



Proposal No: 17-1814-P-R

March 26, 2018

Beverly Hills Unified School District
255 South Lasky Drive
Beverly Hills, CA 90212

Attention: Mike Barbera, P.E.

Subject: REVISED Proposal to Provide Construction Inspection and Testing Services
DSA Application No.: 03-116437
Beverly Hills High School
241 Moreno Drive
Beverly Hills, CA

In response to your request, we propose to provide construction inspection and testing services for the Beverly Hills HS- Phase 1 B-1 project.

PROJECT UNDERSTANDING

We understand that the project will consist of Alterations to Buildings B1 Admin Office/Media Center and Courtyard, B2 Academic Areas/CR, and B2A Office. Based on our review of the project plans and DSA-103 form we understand that construction inspection and testing services will be required during concrete placement operations, fiberglass wrap application, post-installed anchor installation, high strength bolt installation, and structural steel installation for field and shop operations.

Therefore we have prepared this proposal to outline the scope of work required to provide inspection and testing services, in accordance with the project requirements.

SCOPE OF WORK

Our proposed scope of work will consist of Special Inspection of Shotcrete, Special Inspection of Reinforced Concrete, Special Inspection of Fiber Reinforced Polymer (FRP), and Special Inspection of Structural Steel Construction. A detailed description of the tasks required to complete this scope of work and an estimate of the costs associated with our work are detailed herein.

Special Inspection and Testing of Reinforced Concrete

This scope of services will include engineering review of concrete mix designs, inspection of concrete batch plant operations, field sampling and laboratory testing of concrete, non-shrink grout, and reinforcing steel used in concrete construction for the project.

Our materials engineer would review mix designs submitted by the contractor and the results of tests performed on the aggregates. A written report of our review of the concrete mix design submittal will be prepared upon the completion of the work.

Our materials engineer would review mix designs submitted by the contractor and the results of tests performed on the aggregates. A written report of our review of the concrete mix design submittal will be prepared upon the completion of the work.

This scope of work will include the inspection of concrete batch plant operations. We will provide an inspector during concrete batch plant operations to monitor the batch weights and provide periodic inspection of the aggregate stockpiles and cement bins. Written reports of all inspections will be provided on a daily basis and at the completion of the work.

This scope of services would also include sampling and testing of Portland concrete cement (PCC) cylinders and reinforcing steel, and sampling and testing of non-shrink grout cylinders, and sampling. We will provide an ACI certified Special Inspector onsite to obtain samples of Portland cement concrete and non-shrink grout during placement operations. A set of test cylinders will be made from each 100 cubic yards of concrete or fraction thereof for each class of concrete placed each day. Four test cylinders will be cast for each set. Test cylinders will be cured in our laboratory until they are tested in accordance to ASTM C192. Compression tests would be performed in accordance to ASTM C39 at 7 and 28 days, respectively. Copies of the results of all tests will be provided upon completion of the test.

Samples of the reinforcing steel to be used for production of concrete would be tested in accordance to ASTM A370 and A615 test methods. Written reports of all tests presenting applicable information would be prepared at the completion of testing.

Special Inspection and Testing of Shotcrete

This scope of services will include special inspection of shotcrete placement operations and field sampling of shotcrete used on the construction project.

Our special inspector will provide continuous observation during shotcrete placement and will obtain samples for testing in accordance with ASTM C1140. Cores will be obtained from panel samples for compressive strength testing. Compression tests would be performed in accordance to ASTM C39 at 7 and 28 days, respectively. Copies of the results of all tests will be provided upon completion of the test. Written reports of all inspections will be provided on a daily basis and at the completion of the work.

Special Inspection of Structural Steel Shop Fabrication

This scope of services will consist of inspection of structural steel shop fabrication and welding procedures and completed welds for conformance to approved plans, specifications, and building codes. We will provide an inspector that has been certified by AWS as a special inspector for welding. His work would consist of inspection of all welds made in the shop for compliance of the approved plans and job specifications.

He shall make a systematic record of all welds, including a list of defective welds and a manner of correction of defects. Our inspector will check the material, equipment, details of construction and procedures, as well as the welds. He would also check the ability of the welder. Our inspector will perform periodic inspection during fit up and fabrication of structural steel to verify the materials utilized are properly marked and traceable. He will collect mill certifications for the materials and inspect joint details to verify conformance at each connection.

Non Destructive testing of the completed welds will be performed as required. The inspector may use Ultra Sonic, Magnetic Particle or Dye Penetrants as appropriate to inspect completed welds and assure the adequacy of the welding.

Special Inspection of Structural Steel Construction

This scope of services will consist of inspection of structural steel erection, high strength bolting and field welding procedures and completed welds for conformance to approved plans, specifications, and building codes.

We will provide an inspector that has been certified by AWS as a special inspector for welding. His work would consist of inspection of all welds made in the field for compliance of the approved plans and job specifications. He shall make a systematic record of all welds, including a list of defective welds and a manner of correction of defects. Our inspector will check the material, equipment, details of construction and procedures, as well as the welds. He would also check the ability of the welder. Our inspector will perform periodic inspection during erection of structural steel to verify the materials utilized are properly marked and traceable. He will collect mill certifications for the materials and inspect joint details to verify conformance at each connection. He will also inspect the installation of the high strength bolts for conformance to the job specifications.

Non Destructive testing of the completed welds will be performed as required. The inspector may use Ultra Sonic, Magnetic Particle or Dye Penetrants as appropriate to inspect completed welds and assure the adequacy of the welding.

Special Inspection and Testing of Fiber Reinforced Polymer (FRP)

Our special inspector will provide continuous observation during Fiber Reinforced Polymer (FRP) application operations to ensure area to receive FRP are prepared and wrapped according to the project specifications. A written report of our observations will be prepared upon the completion of the work.

Witness panels will be obtained once a day during FRP application operations. Witness panels will be randomly selected and tested in accordance with ASTM D3039 to ensure compliance with project plans and specifications. The frequency of witness panels tested will be approximately 15 percent of those obtained. Written reports of all tests presenting applicable information would be prepared at the completion of testing.



Post-Installed Anchor Testing

This scope of work will include the testing of Post-Installed Anchors in concrete. We will provide a technician to provide field testing of installed anchors on randomly selected anchors at the frequency specified for the project. Written reports of all tests will be provided on a daily basis and at the completion of the work.

TERMS

We propose to perform the previously described services on an hourly or test rate basis in accordance to the attached fee schedule. Our estimate is based on information given to RMA Group by Mike Barbera, P.E. and the following assumed construction durations. Our estimate of charges for the proposed services is as follows:

Construction Activity	Estimated Costs
Special Inspection and Testing of Reinforced Concrete	\$86,400.00
Special Inspection and Testing of Shotcrete	\$42,778.00
Special Inspection of Structural Steel Shop Fabrication	\$32,560.00
Special Inspection of Structural Steel Construction	\$79,016.00
Special Inspection and Testing of Fiber Reinforced Polymer (FRP)	\$125,736.00
Post-Installed Anchor Testing	\$21,700.00
TOTAL	\$388,190.00

Our estimate may vary due to circumstances that may develop during the course of the work or due to extended construction duration. If a change in the scope of work becomes necessary due to unforeseen conditions, which will increase the charges, we will obtain your authorization before proceeding.

Invoices for our services will be rendered at the completion of the work and upon completion of the report. Invoices are due and payable upon presentation. Should the duration of the job exceed one month, monthly invoices will be presented for services performed.

Any amount not paid within 30 days of the date due will bear interest at a rate of 18% per annum. In the event legal action is instituted to enforce this agreement, the prevailing party will be entitled to reasonable attorney fees.

PROFESSIONAL INSURANCE

We maintain the following insurance coverage. Certificates of insurance will be provided upon request. However, our professional liability insurance carrier (errors and omissions) will not name any additional insured.

General liability	\$1,000,000.00 limit
Professional Liability	\$1,000,000.00 limit
Workmen's Compensation	\$1,000,000.00 limit



CLOSURE

RMA Group does not guarantee the performance of the contractor(s) by performing these services. RMA Group's performance of these services shall not relieve the contractor(s) of his obligation to perform the work in conformity with the drawings and specifications and in a workmanlike manner; shall not make RMA Group an insurer of the contractor's performance; and shall not impose on RMA Group any obligation to see that the work is performed in a safe manner.

Thank you for the opportunity to submit this REVISED proposal. We look forward to working with you on this project and can begin our work upon receipt of your notice to proceed and receipt of a signed copy of this proposal authorizing us to perform these professional services. If you have any questions regarding this proposal please contact the undersigned Project Manager.

Authorized By:

Submitted By:

RMA Group

(Signature)



Dean Self
Project Manager

(Print or Type Name)

(Title)

(Date)



Slawek Dymerski, P.E.
Vice President

ESTIMATE WORKSHEET
Special Inspection and Testing of Reinforced Concrete

Item	Quantity	Unit	Unit Price	Total
Special Inspector Concrete Batch Plant	280	HR	\$96.00	\$26,880.00
ACI Concrete Technician	344	HR	\$96.00	\$33,024.00
Pick-up and Delivery of Test Specimens	96	HR	\$45.00	\$4,320.00
Supervising Special Inspector	24	HR	\$105.00	\$2,520.00
ASTM C39 Concrete Cyl Cured or Tested	304	EA	\$30.00	\$9,120.00
ID Reinforcing Bar	16	HR	\$96.00	\$1,536.00
ASTM A370 Rebar Tension up to #8	8	EA	\$45.00	\$360.00
ASTM A370 Bend Test Rebar up to #8	8	EA	\$35.00	\$280.00
Administrative	72	HR	\$50.00	\$3,600.00
Project Engineer - Office	32	HR	\$150.00	\$4,800.00
Subtotal:				\$86,400.00

ESTIMATE WORKSHEET
Special Inspection of Structural Steel Shop Fabrication

Item	Quantity	Unit	Unit Price	Total
AWS Certified Welding Inspector- Shop	240	HR	\$96.00	\$23,040.00
Supervising Special Inspector	16	HR	\$105.00	\$1,680.00
Non Destructive Testing ASNT Level II	40	HR	\$96.00	\$3,840.00
Administrative	32	HR	\$50.00	\$1,600.00
Project Engineer - Office	16	HR	\$150.00	\$2,400.00
	Subtotal:			\$32,560.00

ESTIMATE WORKSHEET
Special Inspection of Structural Steel Construction

Item	Quantity	Unit	Unit Price	Total
AWS Certified Welding Inspector- Field	656	HR	\$96.00	\$62,976.00
Supervising Special Inspector	40	HR	\$105.00	\$4,200.00
Non Destructive Testing ASNT Level II	40	HR	\$96.00	\$3,840.00
Administrative	64	HR	\$50.00	\$3,200.00
Project Engineer - Office	32	HR	\$150.00	\$4,800.00
	Subtotal:			\$79,016.00

ESTIMATE WORKSHEET
Special Inspection and Testing of Fiber Reinforced Polymer (FRP)

Item	Quantity	Unit	Unit Price	Total
Special Inspector Fiber Wrap	1,016	HR	\$96.00	\$97,536.00
Supervising Special Inspector	40	HR	\$105.00	\$4,200.00
ASTM D3039 FRP Tensile Test	20	EA	\$750.00	\$15,000.00
Administrative	72	HR	\$50.00	\$3,600.00
Project Engineer - Office	36	HR	\$150.00	\$5,400.00
Subtotal:				\$125,736.00

ESTIMATE WORKSHEET
Post-Installed Anchor Testing

Item	Quantity	Unit	Unit Price	Total
Pull Torque Testing Technician	200	HR	\$96.00	\$19,200.00
Administrative	20	HR	\$50.00	\$1,000.00
Project Engineer - Office	10	HR	\$150.00	\$1,500.00
	Subtotal:			\$21,700.00