



October 20, 2016



1919 5<sup>th</sup> Street  
Davis, CA 95616

Attn: Mr. George Parker  
Director of Facilities, Maintenance & Operations  
P: (530) 759-2182  
F: (530) 757-5321  
E: [gparker@djusd.net](mailto:gparker@djusd.net)

Re: **Proposal for Construction Materials Testing & Special Inspection Services**  
**Davis Senior High School – All Student Center**  
**215 West 14<sup>th</sup> Street**  
**Davis, California 95616**  
**Terracon Proposal No. PNB161136**

Dear Mr. Parker:

Terracon is pleased to submit a proposal to provide materials testing and inspection services for the All Student Center project located on Davis Senior High School at 215 West 14<sup>th</sup> Street in Davis, CA. We have extensive experience providing construction materials testing and inspection services similar to this project.

All of our services are delivered on a timely basis with high value and attention to client needs. We are confident that Terracon will provide Davis Joint Unified School District with a high level of service and look forward to working with you.

We appreciate your consideration of Terracon for this work, and look forward to working as your materials engineering consultant on this and future projects.

Sincerely,  
**Terracon Consultants, Inc.**

Ryan R. King, P.E.  
Senior Associate

Robert E. Holmer, G.E.  
Office Manager

Terracon Consultants, Inc.

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Environmental



Facilities



Geotechnical



Materials

## **Proposal for Construction Materials Testing Services**

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### **A. PROJECT INFORMATION**

It is our understanding the All Student Center project will consist of a new approximately 13,550 square foot, single story building at the existing Davis High School Campus and includes related site improvements. The on-site improvements consist of AC paving and striping, concrete curbs, gutters, ramps and walks, and associated landscaping. The new structure will be a steel concentric braced frames with metal deck and metal studs, supported on shallow spread footings with concrete slab on grades.

Our preparation of this proposal is based on the following items:

- DSA-103 Form (Application No. 02-115086, dated 4/27/2016).
- DJUSD – Davis Senior High School, All Student Center, Architectural Plans prepared by HMC Architects, dated 9/19/2016, approved 9/22/2016 (Sheets A.1 through A10.9).
- DJUSD – Davis Senior High School, All Student Center, Structural Plans prepared by Buehler & Buehler, dated 4/25/2016, approved 9/22/2016 (Sheets S1.1 through S5.3).

### **B. SCOPE OF SERVICES**

Based on our understanding of the proposed improvements, the general services to be provided by Terracon on this project may include the following:

- Field density testing of engineered fill;
- Special inspection of foundation excavations, reinforced concrete, masonry, structural steel/welding, and shop welding;
- Sampling soils for laboratory testing;
- Field sample and testing of concrete & grout;
- Laboratory testing on soils, aggregates, and cementitious materials to supplement the referenced field testing; and,
- Project administration, engineering review, and reporting.

**Field Services** - Terracon's approach to providing materials testing and observation services is to assign qualified engineering technicians, directed by Professional Engineers registered in the State of California to perform the required testing and observations for your project. The technicians assigned to the project will be qualified and equipped to perform each of the required field services.

- **Project Management** – A project manager will be assigned to the project to review the daily activity and assist in scheduling the work. All field and laboratory tests will be reviewed prior to submittal. Mr. Ryan King will be responsible for maintaining the project budget and will oversee the preparation of the pad certification letter.

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- **Daily Reports** – A draft copy of special inspection and field test reports will be left onsite with you or your Representative prior to our technician leaving the site. All reports are electronically prepared using CMELMS (in house developed proprietary laboratory management system). See below for report distribution policy.
- **Additional Services** - If additional work, beyond the scope and fees of this proposal is required, a short Supplement to the Agreement for Services form will be issued to identify the additional work to be performed and the associated fees. To authorize us to begin the additional work, simply return a signed copy of the Supplemental form.

**Scheduling of Work** - Field testing services will be provided on a "call-out" basis when scheduled by your representative. **The contractor has the responsibility to be familiar with the project requirements and to contact Terracon with a minimum 24-hour notice to schedule our services**, although we will attempt to meet requests in a short time frame. Terracon will only provide testing when called by your onsite representative.

**Report Distribution** – Upon commencement of the project, Terracon utilizes proprietary software called CMELMS for scheduling, reporting, distribution, invoicing, and budget tracking. CMELMS allows us to achieve better communication, more consistency, and faster report turnaround. The program automatically tracks all reports, including deviations, and provides immediate retrieval ability of test results. Reports can be distributed via traditional mail, email, and by Terracon's client document website. The program will also track our project budget and produce budget reports and invoices for services provided.

Final signed reports are typically distributed via e-mail, but can be made available via Terracon's Client Document Website (CDW) at <https://client.terracon.com>. If you would like access to the reports as soon as they become available, we will need your designated e-mail address to create an account. If you would like to grant access of reports for this project to third parties of certain or all reports; please inform the project manager with the parties' full contact information and receipt preferences (recommend CDW, but e-mail or fax is available). Please note that our special report distribution features are only available if a fully executed agreement is in place.

Our policy is to provide you with a copy of our inspection, laboratory and field test results per the following guidelines:

- n Laboratory test result reports within 48 hours of the test completion,
- n Inspection reports within 5 days of inspection completion. Generally, we have been able to distribute reports to our clients within a day of inspection service.
- n Inspection reports with non-compliance items delivered within 24 hours of inspection completion.

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**Final Special Inspection Reports:**

Final special inspection reports will be prepared at the conclusion of the project. An electronic copy will be made available to you and, upon request, a hard copy will also be mailed to you for your records.

**C. KEY PERSONNEL****ROBERT HOLMER, PE, GE – Principal Engineer**

Robert provides senior leadership for geotechnical engineering and materials testing and inspection projects. His experience extends across public municipal, state and federal government agencies and private sector projects.

**RYAN R. KING, PE – Materials Department Manager**

Ryan oversees construction materials testing and construction oversight (CMT) for our Sacramento Office. Ryan has extensive experience with DSA project including clients with Los Rios Community College District and Yuba Community College District. In addition, he has worked with major municipal and public sector agencies.

**MATT SIEGALKOFF – Field Services Manager**

Matt provides leadership for materials testing and inspection projects and oversees all materials testing staff. His experience extends across public municipal, state and federal government agencies and private sector projects.

**D. COMPENSATION**

The fee for our services, including all field work, laboratory testing, engineering review and report preparation will be based upon the unit costs prepared for this project as shown in the table below. The time required for construction materials testing on the project will be directly related to the schedule and performance of the various contractors on the site and amount of trips are made to the site. As a result, total fees for our services will be based upon the applicable unit rates. The following table is a detailed breakdown of our proposed estimated fees for this project and also includes a summary of our scope of work:

<u>Service</u>	<u>Hours/Units</u>		<u>Rate</u>		<u>Fee</u>
<u>Soils</u>					
Soil Inspector w/ Nuc Gauge	60	hours	\$ 90.00	/hour	\$ 5,400.00
Footing Inspection	12	hours	\$ 90.00	/hour	\$ 1,080.00
Trip Charge	14	each	\$ 30.00	/each	\$ 420.00
PM/PE Review/Admin Support	13	reports	\$ 75.00	/report	\$ 975.00
Soil Sample Pickup*	2	hours	\$ 90.00	/hour	\$ 180.00
Estimated Soils Total					\$ 8,055.00

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<u>Masonry</u>					
Masonry Inspection	24	hours	\$ 90.00	/hour	\$ 2,160.00
Trip Charge	3	each	\$ 30.00	/each	\$ 90.00
PM/PE Review/Admin Support	3	reports	\$ 75.00	/report	\$ 225.00
Cylinder Sample Pickup*	2	hours	\$ 90.00	/hour	\$ 180.00
Estimated Masonry Total					\$ 2,655.00
<u>Structural Steel</u>					
Certified Field Welding Inspector	160	hours	\$ 95.00	/hour	\$ 15,200.00
Certified Shop Welding Inspector	80	hours	\$ 95.00	/hour	\$ 7,600.00
High Strength Bolt Testing	16	hours	\$ 100.00	/hour	\$ 1,600.00
NDT Ultrasonic Testing	40	hours	\$ 95.00	/hour	\$ 3,800.00
NDT Magnetic Particle Testing	24	hours	\$ 95.00	/hour	\$ 2,280.00
Trip Charge	40	each	\$ 30.00	/each	\$ 1,200.00
PM/PE Review/Admin Support	40	reports	\$ 75.00	/report	\$ 3,000.00
Estimated SS Total					\$ 34,680.00
<u>Concrete &amp; Reinforcing</u>					
Concrete Batch Plant Insp.	4	hours	\$ 90.00	/hour	\$ 360.00
Concrete Inspection	40	hours	\$ 90.00	/hour	\$ 3,600.00
Trip Charge	6	each	\$ 30.00	/each	\$ 180.00
PM/PE Review/Admin Support	6	reports	\$ 75.00	/report	\$ 450.00
Estimated Conc./Reinf. Total					\$ 4,590.00
<u>Laboratory Services</u>					
D4318 Atterberg Plasticity Index	1	each	\$ 100.00	/each	\$ 100.00
Compression Test 2x2 Cubes	15	each	\$ 25.00	/each	\$ 375.00
Compression Grout Test	9	each	\$ 25.00	/each	\$ 225.00
Compression Test Concrete	50	each	\$ 25.00	/each	\$ 1,250.00
Masonry Unit 8x8x16	3	each	\$ 175.00	/each	\$ 525.00
Proctor Mod Effort 4 in D1557	2	each	\$ 190.00	/each	\$ 380.00
Proctor Mod Effort 6 in D1557	2	each	\$ 200.00	/each	\$ 400.00
Reinf Steel Tens&Bend 6 to 9	2	each	\$ 230.00	/each	\$ 460.00
Reinf Steel Tens&bend < 6	2	each	\$ 230.00	/each	\$ 460.00
Rockwell Hardness	1	each	\$ 500.00	/each	\$ 500.00
Concrete Mix Design	1	each	\$ 200.00	/each	\$ 200.00
Estimated Lab Total					\$ 4,875.00
<u>Project Management</u>					
Project Manager	8	hours	\$ 150.00	hour	\$ 1,200.00
DSA Interim Verified Report	1	each	\$ 250.00	/each	\$ 250.00
DSA Affidavid	1	each	\$ 250.00	/each	\$ 250.00
Estimated Management Total					\$ 1,700.00
Estimated Grand Total					\$ 56,555.00

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The above estimate for services to cover anticipated special inspection services is based upon our understanding of the project from a review of the project plans provided to us, and our experience with similar projects. We have attached a currently hourly and service fee schedule for providing additional services under this contract.

The total fee could vary depending on the actual construction schedule and number of trips made to the project site. Once a construction schedule is available for our review, we would be happy to revisit the above cost estimate.

Work performed in addition to the anticipated items will be billed in accordance with Terracon's standard fee schedule. Requirements relative to invoicing must be provided prior to the start of work so that payments to Terracon can be made in the appropriate time frames discussed below.

Time will be charged in 2, 4 and 8 hour increments with a 2 hour minimum for field inspections and observation and shall be billed from portal to portal. Structural steel, masonry and welding observations, if applicable, shall be charged in 4 and 8 hour increments with a 4 hour minimum. Weekends and holidays will be charged in 4 and 8 hour increments. Overtime and double time, if any, will be applied per California Labor law.

Terracon can only provide the services discussed herein when properly scheduled. Our services will be provided only at the specific starting times scheduled by the contractor. Failure on the contractor's part to notify Terracon of the construction activities which require our involvement could jeopardize our ability to provide the necessary materials testing certification upon completion of the grading for the building pad.

The following assumptions were used in preparing this proposal:

- Our fees for trips to the site will be charged portal to portal;
- We have assumed that contractors on the site will work a single shift 5-day per week schedule;
- This project is located approximately 18 miles from our office and laboratory. Average drive time is 30 minutes each way.
- The durations estimated in this proposal are based on our review of the preliminary baseline schedule in the Notice of Inviting Bids and the drawings provided and should be verified by the construction team;
- An out-of-scope charge of \$75/hour will be applied for all stand-by time and/or time spent on activities which were not cancelled with prior timely notice (within 8 working hours of requested field inspection);
- Staff time, laboratory testing and extra trips required for re-testing and/or re-inspection will be marked on the monthly invoices and be considered out-of-scope items;
- All work performed during weekends and holidays or in excess of 8 hours per day will be billed at 1.5 times the applicable hourly billing rates;

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- Testing and inspection services must be scheduled by the client / contractor with 24 hours notice to our office (916-928-4690). Our services are provided on an on-call, as requested basis either by the client's representative or client's contractor. Terracon will not be responsible for scheduling our services and will not be responsible for tests that are not performed due to failure to schedule our services;
- Terracon's services specifically exclude job site safety responsibility;
- Our services do not relieve any contractor/subcontractor from complying with project plans and specifications; and,
- Invoices for the project will be submitted on a monthly basis.

## **E. AUTHORIZATION**

This proposal may be accepted by returning an executed copy of the attached Supplement to Agreement for Services along with this proposal to Terracon Consultants, Inc. You may expedite by emailing it to [ryan.king@terracon.com](mailto:ryan.king@terracon.com). Please be aware that we will be unable to distribute field and laboratory reports until a signed contract is received. This proposal is valid only if authorized within sixty days from the listed proposal date.

Terracon provides environmental, geotechnical, construction materials testing, and facilities services on a wide variety of projects; locally, regionally and nationally. Increased involvement by Terracon will provide value added to your project; by saving you time and money on our other services, for more detailed information on our services visit our website at [www.terracon.com](http://www.terracon.com). Please contact me if you would like a separate proposal for additional services.

We appreciate your consideration of Terracon for this work, and look forward to working as your materials engineering consultant on this and future projects.

Attached: Supplement to Agreement for Services

## SUPPLEMENT TO AGREEMENT FOR SERVICES

CHANGE TO  
SCOPE OF SERVICES AND FEES

This SUPPLEMENT to AGREEMENT FOR SERVICES to the original Agreement for Services (original Agreement dated 10/17/2015, Agreement reference number NB155057) is between Davis Joint Unified School District ("Client") and Terracon Consultants, Inc. ("Consultant") for additional or changed Services to be provided by Consultant for client on the Project, as described in the Supplemental Proposal. This Supplement is incorporated into and part of the Agreement for Services.

1. Scope of Services. The scope of the additional or changed Services are described in the Scope of Services section of the Consultant's Supplemental Proposal, unless Services are otherwise described below or in Exhibit B to this Supplement (which section or exhibit are incorporated into the Supplement).

See Proposal PNB161136 dated October 20, 2016

2. Compensation. Client shall pay compensation for the additional or changed Services performed at the fees stated in the Supplemental Proposal unless fees are otherwise stated below or in Exhibit C to this Supplement (which section or exhibit are incorporated into the Supplement).

See Proposal PNB161136 dated October 20, 2016

All terms and conditions of the Agreement for Services shall continue in full force and effect. This Supplement is accepted and Consultant is authorized to proceed.

Consultant: Terracon Consultants, Inc.  
By: \_\_\_\_\_ Date: 10/20/2016  
Name/Title: Ryan R. King / Department Manager  
Address: 50 Golden Land Ct Ste 100  
Sacramento, CA 95834-2425  
Phone: (916) 928-4690 Fax: (916) 928-4697  
Email: Ryan.King@terracon.com

Client: Davis Joint Unified School District  
By: \_\_\_\_\_ Date: \_\_\_\_\_  
Name/Title: George Parker / Director of Facilities,  
Maintenance & Operations  
Address: 1919 5th Street  
Davis, CA 95616  
Phone: (530) 759-2182 Fax: (530) 757-5321  
Email: gparker@djusd.net