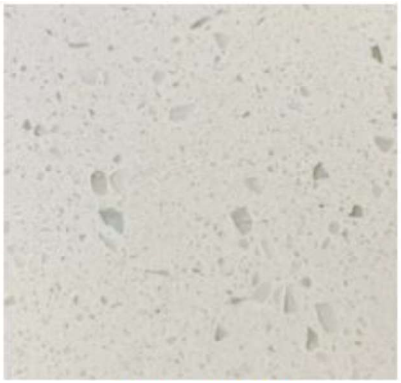


BASIC HARDWOOD CABINETS



Beech Alder Cabinets

QUARTZ or ThinScape (solid surface) COUNTERTOPS



STANDARD LINOLEUM FLOORING



LX275 Barn Wood White



LX311 European Oak



LX277 Barnwood Greige



LX150 Honeytone

16OZ WINDSTONE CARPET



Canvas



Earthy



Pine Trail



Smoke

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

PROJECT STANDARDS - BETTER

CRAFTSMAN FRONT DOOR w/ DLX PORCH LT:

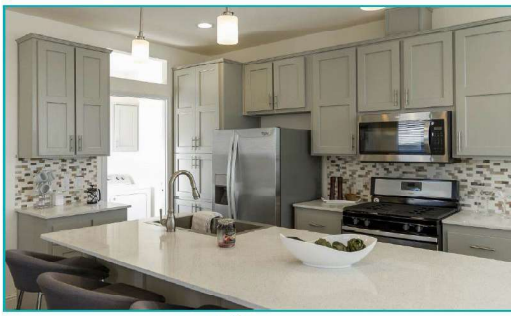
Craftsman Door



UPGRADED CABINETS



White Glazed Cabinets



Grey Cabinets



New Lance Cabinets



Colombian Walnut Cabinets

25OZ BROADCREEK TWEED CARPET BEDROOMS



Blended Tan



Brentwood



Greige



Warm Almond

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

PROJECT STANDARDS - BEST

Board and Batten Siding Hitch and Door Side



3-ROWS LAP ACCENT HITCH & DOOR SIDE



38OZ HARTLEY CARPET BEDROOMS



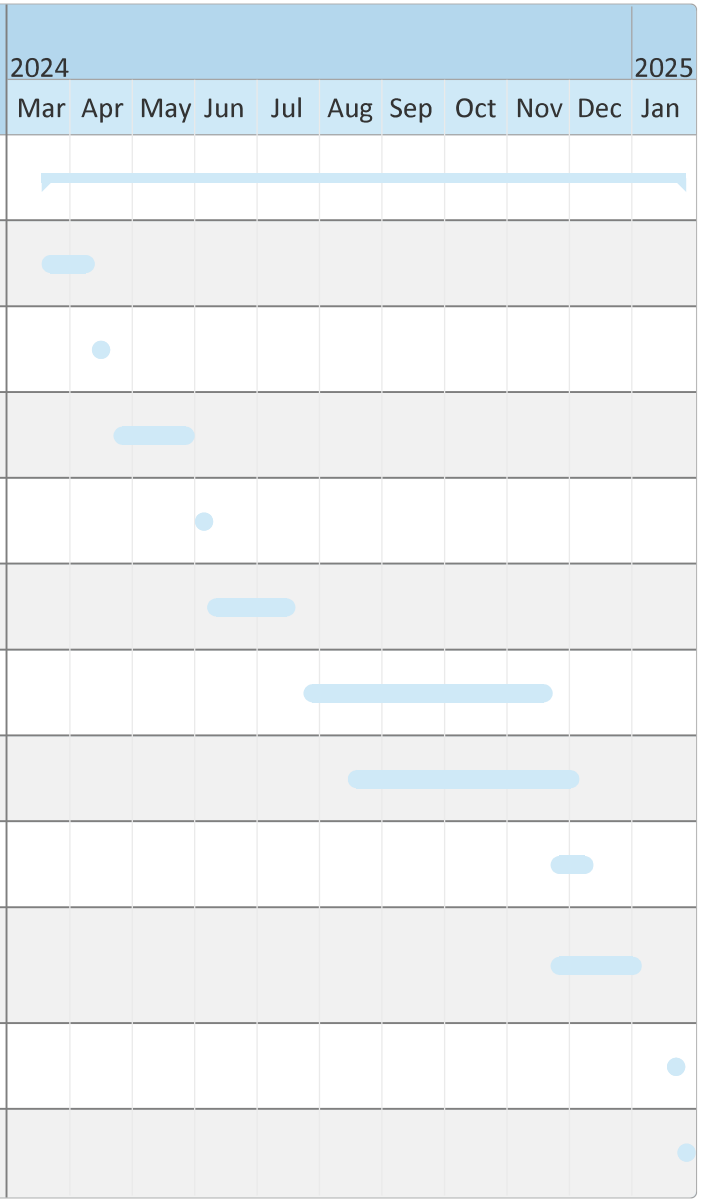
DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

9. Proposed Schedule

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

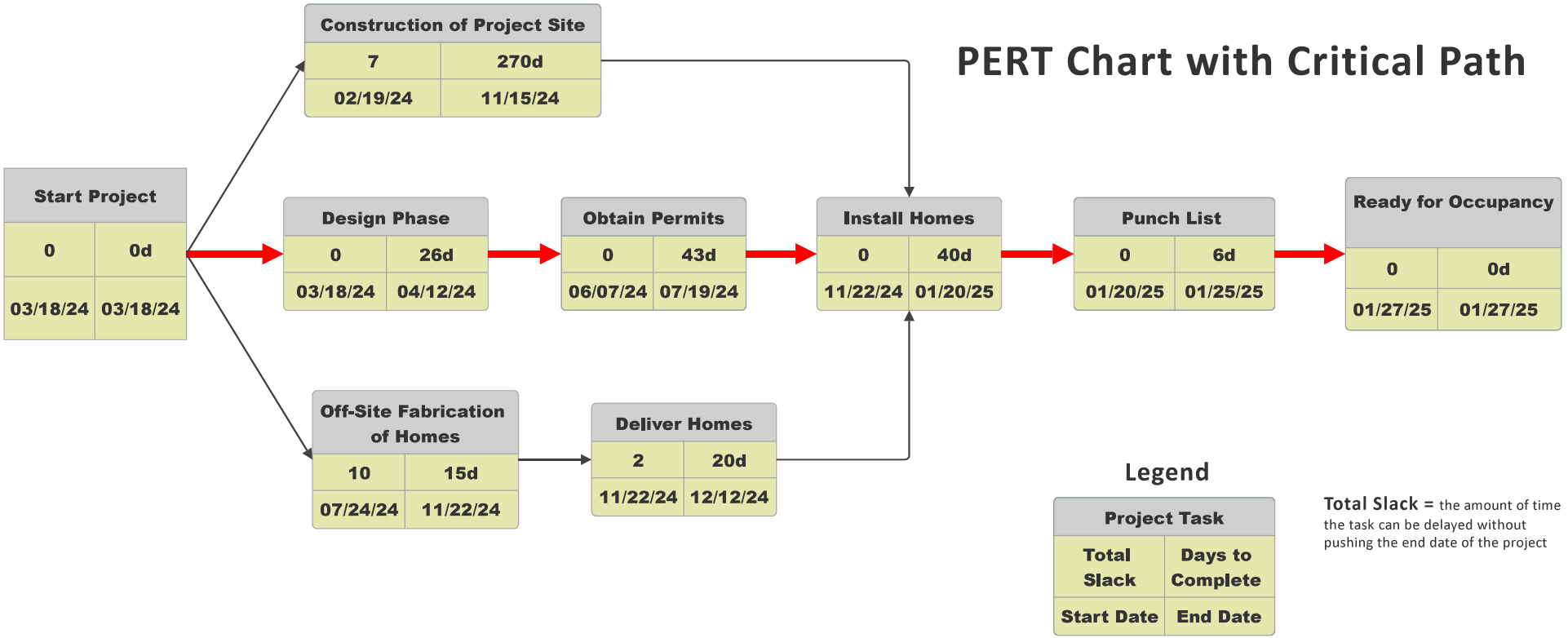
DBE Project Schedule

	Task	Start	End	Dur
	Bigfoot Homes DBE Project Schedule	3/18/24	1/27/25	312
1	Design Phase	3/18/24	4/12/24	26
2	County Review and Approval	4/12/24	4/19/24	8
3	Construction Document Phase	4/22/24	5/31/24	40
4	County Review and Approval	6/3/24	6/7/24	5
5	Prepare and Obtain Permits	6/7/24	7/19/24	43
6	Off-Site Fabrication of Homes	7/24/24	11/22/24	120
7	Store Homes off Site Ready for Delivery	8/15/24	12/5/24	110
8	Deliver Homes to Project Site	11/22/24	12/12/24	20
9	Install Homes Per Zone - Includes: Foundation, Utilities, Stairs/Ramps, Interior/Exterior Work	11/22/24	1/20/25	40
10	Punch List / Corrective Work / Final Inspections	1/20/25	1/25/25	6
11	Ready to Occupy Homes	1/27/25	1/27/25	1



DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

PERT Chart with Critical Path



Additional Activities:

Design Team Coordination: Continuous communication and collaboration between DBE and San Mateo County maintains project integrity and optimizes workflow.
Budget Monitoring: Track expenditure against the $5.5M-$6M budget

Considerations:

Weather delays, material shortages, and unforeseen permitting challenges are possible risks to factor in for contingency planning.
Regular communication and updates to San Mateo County are crucial for maintaining project awareness and addressing any issues promptly.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

10. Fixed Fee Price Proposal

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Section 10

Fixed Fee Price Proposal

Bigfoot Homes, Inc. proposes to provide the requested 47 manufactured homes and installed as requested by the County per the terms of this Proposal at the prices listed below and provided in more detail on the next page.

Summary (please see the break-out of each category on the following page):

- "Good" home options - $5,850,055 total price
- "Better" home options - $5,920,060 total price
- "Best" home options - $5,999,360 total price

Definitions:

- Base Price: The wholesale retail price Bigfoot Homes, Inc. received from home manufacturers.
- Markup: Bigfoot Homes, Inc. will charge a combined 29.38% markup on these homes which includes the San Mateo County 9.38% sales tax and a 20% markup paid to Bigfoot Homes, Inc. for services offered including a 2-year warranty exposure and exposure to materials price fluctuations.
- Storage and Delivery of Homes: Bigfoot Homes, Inc. has secured bids from trucking vendors mentioned in Section 5 – Technical Proposal. Our trucking company vendors have storage lots that will assist in project staging.
- Site Installation + 10% Contingency: Bigfoot Homes, Inc. will pay S R M Contracting the listed installation costs per home site, increased by a 10% contingency factor. This contingency factor was chosen based on S R M Contracting's experience in home installations.

DocuSign Envelope ID: 275168FD-C0E0-4C0A-A25A-DE4C68830CF2

Fixed Fee Price Proposal

Quantity	Home Type	Base Price to Bigfoot from Manufacturer (per home)	GOOD - Home Cost after 20% Markup and 9.38% Sales Tax in San Mateo County (per home)	Delivery and Storage Cost (per site)	Site Installation (per site) + 10% Contingency	Total Costs
9	1 Bed 1 Bath	$61,650	$79,763	$3,000	$27,500	$992,365
2	1 Bed 1 Bath ADA	$65,650	$84,938	$3,000	$33,000	$241,876
21	2 Bed 1 Bath	$63,413	$82,044	$3,000	$33,000	$2,478,919
3	2 Bed 1 Bath ADA	$70,350	$91,019	$3,000	$38,500	$397,556
10	3 Bed 2 Bath	$75,330	$97,462	$5,000	$38,500	$1,409,620
2	3 Bed 2 Bath ADA	$89,550	$115,860	$5,000	$44,000	$329,720
					Total	$5,850,055

Quantity	Home Type	Base Price to Bigfoot from Manufacturer (per home)	BETTER - Home Cost after 20% Markup and 9.38% Sales Tax in San Mateo County (per home)	Delivery and Storage Cost (per site)	Site Installation (per site) + 10% Contingency	Total Costs
9	1 Bed 1 Bath	$62,450	$80,798	$3,000	$27,500	$1,001,680
2	1 Bed 1 Bath ADA	$67,250	$87,008	$3,000	$33,000	$246,016
21	2 Bed 1 Bath	$65,021	$84,124	$3,000	$33,000	$2,522,608
3	2 Bed 1 Bath ADA	$71,000	$91,860	$3,000	$38,500	$400,079
10	3 Bed 2 Bath	$76,009	$98,340	$5,000	$38,500	$1,418,404
2	3 Bed 2 Bath ADA	$90,150	$116,636	$5,000	$44,000	$331,272
					Total	$5,920,060

Quantity	Home Type	Base Price to Bigfoot from Manufacturer (per home)	BEST - Home Cost after 20% Markup and 9.38% Sales Tax in San Mateo County (per home)	Delivery and Storage Cost (per site)	Site Installation (per site) + 10% Contingency	Total Costs
9	1 Bed 1 Bath	$63,650	$82,350	$3,000	$27,500	$1,015,653
2	1 Bed 1 Bath ADA	$67,650	$87,526	$3,000	$33,000	$247,051
21	2 Bed 1 Bath	$66,413	$85,925	$3,000	$33,000	$2,560,428
3	2 Bed 1 Bath ADA	$72,350	$93,606	$3,000	$38,500	$405,319
10	3 Bed 2 Bath	$77,330	$100,050	$5,000	$38,500	$1,435,496
2	3 Bed 2 Bath ADA	$91,750	$118,706	$5,000	$44,000	$335,412
					Total	$5,999,360