AMENDMENT TWO TO AGREEMENT BETWEEN THE COUNTY OF SAN MATEO AND GHD, INC.

THIS AMENDMENT TO THE AGREEMENT, entered into this 14th day of May, 2019, by and between the COUNTY OF SAN MATEO, hereinafter called "County," and GHD, Inc., hereinafter called "Contractor";

$\underline{W} \underline{I} \underline{T} \underline{N} \underline{E} \underline{S} \underline{S} \underline{E} \underline{T} \underline{H}$:

WHEREAS, pursuant to Government Code, Section 31000, County may contract with independent contractors for the furnishing of such services to or for County or any Department thereof;

WHEREAS, the parties entered into an Agreement for geotechnical investigations and geological hazard reports on April 16, 2018 in the amount of \$21,800.00; and

WHEREAS, the parties agreed to Amendment One to the Agreement on August 2, 2018 which modified the scope, increased the amount by \$18,500 to a total of \$40,300, and extended the completion date from September 30, 2018 to July 31, 2019; and

WHEREAS, the parties wish to further amend the Agreement to modify the scope of work, increase the amount, and extend the completion date as indicated below.

NOW, THEREFORE, IT IS HEREBY AGREED BY THE PARTIES HERETO AS FOLLOWS:

- **1.** Section 3 of the agreement, Payments, sentence 3 is deleted in its entirety and replaced as follows:
 - In no event shall County's total fiscal obligation under this Agreement exceed ONE HUNDRED TWENTY-NINE THOUSAND EIGHT HUNDRED DOLLARS AND NO CENTS (\$129,800.00).
- **2.** Section 4 of the agreement, Term, is amended to read as follows:
 - Subject to compliance with all terms and conditions, the term of this Agreement shall be from April 16, 2018, through December 31, 2021.
- **3.** Exhibit A (rev. 7/26/18) is hereby deleted in its entirety and replaced with Revised Exhibit A, (rev. 5/14/2019).

- **4.** Exhibit B (rev. 7/26/18) is hereby deleted in its entirety and replaced with Revised Exhibit B, (rev 5/14/2019).
- 5. All other terms and conditions of the agreement dated April 16, 2018, and in accordance with subsequent approved Amendments, between the County and Contractor shall remain in full force and effect.

For Contractor: GHD, Inc. Contractor Signature	4/18/19 	Christopher Trumbull Contractor Name (please print)
For County:		
Purchasing Agent Signature (Department Head or Authorized Designee) County of San Mateo	Date	Purchasing Agent Name (please print) (Department Head or <u>Authorized</u> Designee) County of San Mateo
		Purchasing Agent or <u>Authorized</u> Designee Job Title (please print) County of San Mateo

In witness of and in agreement with this Agreement's terms, the parties, by their duly authorized representatives, affix their respective signatures:

Exhibit A (Revised 5/9/2019 per Amendment Two)

Base Agreement & Amendment One Scope of Work:

In consideration of the payments set forth in Exhibit B, Contractor shall provide the following services:

- Contractor shall review available published geotechnical and geologic data applicable to the project.
- 2. Exploration will include six borings, each to a maximum depth of 15 feet. Proposed Exploration. Locations are shown in the enclosure on Exhibit C.

Contractor shall prepare a work plan and submit it to the County at least one week prior to exploration. Contractor staff shall review the visit the site to confirm logistics for drilling and mark the drilling locations for Underground Service Alert (USA). Contractor staff shall register the proposed boring locations with USA at least 48 hours prior to the start of drilling. A drilling permit will be obtained from the County of San Mateo Department of Environmental Health.

Since the proposed Link Building is located where a current building exists, one boring (B-4) will be drilled inside the existing building (cafeteria eating area) to a maximum depth of 15 feet. Contractor shall apply for an Infection Control Permit and have a preconstruction meeting with Infection Control personnel at least one week prior to exploration to review the work plan and infection control requirements. The work site will be surrounded with air-tight fireproof plastic sheeting, taped to the floor and ceiling with two foot overlap at the seams; all seams will be sealed with duct tape. An anteroom will be constructed where all personnel will be cleaned with an industrial-rated HEPA filter vacuum prior to re-entering the atmosphere of the hospital. An adhesive mat will be used at the entrance, which will be barricaded. The HVAC system will be isolated by placing plastic bags over the vents and sealing them with duct tape. The existing concrete floor will be cored and a portable electrically-operated drill rig will be used to advance the boring and collect samples. A generator to run the drill rig will be placed outside of the hospital and power lines will be run into the work area. The hole will be backfilled with soil cuttings and the floor will be replaced with quick-set concrete. Virtually no debris will be generated, but the minor amount will be removed in air-tight containers. The floor tile removed will be replaced. This work will take place in one day, on a Saturday.

The preliminary boring locations are shown below; locations are approximate. The remainder of the borings will be drilled with truck-mounted drilling equipment with hollow stem augers. Borings B-5, B-6, and B-7 will be drilled to a maximum depth of 15 feet. Sampling for all borings will be continuous in the upper 5 feet of the borings and every five feet thereafter. Bulk samples will be collected in select borings for R-value testing. Soils shall be field-classified in general accordance with ASTM D2488.

Borings B-8 and B-9 will be drilled to depths of two to five feet to perform percolation tests to determine the infiltration characteristics for the proposed LID features. All borings will be backfilled with drill cuttings and topped with asphalt patch.

- 3. Contractor shall perform geotechnical laboratory tests of the type and number as required to obtain sufficient information to prepare the geotechnical report, which shall state the standards used for the laboratory tests. The laboratory testing will include, as appropriate:
 - a. Strength tests such as direct shear and unconfined compression
 - b. Index Tests such as sieve analysis, hydrometer, Atterberg limits, moisture content, and dry density

- c. R-Value test
- 4. Engineering analyses will be performed to support the recommendations, to include, as appropriate:
 - a. Evaluation of soil compressibility
 - b. Foundation and bearing capacity analyses
 - c. Retaining wall design analyses
 - d. Earthwork
 - e. Infiltration
- 5. A Geotechnical Investigation Report will be prepared for the project, to include the following:
 - a. Description of physical properties and characteristics of the subsurface soils, including questionable soil, expansive soil, rock, and groundwater
 - b. A plan showing the locations of borings and logs of borings
 - c. Discussion of general and local site geology
 - d. Discussion of site seismicity, potential ground shaking, and other potential seismic hazards
 - e. Discussion of the potential for liquefaction or settlement during earthquakes
 - f. A summary of all laboratory test data
 - g. Conclusions and recommendations for the following:
 - Impacts of questionable soils (expansive, compressible, resistant), if encountered, and mitigation
 - ii. Earthwork recommendations including site preparation, subgrade preparation compaction, surface drainage, and erosion potential
 - iii. Feasibility to excavate bedrock encountered
 - iv. Utility trench backfill
 - v. Foundations (bearing capacity, lateral soil resistance and base friction)
 - vi. Lateral resistance for pole foundations
 - vii. Retaining walls (lateral earth pressures, seismic increment, and drainage)
 - viii. Seismic design parameters in accordance with CBC (2016)
 - ix. Exterior flatwork
 - x. Interior slabs-on-grade
 - xi. Infiltration rates
 - xii. Flexible and rigid pavements
- 6. Deliverable: three hard copies and one digital copy of the draft and final Geotechnical Investigation Reports, signed and sealed by a Geotechnical Engineer and Certified Engineering Geologist.
- 7. Exploration effort for interior and exterior borings; Performing two seismic refraction traverses to provide data to understand the depth to excavatable rock; Consultation to define the rock characteristics across the site.
- 8. A site specific seismic analysis required by CGS/ASCE-7 due to the Project being classified as a Seismic Design Category F.

Assumptions and clarifications

- The two buildings are not classified as essential facilities and do not require OSHPD or CGS review.
- 2. County staff will block off areas for exterior drilling the day before.
- 3. The exterior drill sites are accessible by a truck-mounted drill rig.

- 4. An Industrial-rated HEPA filter vacuum is available for loan from the hospital.
- 5. Wet weather may delay the schedule of field services.
- 6. Consultations or engineering after the geotechnical report is issued are not included.
- 7. Any services not expressly contained in the scope of work are excluded; however, Contractor can provide additional services, if requested, per a contract amendment.

Project schedule

Work shall be undertaken and completed in a sequence assuring expeditious completion, but in any event, all the services in this scope of work shall be completed within the timeframe discussed below, following receipt of the authorization to proceed.

For the geotechnical investigation, the field exploration could happen as soon as three weeks after authorization. Fieldwork shall be completed in two days, one for the exterior borings and one for the interior borings, which may not be consecutive. Following the exploration, laboratory testing will take about one week to complete. The engineering analysis will be completed and the draft geotechnical report will be issued within two weeks after completion of testing. The total time for the geotechnical investigation should be less than six weeks; preliminary information can be made available after the field exploration.

Amendment Two Scope of Work:

- Attend Project meetings as required and other general project coordination duties included but not limited to, work as a liaison with Regulatory Agencies having jurisdiction as is required to provide guidance to the County and others as deemed necessary, Coordinate and work with the County and its consultants and contractor, etc during the pre-construction/design, bidding, construction and close-out phases.
- 2. Review and respond to pre-bid RFIs, Geotechnical submittals, geotechnical related construction RFIs and any other assistance as required by the County.
- 3. Provide Geotechnical Engineering services as mentioned in the table below throughout the project duration.
- 4. Provide project closeout assistance as necessary and be available or on-site throughout the duration of the project(s), as required.

Project Component	Component/ Location	Geotechnical Service
A-1	Nursing Wing	Foundation observation, consultations, RFIs
A-2	Facilities Engineering Office and Shop Relocation	Uncertain
A-3.1	Central Plant	Foundation observation, consultations, RFIs
A-4	MRI Trailer and Dental Van	Seepage and pad prep observations, consultations, RFIs
B-5	Early Site Demo+ Administration Building	Foundation and earthwork observation, bedrock determination, wall/drainage observation, supplemental engineering, design team and client coordination and consultation
C-7	1954 Building	Design team and client coordination and consultation, demo observation
C-8	Link Building	Foundation and earthwork observation, supplemental engineering, design team and client coordination and consultation
C-9.1	Health Services Building	Design team and client coordination and consultation, demo observation
C-9.2	Site Work	Earthwork observation, design team and client coordination and consultation

Project Schedule and Jurisdiction:

Please see the table below for overall tentative project schedule and related Authority Having Jurisdiction:

Project Component	Component/Location	Scope	Anticipated Start Date	Substantial Completion	Lead AHJ	Approx. Area (GSF)	Permit#
A-1	Nursing Wing Ground Floor - OSHPD	Renovation	12/1/2019	12/19/2019	OSHPD 1	27.000	OSHPD - H18066-41-00
A-1	Nursing Wing Site Work - CoSM	Reliovation	12/1/2019	12/19/2019	OSHPD I	21,000	CoSM - BLD2018-01521
A-2	Facilities Engineering Office and Shop Relocation	Renovation	1/28/2019	5/30/2019	County of San Mateo Planning and Building Dept.	3,000	BLD2018-02122
A-3.1	Central Plant - Interior Part A Central Plant - Exterior Part B	Renovation	Part A - 3/1/2019 Part B - 07/13/2021	Part A - 09/16/2019 Part B - 12/08/2021	OSHPD 1	6,000	H180249-41-00
A-4	MRI Trailer and Dental Van	Relocation	12/1/2019	5/30/2019	County of San Mateo Planning and Building Dept. (OSHPD 3)	-	BLD2018-00979
B-5	Early Site Demo Administration Office Building	New Construction	5/30/2019	8/5/2020	County of San Mateo Planning and Building Dept.	50,000	Early Site Demo - BLD2019-00006 Admin Bldg - BLD2019-00007
C-7	1954 Building	Demolition	8/1/2020	12/10/2020	OSHPD 1	109,000	TBD
C-8	Link Building	New Construction	12/7/2020	12/10/2021	County of San Mateo Planning and Building Dept.	20,000	BLD2019-00008
C-9.1	Health Services Building	Demolition	5/14/2021	12/10/2021	County of San Mateo Planning and Building Dept.	70,000	BLD2019-00009
C9.2	Site Work	New Construction	12/7/2020	12/10/2021	County of San Mateo Planning and Building Dept.	200,000 (4.5 acres)	BLD2019-00009

Exhibit B (Revised 5/9/2019 per Amendment Two)

In consideration of the services provided by Contractor described in Exhibit A and subject to the terms of the Agreement, County shall pay Contractor based on the following fee schedule and terms:

In no event shall total payment for this contract exceed ONE HUNRED TWENTY-NINE THOUSAND EIGHT HUNDRED DOLLARS AND NO CENTS (\$129,800.00). County shall pay Contactor within 30 days upon receipt and acceptance of invoice. Estimated costs are as follows:

Original Scope of Work

Geotechnical Investigation \$20,900.00

Amendment One Scope of Work

Exploration effort \$17,000.00 Seismic analysis \$1,500

Amendment Two Scope of Work

A-1 Nursing Wing	\$9,500.00
A-2 Facilities Engineering Office	\$2,000.00
A-3.1 Central Plant	\$6,000.00
A-4 MRI Trailer & Dental Van	\$5,000.00
B-5 Early Site Demo & Admin Bldg.	\$40,000.00
C-7 1954 Building	\$4,000.00
C-8 Link Building	\$15,000.00
C-9.1 Health Services Bldg.	\$4,000.00
C-9.2 Site Work	\$5,000.00

<u>Reimbursable Costs.</u> There are some general guidelines regarding reimbursement rates that will apply. All reimbursables shall be applied against the fee amounts listed above. No additional reimbursable allowance is provided. In general, the following restrictions should be followed:

- a. Reimbursable Expenses shall not include Local Travel, see below for definition.
- b. Travel expense beyond Local Travel for travel by automobile shall be reimbursed at the current rate set by the U.S. Government, and for travel by other means shall be the actual expense incurred by the Firm without mark-up.
- c. "Local Travel" means travel between Firm's offices and San Mateo County, and travel to any location within a fifty-mile radius of either Firm's office or San Mateo County.

Reimbursement for the actual cost of lodging, meals, and incidental expenses ("LM&I Expenses") is limited to the then-current Continental United States ("CONUS") rate for the location of the work being done (San Mateo/Foster City/Belmont, California), as set forth in the Code of Federal Regulations and as listed by the website of the U.S. General Services Administration (available online by searching www.gsa.gov for the term 'CONUS'); airline and car rental travel expenses ("Air & Car Expenses") are limited to reasonable rates obtained through a cost-competitive travel service (for example, a travel or car-rental website), with air travel restricted to coach fares and car rental rates restricted to the mid-level size range or below; and certain other reasonable travel expenses ("Other Expenses") such as taxi fares, parking costs, train or subway costs, etc. are reimbursable on an actual-cost basis without mark-up. If there are no air flights involved, rental cars and pay for rides, where allowed, are reimbursed at the GSA rate from the office or place of ride origin, whichever is less.

<u>Payments</u>. All payments will be invoiced at the end of each month, and due and payable to Contractor within thirty (30) days of receipt by County. Payments shall be based upon the percentage of work completed to date including materials stored and work performed on. County and Contractor shall agree to a "Schedule of Values" on which the relative percent complete will be determined.



US WEST FEE SCHEDULE CAMERON PARK OFFICE

(Effective February 2019)

Hourly Rates*

Alcon, Cristina Balbierz, Thomas Barclay, Gregory Bast, Ryan Bruce, James Burkhart, Tom Carlton, Alan Codiroli, Marjorie Culick, Alex Deakyne, Amy Floyd, Dori Flynn, Kerry Garrison, Greg Hanser, John Hargrave, Morgan Iseger, Bryon Jermstad, David Leatham, Jashua Lane, G. Casey McKenna, Paula McKenna, Kayla Moore, Carl Moose, Samantha	Scientist Senior Professional Associate Professional Senior Designer Senior Professional Associate Professional Associate Professional Administrative Officer Principal Professional Senior Professional Administrative Officer Professional	\$120.00 \$210.00 \$215.00 \$125.00 \$160.00 \$210.00 \$245.00 \$100.00 \$265.00 \$100.00 \$175.00 \$175.00 \$125.00 \$125.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00
Moose, Samantha Pratt, Alyceson Rizo, Edgard Silva, Brian Trumbull, Christopher Vander Dussen, Matthew	Professional Designer Professional Professional Senior Professional Professional	\$160.00 \$135.00 \$115.00 \$165.00 \$210.00 \$140.00
One Man Survey Crew Two Man Survey Crew Three Man Survey Crew Non-Professional overtime (8+ hours/day), swing sunday work Holiday work		\$180.00 \$275.00 \$360.00 1.5 x hourly rate 2.0 x hourly rate 2.5 x hourly rate
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Estimated Prevailing Wage rates are as follows:

One/Two/Three Man Survey Crew

Special Inspector or Engineering Technician with Equipment

Special Inspector or Engineering Technician

\$145.00

\$135.00

Expenses and other project-related costs are billed out at cost plus 15%. Rates are as follows:

Office Consumables \$6.00/hour Environmental and Construction Inspection consumables \$11.00/hour Survey Field consumables \$15.00/hour Exploration Equipment — Hand Auger & Sampling Equipment \$15.00/hour Exploration Equipment — Seismic Refraction \$15.00/hour Exploration Equipment — Seismic Refraction \$15.00/hour Exploration Equipment — Seismic Refraction & Surface Waves \$15.00/hour Stool/day Slope Inclinometer Equipment — Seismic Refraction & Multi-channel Analysis of Surface Waves \$15.00/hour Stool/day Slope Inclinometer Equipment & Seismic Refraction & Multi-channel Analysis of Surface Waves \$15.00/hour Stool/day Slope Inclinometer Equipment & Seismic Refraction & Multi-channel Analysis of Surface Waves \$15.00/hour Stool/day Slope Inclinometer Equipment & Seismic Refraction & Multi-channel Analysis of Surface Waves \$15.00/hour Stool/day Slope Inclinometer Equipment & Seismic Refraction & Multi-channel Analysis of Surface Waves \$15.00/hour Stool/day Slope Inclinometer Equipment & Seismic Refraction & Multi-channel Analysis of Surface Waves \$15.00/hour Stool/day Slope Inclinometer Equipment & Seismic Refraction & Multi-channel Analysis of Surface Waves \$15.00/hour Stool/day Slope Inclinometer Equipment & Seismic Refraction & Multi-channel Analysis of Surface Waves \$15.00/hour Stool/day Slope Inclinometer Equipment & Seismic Refraction & Seismic Refraction

*These rates are subject to change on a semi-annual basis.
Rates do not apply to forensic-related services. All field personnel charges are portal to portal.



LABORATORY FEE SCHEDULE CAMERON PARK OFFICE

(Effective October 2018)

Test	Unit Rate			
Compaction Curve – 4 inch mold (ASTM D698 or D1557)	\$200.00			
Compaction Curve – 6 inch mold (ASTM D698 or D1557)	\$250.00			
Cal Impact (CTM-216)	\$265.00			
Sieve Analysis Including Wash (ASTM C136, C117, and CTM-202)	\$122.00			
Sieve Analysis Wash Only (Passing #200 Sieve) (ASTM C117, and CTM-202)	\$70.00			
Hydrometer, including sieve (ASTM D422, C136, C117, and CTM-202)	\$175.00			
Hydrometer, without sieve (ASTM D422)	\$125.00			
Atterberg Limits (ASTM D4318)	\$155.00			
Moisture Content and Unit Weight (ASTM D2216, D2937, D4643)	\$32.00			
Moisture Content (ASTM D2937, D4643)	\$22.00			
Sand Equivalent (CTM-217)	\$83.00			
R-Value (CTM-301)	\$300.00			
Direct Shear, 3 point, includes remolding (ASTM D3080)	\$400.00			
Unconfined Compressive Strength – Soil (ASTM D2166)	\$92.00			
Unconfined Compressive Strength – Rock (ASTM D238)	\$112.00			
Unconfined Compressive Strength – Concrete Cylinder (ASTM C39)	\$30.00			
Unconfined Compressive Strength – Gunite or Shotcrete (ACI 301)	\$162.00			
Unconfined Compressive Strength – Cores (ASTM C42)	\$162.00			
Unconfined Compressive Strength – Grout or Mortar (ASTM C579, C1019, C780)	\$30.00			
Unconfined Compressive Strength – Masonry Block (ASTM C140)	\$151.00			
Corrosion Suite: pH, Res, Chl, Sul, Redox (CTM-643, -422, -417, ASTM D1498)	\$220.00			
TDA Sieve analysis (ASTM D6270)	\$385.00			
TDA Compaction (ASTM D6270)	\$250.00			
Expenses and other project-related costs are billed out at cost plus 15%. Rates are as follows:				
Office Consumables	\$6.00/hour			
Environmental and Construction Inspection consumables	\$11.00/hour			
Survey Field consumables	\$15.00/hour			
Exploration Equipment – Hand Auger & Sampling Equipment	\$50/day			

\$400/day

\$500/day

\$725/visit

Federal Mileage Rate

Mileage

Geophysical Equipment - Seismic Refraction

Slope Inclinometer Equipment

Geophysical Equipment – Seismic Refraction & Multi-channel Analysis of Surface Waves

^{*}These rates are subject to change on a semi-annual basis. Rates do not apply to forensic-related services.