



DEVELOPMENT SERVICES CENTER  
PUBLIC WORKS DEPARTMENT  
17575 PEAK AVENUE  
MORGAN HILL, CA 95037-5301  
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## **ADDENDUM NO. 2**

**DATE:** **October 14, 2020**

**TO:** **ALL PLAN HOLDERS OF THE:  
HALE AVENUE EXTENSION PROJECT**

**FROM:** **DAVID GITTELESON – CITY OF MORGAN HILL**

**SUBJECT:** **ADDITIONS/CLARIFICATIONS**

### **PLANS:**

- 1) **REPLACE:** Plan Sheets TS-1, TS-2, TS-3, DM-3, X-1, X-2, X-3, X-4, EC-1, EC-3, E-1, E-2, E-3, E-4, E-5, E-6
- 2) **WITH:** Revised Plan Sheets TS-1, TS-2, TS-3, DM-3, X-1, X-2, X-3, X-4, EC-1, EC-3, E-1, E-2, E-3, E-4, E-5, E-6
- 3) **Add:** Plan Sheet CD-1A
- 4) **DELETE:** “5’ access gate (see note 2)” on plan sheets SW-2 and SW-5, pages 62 and 65 of 120
- 5) Plan Sheet RW-8 (page 73) has been deleted, thus there are only 119 Plan sheets in total.
- 6) The Sound wall shown between sta. 44+60 and 46+00 on plan sheets L-4 and L-5 is not part of this contract.
- 7) The existing pavement section for “Remove Existing Pavement” on plan sheets DM-1, DM-4 and DM-5 are assumed to be the City standard for residential streets, minimum of 4”AC over 8” AB. The existing pavement section for “Remove Existing Pavement” on plan sheet DM-3 (Dunne Avenue) is minimum 6”AC over 12” AB.
- 8) Plan Sheets IR-7 and PL-7 (page 100 and 108), the limits of work are up to sta. 46+00, not 47+00.

### **SPECIFICATIONS:**

- 1) **Under Notice Inviting Bids, Section 1 “Bid Acceptance”**

The Bid Opening Date has been changed to **“on or before Thursday, October 29, 2020 at 2:00 p.m.”** at the Development Services Center office, located at 17575 Peak Ave., Morgan Hill, California.”

2) **Under Bid Proposal.**

REPLACE: Bid Schedule I

WITH: Revised Bid Schedule I (Addendum #2)

3) **Under Article 2.3 Subcontractors**

REPLACE: Paragraph 2.3 (A)

WITH:

(A) **General.** All Work which is not performed by Contractor with its own forces must be performed by Subcontractors, subject to the 30% limitation set forth in the Instructions to Bidders. City reserves the right to approve or reject any and all Subcontractors proposed to perform the Work, for reasons including the subcontractor's poor reputation, lack of relevant experience, financial instability, and lack of technical ability or adequately trained workforce. Each Subcontractor must obtain a City business license before performing any Work.

4) **Under Article 4-Bonds, Indemnity, and Insurance**

REPLACE: Section 4.3 B (1). Page 57

WITH:

(1) **Commercial General Liability Insurance (“CGL”).** Contractor shall maintain CGL and must include coverage for liability arising from Contractor's or its Subcontractor's acts or omissions in the performance of the Work against claims and liabilities for personal injury, death, or property damage providing protection in the minimum amount of: (i) Five million dollars (\$5,000,000.00) combined single limit each occurrence and either a general aggregate limit of Ten million dollars (\$10,000,000.00) or a general aggregate limit of Five million dollars (\$5,000,000.00) as applied on a “per project” or “per location” basis, or (ii) the maximum amount of such insurance available to Contractor under Contractor's combined insurance policies (including any excess or “umbrella” policies), whichever is greater.

- a. CGL policy may not exclude explosion, collapse, underground excavation hazard, or removal of lateral support.
- b. CGL policy must include contractor's protected coverage, blanket contractual, and completed operations.

REPLACE: Section 4.3 B (5). Page 58

WITH:

(5) **Pollution (Environmental) Liability:** If the performance of Contractor's work or service under this Contract involves hazardous materials, contaminated soil disposal, and/or a risk of accidental release of fuel oil, chemicals or other toxic gases or hazardous materials, Contractor shall procure and maintain Pollution Liability covering Contractor's liability for bodily injury, property damage and environmental damage resulting from pollution and related cleanup costs arising out of the work or services to be performed under this Contract. Coverage shall be provided for both work performed on site, as well as during the transport of hazardous materials. Such coverage shall be in the minimum amount of: (i) Two Million Dollars (\$2,000,000.00) for any one accident or occurrence, or (ii) the maximum amount of such insurance available to Contractor under Contractor's combined insurance policies (including any excess or “umbrella” policies), whichever is greater.

5) **Under TS-34 Earthwork,**

Delete paragraph 5 on page 83,

"Areas to receive engineered fills and pavements shall be over-excavated and re-compacted. The depth of over-excavation below existing ground surface shall be a minimum of 24 inches in areas of the proposed approach fills (including MSE walls), and a minimum of 12 inches in areas of at-grade roadways and levees. The over-excavations shall extend a minimum of 5 feet beyond the limits of the proposed improvements."

6) **Under TS-07 Order of Work**

Delete paragraph 5 on page 14,

"When embankment settlement periods or surcharge embankments settlement periods are specified, the settlement periods and the deferment of portions of the work shall comply with the provisions in Section 19-6.03D, "Settlement Periods and Surcharges," of the Standard Specifications and in "Earthwork of these Technical Specifications."

**REPLACE:** Description of Sound Wall & Retaining Wall Work

**WITH:**

Sound Wall No.1: Construct Precast Sound Wall (includes foundation) per Plans.

Sound Wall No.2: Construct Precast Sound Wall (includes foundation) per Plans.

Sound Wall No.3: Not part of this contract.

Retaining Wall No.1: Construct Reinforced Concrete Retaining wall, approximately 156 feet long and approximately 8 feet maximum height with Chain Link Railing.

Retaining Wall No.2: Construct Reinforced Concrete Retaining wall, approximately 54 feet long and approximately 6 feet maximum height with Chain Link Railing.

Retaining Wall No.3: Construct Reinforced Concrete Retaining wall, approximately 90 feet long and approximately 11 feet maximum height with Chain Link Railing.

Retaining Wall No.4: Construct Reinforced Concrete Retaining wall, approximately 224 feet long and approximately 7 feet maximum height with Chain Link Railing.

7) **Under TS-39 Hot Mix Asphalt**

Add the following under "Construction" on page 87,

*"The surface, when compacted, shall be smooth, dense, well bonded, and of uniform texture and appearance. The compacted surface course of asphalt concrete shall be free from ruts, humps, depressions or irregularities. When a straightedge 3.6 meters (12 feet) long is laid on the finished surface and parallel with the centerline of the road or driveway, the surface shall not vary more than .006 meters (0.02 foot) from the lower edge of the straightedge. The transverse slope of the finished surface shall be uniform to a degree such that no depressions greater than 0.02 foot are present when tested with a straight-edge 12 feet long laid in a direction transverse to the center line and extending from edge to edge of a 3.05 meter (10 foot) pass.*

*Any ridges, indentations or other objectionable marks left in the surface of the asphalt concrete shall be eliminated by rolling or other means. The use of any equipment that leaves ridges, indentations or other objectionable marks in the asphalt concrete shall be discontinued.*

*In addition to the requirements in Section 39-5.01, "Spreading Equipment," of the CSS, asphalt-paving equipment shall be equipped with automatic screed controls and a sensing device or devices.*

*When placing asphalt concrete the automatic controls shall control the longitudinal grade and transverse slope of the screed. Grade and slope references shall be furnished, installed and maintained by the Contractor. A **Ski device is required for paving. Ski device shall be a minimum length of at least 30 feet with a rigid one-piece unit whereby the entire length activates the sensor.***

*When placing contiguously with previously placed mats, the end of the screed adjacent to the previously placed mat shall be controlled by a sensor that responds to grade of the previously placed mat and will reproduce the grade in the new mat within a 0.01-foot tolerance.*

*Should the method and equipment furnished by the Contractor fail to produce a layer of asphalt concrete conforming to the above requirements, including straightedge tolerance of Section 39-6.03, the paving operations shall be discontinued upon notice of the Engineer, and the Contractor shall modify his equipment or furnish substitute equipment within three (3) working days of such notice of the Engineer.*

*The Contractor shall be responsible for temporary pavement delineation and markings as required by the Engineer for the maintenance of a safe traveled way. The Contractor shall be responsible for providing a safe and well-marked roadway. This shall include providing temporary striping during evening and weekend hours if specified by the Engineer."*

**REFERENCE:**

8) **Geotechnical Recommendations for Sound wall Design**

**ADDENDUM ACKNOWLEDGMENT**

Bidder acknowledges receipt of this addendum, which shall be attached to the proposal.

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Contractor's Representative

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Date

**THIS DOCUMENT AND THE ATTACHMENTS SHALL BECOME PART OF THE PROJECTS  
SPECIFICATION**

## ADDENDUM #2

### REVISED BID SCHEDULE I – GENERAL

#### Hale Avenue Extension Project

**This Bid Schedule must be completed in ink and included with the sealed Bid Proposal.** Pricing must be provided for each Bid Item as indicated. Items marked "(SW)" are Specialty Work that must be performed by a qualified Subcontractor. The lump sum or unit cost for each item must be inclusive of all costs, whether direct or indirect, including profit and overhead. The sum of all amounts entered in the "Extended Total Amount" column must be identical to the Base Bid price entered in Section 1 of the Bid Proposal Form. Quantities shown are required for bid purposes and may or may not be final pay quantities. Actual quantities, if different, must be substantiated during the Project by the Contractor (either by field measurement, trucking tags, or other means acceptable to the Engineer).

AL = Allowance  
LF = Linear Foot

CF = Cubic Feet  
LS = Lump Sum

CY = Cubic Yard  
SF = Square Feet

EA = Each  
TON = Ton (2000 lbs)

LB = Pounds

Bid Item No.		Description of Bid Item	Estimated Quantity/Unit of Measure	Unit Price	Extended Total Amount
		<b>Civil</b>			
1	TS-21	Mobilization	LS	\$	\$
2	TS-10	Storm Water Pollution Prevention Plan and Implementation	LS	\$	\$
2a	<b>TS-10</b>	<b>Storm Water Rain Event Action Plan (REAP)</b>	<b>35 EA</b>	\$500	\$17,500
2b	<b>TS-10</b>	<b>Storm Water Annual Report</b>	<b>2 EA</b>	\$2,000	\$4,000
2c	<b>TS-10</b>	<b>Storm Water Sampling and Analysis Day</b>	<b>5 EA</b>	\$	\$
3	TS-11	Construction Site Management	LS	\$	\$
4	TS-12	Street Sweeping	LS	\$	\$
5	TS-13	Erosion Control and (Hydroseed)	<b>120,000 SF</b>	\$	\$
6	TS-14	Temporary Concrete Washout	4 EA	\$	\$
7	TS-15	Temporary Fiber Roll	3,740 LF	\$	\$
8	TS-16	Temporary Silt Fence	8,700 LF	\$	\$
9	TS-18	Temporary Construction Entrance	4 EA	\$	\$
10	TS-19	Temporary Drainage Inlet Protection	19 EA	\$	\$
11	TS-20	Move-In/Move-Out (Temporary Erosion Control)	6 EA	\$	\$
12	TS-24	Maintaining Existing Traffic Management System Elements During Construction	LS	\$	\$
13	TS-25	Temporary Pavement Marking (Paint)	1,840 SF	\$	\$
14	TS-25	Temporary Traffic Stripe (Paint)	4,670LF	\$	\$

15	TS-25	Temporary Pavement Marker	1,190 EA	\$	\$
16	TS-26	Type III Barricade	65 EA	\$	\$
17	TS-28	Temporary Railing (Type K)	3,460 LF	\$	\$
18	TS-29	Channelizer (Surface Mounted)	278 EA	\$	\$
19	TS-30	Temporary In-line Crash Cushion	11 EA	\$	\$
20	TS-31	Shed Demolition	LS	\$	\$
21	TS-31	Adjust Water Meter to Grade	2 EA	\$	\$
22	TS-31	Adjust Water Valve to Grade	11 EA	\$	\$
23	TS-31	Adjust Electrical Vault to Grade	7 EA	\$	\$
24	TS-31	Adjust SD Manhole to Grade	10 EA	\$	\$
25	TS-31	Adjust SS Manhole to Grade	9 EA	\$	\$
26	TS-31	Adjust Communication (AT&T) Manhole to Grade	1 EA	\$	\$
27	TS-31	Adjust SD Inlet to Grade	2 EA	\$	\$
28	TS-31	Remove Storm Drain Inlet	2 EA	\$	\$
29	TS-31	Remove Cobblestone Ditch	20 LF	\$	\$
30	TS-31	Remove Concrete V Ditch	110 LF	\$	\$
31	TS-31	Remove Storm Drain Pipe	35 LF	\$	\$
32	TS-31	Remove Traffic Stripe and Pavement marking	LS	\$	\$
33	TS-31	Remove Base & Surfacing	2,010 CY	\$	\$
34	TS-31	Remove Concrete Sidewalk	540 SF	\$	\$
35	TS-31	Remove Concrete Curb & Gutter	1,100 LF	\$	\$
36	TS-31	Remove Sign & Post	1 EA	\$	\$
37	TS-31	Remove concrete Sound walls	<b>1,040 LF</b>	\$	\$
38	TS-31	Remove Wood Fence	3,500 LF	\$	\$
39	TS-31	Remove Chain Link Fence	300 LF	\$	\$
40	TS-31	Replace Fence	50 LF	\$	\$
41	TS-31	Remove Interlocking Block Retaining Wall	40 LF	\$	\$
42		<b>DELETED</b>		<b>BLANK</b>	<b>BLANK</b>
43		<b>DELETED</b>		<b>BLANK</b>	<b>BLANK</b>
44	TS-31	Relocate Street Light Pole & Pull Box	1 EA	\$	\$
45	TS-31	Relocate Fire Hydrant	2 EA	\$	\$
46	TS-32	Cold Plane AC (2" to 4")	1,730 SY	\$	\$
47	TS-33	Clearing and Grubbing	LS	\$	\$
48	TS-34	Earthwork (Roadway and Bio Swale Grading & Excavation)	100,000 CY	\$	\$
49	TS-34	Earthwork (Detention Basin Grading & Excavation)	1,000 CY	\$	\$

49a	TS-34	Remove and Dispose of Greenstone Bedrock Material	1,000 CY	\$	\$
50	TS-36	Irrigation crossovers	1 EA	\$	\$
51	TS-38	Class 2 Aggregate Base (Roadway)	9,300 CY	\$	\$
52	TS-38	Class 2 Aggregate Base (Bike/Pedestrian Path)	415 CY	\$	\$
53	TS-39	Hot-Mixed Asphalt (Type A) (Roadway)	6,750 TON	\$	\$
54	TS705-392	Hot-Mixed Asphalt (Type A) (Bike/Pedestrian Path)	475 TON	\$	\$
55	TS-39	2" to 4" HMA Overlay	705 TON	\$	\$
56	TS-42	Concrete Headwall	2 EA	\$	\$
57	TS-46	Pedestrian Barricade	8 EA	\$	\$
58	TS-47	Roadside Sign	57 EA	\$	\$
59	TS-49	6" Perforated High Density Polyethylene Pipe (Subdrain)	4,350 LF	\$	\$
60	TS-50	15" RCP SD pipe	910 LF	\$	\$
61	TS-50	18" RCP SD pipe	3,700 LF	\$	\$
62	TS-50	24" RCP SD pipe	42 LF	\$	\$
63	TS-53	Rock Rip-Rap	75 CY	\$	\$
64	TS-55	Bio Filtration Swale (Include Permeable Soil, Root Barriers, Vegetation & Filter fabric)	3,400 SY	\$	\$
65	TS-56	Ditch Inlet (SD-3)	18 EA	\$	\$
66	TS-56	Curb Inlet (SD-5)	11 EA	\$	\$
67	TS-57	18" Storm Drain Manhole	15 EA	\$	\$
68	TS-58	Pipe Riser w/Debris Rack Cage (Outlet)	1 EA	\$	\$
69	TS-59	Stamped Concrete (Apron at Roundabout)	3,897 SF	\$	\$
70	TS-59	Concrete Sidewalk	<b>15,800 SF</b>	\$	\$
71	TS-59	Concrete Driveway	13 CY	\$	\$
72	TS-59	Concrete Curb and Gutter (Type 1)	<b>8,850 LF</b>	\$	\$
73	TS-59	Concrete Apron Curb (Type D-4)	300 LF	\$	\$
74	TS-59	Concrete Full Vertical Curb (Type 2)	<b>8,050 LF</b>	\$	\$
75	TS-59	Cobblestone Median Paving	840 SF	\$	\$
76	TS-63	Object Markers (4 type P) (4 type K-1)	8 EA	\$	\$
77	TS-66	Split Rail fence	<b>3,250 LF</b>	\$	\$
78	TS-64	Metal Beam Guard Railing	50 LF	\$	\$
79	TS-68	4" Thermoplastic Traffic Stripe	30,190 LF	\$	\$
80	TS-68	6" Thermoplastic Traffic Stripe	9,130 LF	\$	\$
81	TS-68	8" Thermoplastic Traffic Stripe	1,310 LF	\$	\$

82	TS-68	Thermoplastic Pavement Marking	2,080 SF	\$	\$
83	TS-69	Pavement Marker (Retroreflective)	18 EA	\$	\$
84	TS-70	12" DIP Water Main	3,863 LF	\$	\$
85	TS-70	12" Water Valves	10 EA	\$	\$
86	TS-70	8" Water Valves	4 EA	\$	\$
87	TS-70	Blowoff Valve	2 EA	\$	\$
88	TS-70	Air Relief Valve	2 EA	\$	\$
89	TS-70	Fire Hydrants	16 EA	\$	\$
		<b>Structural-Oldcastle Sierrawall Soundwall</b>			
90	TS-43	8' Tall Sound Wall-Grapestake (Complete in Place)	<b>24,250 SF</b>	\$	\$
91		<b>Concrete Retaining Wall Type 5</b>			
92	TS-34	Structure Excavation (Retaining Wall)	4,400 CY	\$	\$
93	TS-34	Structure Backfill (Retaining Wall)	3,500 CY	\$	\$
94	TS-42	Structure Concrete (Retaining Wall)	960 CY	\$	\$
95	TS-44	Joint Seal MR 1/2"	1,185 LF	\$	\$
96	TS-45	Bar Reinforcing Steel	70,140 LB	\$	\$
97	TS-59	Concrete Gutter	887 LF	\$	\$
98	TS-65	Chain Link Railing	<b>300 LF</b>	\$	\$
		<b>Electrical</b>			
99	TS-E25	Street Lighting	LS	\$	\$
100	TS-E25	PG&E Conduits and Vaults for Undergrounding	LS	\$	\$
101	TS-E25	Fiber Optic Conduits/boxes	LS	\$	\$
		<b>Landscape</b>			
102	TS-L03	Hardscape Paving	LS	\$	\$
103	TS-L04	Irrigation System	LS	\$	\$
104	TS-L05	Landscape Planting	LS	\$	\$
105	TS-L06	Landscape Maintenance Period-3 years	LS	\$	\$
106	TS-73	<b>Supplemental</b>	\$200,000	\$200,000	\$200,000

Bid Schedule I Total	
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TOTAL BASE BID:      Items 1 through \_\_\_\_\_ inclusive: \$\_\_\_\_\_

Note: The amount entered as the "Total Base Bid" should be identical to the Base Bid amount entered in Section 1 of the Bid Proposal form.

## END OF BID SCHEDULE

October 12, 2020  
Project PA17.1024

Michael Cooper  
Mark Thomas & Company  
3000 Oak Road, #650  
Walnut Creek, California 94597

**Subject: Geotechnical Recommendations for Design of Sound Walls for Hale Avenue Extension Project, Morgan Hill, California**

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Dear Mr. Cooper,

The letter presents our recommendations for design of the proposed sound walls for the proposed Hale Avenue Extension project in Morgan Hill, California. Three sound walls (SW#1, SW#2, and SW#3) to be supported on drilled, cast-in-place, reinforced concrete piers are proposed along the new road alignment.

Sound Wall SW#1 will be constructed on the east side of proposed Hale Avenue, between Station "H" 7+96.02 Rt 71.75 and Station "H" 29+78.07 Rt 65.74. The wall will be about 2,176 feet in length and the wall height will be about 8 feet.

Sound Wall SW#2 will be constructed on the west side of proposed Hale Avenue, between Station "H" 10+49.07 Lt 38.89 and Station "H" 14+63.47 Lt 44.56. The wall will be about 432 feet in length and the wall height will be about 8 feet.

Sound Wall SW#3 will be constructed on the west side of proposed Hale Avenue, south of West Main Avenue, between Station "H" 44+31.72 Rt 35.5 and Station "H" 52+11.28 Rt 62. The wall will be about 816 feet in length and the wall height will vary from 8 feet to 12 feet 8 inches.

## **RECOMMENDATIONS**

### **Lateral Soil Pressures for Soil Retaining Portions**

For static loading conditions, the soil retaining portions of the walls may be designed using at-rest soil pressure recommended below. Active soil pressure should only be used if the top of wall is free to deflect and resulting movement of the backfill is acceptable. The active soil pressures given below are for level and sloping backfill surfaces, under either drained or undrained backfill condition.

Backfill Condition	Active Lateral Soil Pressure (Equivalent Fluid Weight)		
	Level Backfill Slope	2H:1V Backfill	3H:1V or Flatter Backfill
Drained backfill	40 pcf	60 pcf	45 pcf
Undrained backfill	82 pcf	92 pcf	85 pcf
Note: To develop active soil pressures, wall movements of about 0.005H to 0.01H may be necessary for cohesive soils, with up to 0.005H for cohesionless soils.			

Pressures due to external loads should be added to the lateral soil pressure in the wall design. For uniform vertical load at the ground surface, the surcharge on the wall should be calculated as a uniform lateral pressure equal to the magnitude of the vertical load multiplied by a factor. For active soil pressure, the factor is 0.32 for level backfill slope, 0.48 for 2H:1V sloping backfill, and 0.36 for 3H:1V or flatter sloping backfill. For other slope inclinations and other types of surcharge loads, such as vehicle loads, point loads, strip loads, consult our office for specific recommendations.

To achieve a drained backfill condition, a subsurface drain should be installed behind each wall extending from the wall bottom to about 1 foot below finished grade. The drain should consist of a 12-inch minimum wide blanket of drainage material consisting of either Class 2 Permeable material (Caltrans Standard Specifications, Section 68) or clean, 1/2 to 3/4-inch maximum size crushed rock or gravel. If crushed rock or gravel is used, it should be encapsulated in a geotextile filter fabric, such as Mirafi 140N or equivalent. Filter fabric is optional if Class 2 Permeable material is used. The top 1 foot below finish grade should be backfilled with compacted clayey soil to reduce infiltration of surface water.

A 4-inch minimum diameter, perforated, schedule 40 PVC (or equivalent) pipe should be installed (with perforations facing down) along the base of each wall on a 2-inch thick bed of drain rock, regardless whether drain rock or pre-fabricated drainage panel is used. The pipes should be sloped to drain by gravity to a proper collection system and be discharged at a proper outlet as designed by the project Civil Engineer.

Backfill against retaining walls should be compacted as recommended in our geotechnical report for this project. Over-compaction should be avoided because increased compaction effort can result in lateral pressures significantly higher than those recommended above. Backfill placed within 3 feet of the walls should be compacted with hand-operated equipment.

### Drilled Pier Foundations

Drilled, cast-in-place, reinforced concrete piers may be used for support of the proposed precast sound walls. Piers should be designed to derive their vertical supporting capacity from "skin friction" between the pier shafts and the surrounding earth materials. Piers should have a diameter of 18 inches or greater. Center-to-center spacing of the piers should be a minimum of 3 pier diameters. Reinforcement in the piers should be determined by the structural designer.

For dead plus live vertical loads, a net allowable adhesion value of 500 pounds per square foot may be assumed along the pier shafts. This value may be increased by one-third when including transient loads, such as wind or seismic. End bearing capacity should be ignored.

Resistance to lateral loads may be calculated based on passive soil pressure acting against the piers. The table below presents passive soil pressures for level and sloping ground surface in front of the walls. The ultimate passive resistance may be assumed to act on 2 times the pier diameter. It should be noted that passive resistance is only applicable where the concrete is placed directly against undisturbed soil or engineered fill. The upper 1 foot of soil should be ignored in the calculation of vertical and passive capacity of the piers.

<b>Passive Lateral Soil Pressure (Equivalent Fluid Weight) at Various Ground Slope in Front of Wall</b>				
<b>Level Ground</b>	<b>2H:1V Down Slope</b>	<b>3H:1V Down Slope</b>	<b>4H:1V Down Slope</b>	<b>5H:1V Down Slope</b>
300	150	230	260	275

If water is encountered in the pier holes, concrete should be placed using the "tremie" method to displace the water to the surface.

## **LIMITATIONS**

Our services were performed using generally accepted engineering approaches and principles available at this time and the degree of care and skill ordinarily exercised under similar circumstances by reputable geotechnical engineers practicing in this area. No warranty or guarantee, express or implied, is included or intended.

Sincerely,

Geo-Logic Associates



Chalerm (Beeson) Liang  
GE 2031

