

County of Santa Clara
Santa Clara Valley Health & Hospital System
Agency Administration
Facilities



HHS09 092909

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DATE: September 29, 2009

TO: Board of Supervisors

FROM: 
Kim Roberts
SCVHHS - Chief Executive Officer

SUBJECT: Eighth Amendment to Agreement with URS Corporation Americas for Geotechnical Engineering
Consultant Services

(Service Agreement #4400001929)

RECOMMENDED ACTION

Approve delegation of authority to SCVHHS Chief Executive Officer, or designee, to negotiate, execute, amend, terminate, and take any and all necessary or advisable actions relating to the Eighth Amendment of the Service

Agreement with URS Corporation Americas to provide geotechnical engineering services related to the construction phase of the Bed Building 1 Seismic Safety Project (SSP) and on-call services for other Santa Clara Valley Medical Center and SSP projects, extending the term of the agreement from June 30, 2010 through June 30, 2013 and increasing the maximum contract authority by \$700,000 to \$1,491,000, following approval by County Counsel as to form and legality, and approval by the Office of the County Executive. Delegation of authority shall expire on June 30, 2013.

FISCAL IMPLICATIONS

There is no impact to the County General Fund. Funding will be supported from the Seismic Safety Project (SSP) funds and other funds in the Santa Clara Valley Medical Center (SCVMC) Capital Budget.

CONTRACT HISTORY

Board Policy 5.6 specifies that the selection of contractors by County agencies/departments to provide architectural, engineering, construction project management, land surveying and environmental services shall be on the basis of demonstrated competence and professional qualifications, rather than competitive bidding.

URS Corporation Americas (formerly URS Greiner Woodward Clyde Consulting Group) has provided geotechnical services on the SCVMC campus, primarily on projects permitted through the Office of Statewide Health Planning and Development (OSHPD).

URS is a large, fully integrated engineering, construction and technical services firm with the ability to provide a wide range of specialized services for hospital and health facility projects. URS local resources available for this assignment include Certified Engineering Geologists, Project Geotechnical Engineers, Lab Supervisor, Senior Lab Technician, and other geotechnical professionals and technicians. Performance monitoring of these services will be by the project Structural Engineer of Record (SEOC), the OSHPD Inspector of Record (IOR) the OSHPD Area Compliance Officer Advisor (ACO). The contract is monitored by the SCVHHS Facilities project management staff.

URS has been a responsive and skilled consultant, one that has developed an extensive knowledge and database on the SCVMC campus geotechnical characteristics. The firm's knowledge of the sub-surface conditions makes it advisable to maintain a continuity of services in this critical area of work. The firm provides reliable, responsive and practical work, and is physically located within minutes of the campus. URS has proven to be a major asset with the ability to maintain consistent and expeditious engineering of key design issues.

URS's responsiveness and performance is judged against the standard of care for the industry. Professional personnel are billed on an hourly basis, at rates competitive with comparable firms in the region. Field work employs union labor falling under collective bargaining agreements.

Predecessor firms, Greiner and Woodward Clyde, were acquired by URS under the banner of URS Corporation Americas. The firms served as geotechnical consultants on the Main Hospital project, the development of the SCVMC Seismic Compliance Plan, and on a number of studies related to the Seismic Safety Project. Other firms have provided geotechnical services for SCVHHS over this period, but not on projects requiring OSHPD and California Geological Survey review. Examples of non-OSHPD projects include the SCVMC Administrative Office Building, Valley Specialty Center and each of the regionally distributed Valley Health Centers.

On July 21, 2005, the Director of Procurement executed the current Service Agreement with URS in the amount of \$40,000 for the firm to provide on-call general civil and soils engineering services for SCVHHS minor projects through June 30, 2006, with the initial focus on the Chiller Addition to the Electrical Building, an OSHPD project.

The First Amendment increased the maximum compensation by \$40,000 and extended the term through June 30, 2007 for various projects including completion and close out of the Chiller Addition Project. In December of 2006, the Director of Procurement approved the Second Amendment increasing the maximum compensation by \$46,000 to \$126,000 for geotechnical design services related to Parking Structure 2, a new 5-level parking facility.

On February 27, 2007, the Board delegated to the SCVHHS Chief Executive Officer the authority to execute the Third Amendment increasing the maximum compensation limit by \$65,000 to \$191,000 for services related to the site selection of a Service Building Replacement project.

A Fourth Amendment increased the maximum compensation limit by \$150,000 to \$341,000, and extended the term through June 30, 2008 for geotechnical services related to construction of Parking Structure 2, design of the Rehabilitation Building seismic upgrade and Bed Building 1. This Amendment was included in the Delegated Contract Authority Resolution (Master Contract List) adopted by the Board of Supervisors on May 22, 2007.

On February 26, 2008, the Board delegated authority to the SCVHHS CEO the authority to execute a Fifth Amendment increasing the maximum compensation limit by \$150,000 to \$491,000 and extending the term through June 30, 2009 for services related to design of the Bed Building 1, Ginger Lane road extension (phase 2), and the Rehabilitation Building seismic upgrade, and for the construction phase of Parking Structure 2, all of these are under the Seismic Safety Program, and revising the rate schedule.

On December 9, 2008, the Board delegated to the SCVHHS CEO the authority to execute a Sixth Amendment increasing the maximum compensation limit by \$150,000 to \$641,000 and extending the term through June 30, 2010 to accommodate continued on-call geotechnical services related to design and permitting of Bed Building 1, associated shoring requirements for adjacent buildings and services related to other SCVMC project activities, and revising the rate schedule.

On May 19, 2009, the Board delegated to the SCVHHS CEO the authority to execute a Seventh Amendment increasing the maximum compensation limit by \$150,000 to \$791,000 to accommodate continued on-call geotechnical engineering services associated with the Bed Building 1 project, and on-call services related to other SCVMC project activities, revising the rate schedule, and incorporating the County's No Smoking Policy.

This is a Type I contract, subject to the Resolution of Contracting Principles adopted by the Board of Supervisors on October 28, 1997. The declaration of the contractor is on file with the department.

REASONS FOR RECOMMENDATION

The three year extension to the term of this agreement is intended to cover the anticipated construction period for Bed Building 1 from excavation through backfill, grading, site work and landscape.

URS is the Geotechnical Engineer of Record providing consulting services in support of the SCVMC Hospital Compliance Plan submitted to OSHPD as part of the SB1953 Seismic requirements. The firm developed the design phase Geotechnical Report for Bed Building 1.

Construction phase geotechnical work is driven by the General Contractor's work schedule. Inspections are monitored and overseen by the Inspector of Record, OSHPD's Area Compliance Officer (ACO) and Structural Engineer of Record (SEOR). In recent years, soils analysis and coordination between the California Geological Survey, OSHPD, and OSHPD retained 3rd party plan reviewers have become more rigorous.

The evaluations, observations, and documentation of geotechnical information that this consultant provides as the Geotechnical Engineer of Record for the Seismic Safety Projects has been critical to formulating the basis for structural

design of the Bed Building 1, the Rehab Seismic Upgrade and other hospital facilities submitted for approval by the California Geological Survey and OSHPD.

This Eighth Amendment to the Agreement will enable URS to provide Construction Phase geotechnical and testing services for Bed Building 1 (projected cost: \$450,000) and to continue providing on-call geotechnical and testing services for related SSP projects, e.g., Rehabilitation Seismic Upgrade, Old Main Demolition and Seismic Upgrade (projected cost: \$250,000).

BACKGROUND

SCVHHS Facilities and URS will develop the scope of work for the construction phase of the Bed Building 1 project to include, but not be limited to:

Task 1 – Review of Contract Documents (estimate: \$6,300)

In accordance with the requirements of the Office of Statewide Health Planning and Development (OSHPD), URS will review the earthwork, shoring, and foundation plans to confirm that the geotechnical recommendations have been appropriately incorporated into the design. The deliverable for this task will be a summary letter signed and stamped by the Geotechnical Engineer of Record.

Task 2 - Submittal and RFI Review (estimate: \$23,600)

As part of this task, URS will review geotechnical engineering issues in the shop drawing submittals and requests for information (RFI), to provide the corresponding opinions or required recommendations. Specifically, it is anticipated that the following items will be addressed in this task:

- Review OSHPD and non-OSHPD shoring and underpinning submittals and RFIs.
- Review grading plan and proposed subgrade stabilization methods.
- Respond to geotechnical issues raised by contractors and the design team.
- Review submittals for imported materials and general fills.
- Evaluate proposed drilled pier installation procedures, including slurry use.

Task 3 – Basement Shoring and Underpinning Installation (estimate: \$203,200)

The BB1 basement excavation and work in the lobby link adjacent to the existing Main Hospital will require a combination of underpinning piers, secant piles, and soldier piles with wooden lagging; tiebacks are required for all of these elements. URS will provide the following services:

- Observe OSHPD underpinning and shoring installation (underpinning piers and secant piles), along with soldier piles and lagging installation in non-OSHPD areas.
- Observe tieback installation and oversee testing.
- Review load cell readings, taken by the Contractor and provided to URS, for tiebacks selected for periodic monitoring after load lockoff.

- Review results of horizontal monitoring of underpinning and shoring, as well as ground movement adjacent to underpinned or shored areas, surveyed by others.

Task 4 – Basement Excavation and Subgrade Stabilization (estimate: \$6,800)

As excavation to the desired basement grades, URS will provide the following observations and testing:

- Examine subsurface conditions encountered as excavation proceeds to basement level, in particular noting the material type and moisture conditions exposed at the finish subgrade level.
- Observe subgrade stabilization procedures, including processing, moisture conditioning and curing of treated subgrade materials prior to compaction.
- Perform laboratory compaction tests to establish the maximum dry density and optimum moisture content of the treated material.
- Perform field density tests to confirm the required relative compaction has been obtained.
- Review the Contractor's unconfined compression test results for the stabilized subgrade materials to confirm the specified strength is achieved.

Task 5 – Pier Drilling (estimate: \$40,500)

During pier drilling, URS will provide the following geotechnical engineering services:

- Observe pier drilling operations, logging the soil conditions and verifying that the required design depths have been achieved.
- Verify the bottoms of all pier holes have been properly cleaned prior to reinforcing steel and concrete placement.
- If unforeseen soil conditions are encountered or pier holes extend below groundwater, necessitating the use of casing or slurry to maintain stable sidewalls, meet with the Contractor and the Inspector of Record (IOR) to resolve geotechnical issues as they arise.

Task 6 – Earthwork Observations (estimate: \$61,200)

This task will include the following:

- Observe all footing excavations, verifying the exposed bottom conditions are consistent with the basis for design.
- Examine excavations for grade beams, pits, and mat foundation areas.
- Observe fill placement and compaction operations for general fill areas and underslab utilities.
- Perform laboratory and field tests to confirm compliance with relative compaction requirements.
- Perform quality compliance tests on fill materials.
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Task 7 - Consultation, Meetings, Reporting and Management (estimate: \$108,400)

This task will include the following items:

- Summarize pier drilling results in an engineering report, including final embedment depths attained and whether slurry or casing was used.
- Prepare periodic geotechnical observation reports covering:
 - Tie-back load cell monitoring
 - Underpinning and shoring movement
 - Grading observations and test results
 - Footing and grade beam construction
 - Underslab utility installation and backfilling
- Review as-built drawings and supplemental information prepared by the underpinning and shoring specialty contractor to document the completed work, and issue brief letter report.
- Attend meetings as needed.
- Document opinions, conclusions and supplemental recommendations in technical memoranda, as required.
- Issue a final report to summarize geotechnical observations and test results. The final report will be signed and stamped by a registered Geotechnical Engineer.

CONSEQUENCES OF NEGATIVE ACTION

Failure to approve the recommended action will require the County to supplant the Geotechnical Engineer of Record for the various Seismic Safety Projects with the Office of Statewide Health Planning and Development and impact the construction schedule.

STEPS FOLLOWING APPROVAL

Following approval of this action, the Clerk of the Board is requested to provide Keyboard notification to SCVHHS Director of Facilities, Duane Oberquell.

ATTACHMENTS

- Original Agreement
- 1st Amend.
- 2nd Amend.

- 3rd Amend.
- 4th Amend.
- 5th Amend.
- 6th Amend.
- 7th Amend.
- 8th Amend.