

Example Request for Proposal Language Annotated by the National Renewable Energy Laboratory (NREL)

SLAC National Accelerator Laboratory Science and User Support Building

NREL/DOE's Energy-Performance-Based Acquisition Steps:

Step 1: Define a Performance-Based Acquisition Process

Step 2: Develop an Energy Performance Goal

Step 3: Require Energy Performance

Step 4: Manage the Performance-Based-Acquisition Process

Step 5: Verify Energy Performance

Energy-performance-based acquisition step	Key action exemplified	Location of example text
Step 2: Develop an Energy Performance Goal	Set an energy performance goal specific to the building type and climate.	Tiered project goals, Page 15
Step 3: Require Energy Performance	Use a tiered structure to prioritize the energy goal among other project goals. (This example also shows how a tiered structure can be used to set minimum and stretch energy goals in proposal request.)	



**Statement of Work
For the
Science and User Support Building
(SUSB) Project**

September, 2012

SLAC NATIONAL ACCELERATOR LABORATORY

OPERATED ON BEHALF OF THE U.S. DEPARTMENT OF ENERGY BY STANFORD UNIVERSITY

CP-SOW-SUSB-105-R0

SUSB Acronym List

ADA	American Disabilities Act
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineer
BIO	Building Inspection Office
CDR	Conceptual Design Report
CFR	Code of Federal Regulations
CPTED	Crime Prevention Through Environmental Design
CUP	Central Utility Plant
D-B	Design-Build
DGPS	Design Guidelines and Performance Specifications
DOE	Department of Energy
ES&H	Environment Safety and Health
FHA	Fire Hazard Analysis
GSF	Gross Square Feet
HPSB	High Performance Sustainable Building
HVAC	Heating Ventilation and Air Conditioning
ICE	Independent Cost Estimator
IP	Internet Protocol
M&O	Management and Operating
NRTL	Nationally Recognized Testing Laboratory
NTP	Notice To Proceed
OSHA	Occupational Safety and Health Act
RFP	Request for Proposal
SC	DOE Office of Science
SLAC	SLAC National Accelerator Laboratory
SOW	Statement of Work
SSO	DOE SLAC Site Office
SUSB	Science and User Support Building
SWPPP	Storm Water Pollution Prevention Plan
UL	Underwriters Laboratories

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1 PURPOSE

This Statement of Work describes all site work, design and construction of the new SUSB building (Building), demolition of Panofsky Auditorium, Visitor's Center (B043) and the Cafeteria (B042). The new SUSB four-story Building will be constructed by the Design-Build delivery method.

All demolition and construction shall be in accordance with attached drawings "SLAC National Accelerator Laboratory Science and User Support Building Demolition Package - drawings and specifications dated 1/13/12 and SUSB 100% Design Guidelines and Performance Specifications (DGPS)" – design guidelines, drawings and specifications issued for Final response dated 8/24/12.

Drawings and specifications are located:

SUSB Dropbox 02

https://slacspace.slac.stanford.edu/sites/lcls/strategic_projects/susb/dropboxes/Dropbox_02/Forms/AllItems.aspx

username: collab\susb_dropbox_02
password: susb#56*7981484899

This solicitation entails a qualifications-based selection for a firm fixed-price subcontract to provide SLAC with the best value.

Background

1.1 The SLAC National Accelerator Laboratory (SLAC) is operated by Stanford University as a contractor for the United States Department of Energy (DOE) Office of Science (SC). SLAC supports a large national and international community of scientific users performing cutting edge research in support of the DOE mission. Success of that mission is directly coupled to the general purpose infrastructure necessary to conduct this research. At SLAC the accomplishment of that mission is currently at risk given sub-standard buildings that do not provide the appropriate environment to conduct world class science or the supporting Management and Operations (M&O) functions.

1.1.1 SLAC Context: The Stanford Linear Accelerator Center was founded in 1962 and the construction of the two mile linear accelerator was completed four years later in 1966. A decade after SLAC was founded; the Stanford Synchrotron Radiation Laboratory (SSRL) was established as a National User's Facility. SSRL became part of SLAC in 1992, and in 1994, The Positron-Electron Project II was initiated, to build the Asymmetric B Factory. The SLAC facility was renamed the SLAC National Accelerator Laboratory in 2009, but, the original acronym, SLAC, was retained.

1.1.2 SLAC's mission and strategy: SLAC's mission and strategy are focused on advancing the DOE's and our nation's energy goals. The scientists and researchers support critical market objectives to accelerate research from scientific innovations to market-viable alternative energy solutions. At the core of this strategic direction are SLAC's research and technology development areas.

1.1.3 SLAC History: SLAC currently lacks appropriate modern and efficient space to consolidate and co-locate accelerator scientists, users, and visitors that are currently spread across the Laboratory in outdated facilities.

SLAC operations suffer from the inefficiency of multiple facilities that house several of the Laboratory's key M&O functions. The SUSB shall allow staff to be co-located so that they can best assess and address the needs of users and visitors as they arrive. This type of centralization of services is beneficial to users arriving at all hours to ensure they can receive assistance as they arrive. It is valuable for this facility to have the capability to operate 24 hours a day, seven days a week, but not on a normal 24/7 schedule throughout the year and therefore, the systems models and security design for the SUSB must take this into consideration.

To correct these deficiencies (i.e. the lack of modern and efficient space to properly serve and support scientists, users, and visitors), close the mission capability gap, and ensure that the world-class research conducted by SLAC scientific staff and users is supported by modern, mission-ready facilities, a new SUSB is proposed.

This SUSB shall be a modern, progressive, and pioneering energy efficient and sustainable Building that shall provide SLAC with the resources to provide a world-class research facility for their users, staff and visitors.

The SUSB shall bring together many of the Laboratory's user, visitor, and administrative services, building on the "One Lab" concept to enhance their productivity through collaboration. This Building shall allow for the collaboration and integration of the accelerator science and technology community across programmatic boundaries and allow them to optimally support the current and future scientific programs at the SLAC Laboratory.

This Building shall replace the outdated buildings with a modern, energy efficient, sustainable, and collaborative facility. The proposed project shall upgrade current working conditions for the laboratory staff and users which supports the laboratory vision of a unified culture with a strong sense of community between all laboratory scientific users and support functions.

2 SUSB PROJECT SCOPE OF WORK (DESIGN-BUILD)

The scope of the project is to provide all materials & labor required to construct the new four-story approximately 58,000 to 72,000 GSF SUSB with site improvements, the building demolition of B043 and B042, required temporary construction at B042, and removal of underground utilities.

Part 1 - GENERAL

2.01 SECTION INCLUDES

- A. Work included in this Bid Package
- B. SLAC Furnished Equipment and Materials

2.02 WORK INCLUDED IN THIS BID PACKAGE

- A. The Subcontractor shall, within 25 months from the notice to proceed (NTP), in accordance with the phases set out herein, provide all labor and materials to design & build a new four-story office building of approximately 58,000 – 72,000 square feet, that meets or exceeds the requirements set forth in these specifications, including the demolition of buildings B042 and B043. The work in this bid package shall include all management; oversight; labor; materials; tools; equipment: shoring, temporary bracing, hoists, scaffolding, etc.; and other services needed to safely perform all the demolition; utility isolation and installation of new utilities; site work; design (including: issuance of drawings and specifications in 5 work packages; preparation and processing of shop drawings, submittals, mockups, samples, energy, acoustic and systems modeling); construction work; functional testing; commissioning coordination; turnover; and documentation using Primavera Contract Management, and as specified in the DGPS and described in these specifications, and any and all work/design/coordination/documentation that may be reasonably inferred as being necessary for the completion and serviceability for the intended use of all items of work.
- B. Subcontractor shall provide all labor and materials to demolish B042 and B043 in phases as shown and design and construct a four-story office Building that meets or exceeds the requirements set forth in these specifications. Note that the Bid Options are identified in section 010030 of the specifications and as listed in Section B Suppliers Services and Prices form. The D-B subcontractor is required to provide the warranty for work performed including rework and installation, labor and materials, as stated in the T&Cs and DGPS.
- C. The Subcontractor shall provide professional recommendations regarding constructability, construction feasibility, and project scheduling to minimize adverse effects of labor or material shortages, procurement, installation, and construction completion

- D. The Subcontractor shall also provide professional construction cost estimates and life cycle cost analysis of alternative designs and/or materials as directed by SLAC and be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other services furnished by the Sub tier contractor(s). The Subcontractor shall, without additional compensation, correct or revise any errors or deficiencies in its designs, drawings, specifications, construction, installation, and other services to conform to SLAC's project program in the CDR and DGPS.
- E. When established by an appropriate subcontract change, the subcontractor shall perform additional engineering design and construction in support of SLAC.

F. General Intent:

1. The intention of these drawings and specifications is to obtain a new four-story office Building and site improvements designed in accordance with the codes, criteria, DGPS, and standards listed herein and provide for the demolition of buildings B042 and B043. The bridging drawings validate that the prescribed Building program (including space allocations, functional adjacencies, critical room components, etc.) can be provided within the required constraints, but are not intended to dictate or define the final design. Complete SUSB Design Guidelines are found in Volume 1 on the SUSB SharePoint site; the SUSB space programming requirements are found in Chapter 3 "Space Programming Requirements."
2. These specifications give specific requirements for the execution of the project; however, they are not intended to cover all requirements that may be necessary to provide complete operating facilities. Omission of specific requirement does not relieve Design-Build (D-B) Subcontractor from providing complete operating and functional facilities.
3. Provide all quantitative and functional needs in the Building programmed areas throughout the Building as defined in the Scope of Work and DGPS packages. Lighting, HVAC, plumbing, fire protection, fire alarm, power, and communications distribution shall be fully deployed throughout the Building in such a manner as to quickly and easily accommodate future potential room partition modifications in a highly flexible and re-configurable fashion.
4. SUSB project's Tier 1-3 Goals are performance based and the DGPS are intended to set the boundary for the design envelope, while allowing the D-B team to use their creativity to explore and find new cost savings solutions to meet project goals within the budget. SLAC understands and appreciates that this is a design/build process. As such, SLAC encourages creative design responses and is prepared to evaluate design proposals that deviate from the bridging documents in various areas:

- a. Structural frame: Design-builder may elect to propose an alternative to structural steel in place of the steel moment frame design as shown.
- b. Skin system: The quality and quantity of windows and window walls are important to the aesthetic, however the design-builder may elect to propose alternate panel material in lieu of GFRC panels, as shown, provided that it exceeds ASHRAE 90.1 (2007) by a minimum of 30% and maintains occupant comfort as described in the bridging documents.
- c. Mechanical system: SLAC is prepared to review an alternate design provided that it exceeds ASHRAE 90.1 (2007) by a minimum of 30% and maintains occupant comfort as described in the bridging documents.
- d. Roof: The general aesthetic of the roof is important to the overall appearance of the Building, however SLAC is prepared to review an alternate flat roof design that retains the aesthetic and allows for photovoltaic panels (Bid Option), roof top mechanical equipment, and appropriate maintenance personnel access.
- e. Sun shading: As stated above, the design/builder must provide a mechanical design that exceeds ASHRAE 90.1 (2007) by a minimum of 30%. SLAC is prepared to review alternate design strategies if the result retains the aforementioned mechanical performance and maintains occupant comfort as described in the bridging documents.
- f. Interior materials and finishes: Finishes shall be selected for durability, performance, and economic efficiency, environmental attributes including recycled content, recyclability or reusability. Finishes shall contribute to HPSB Standards. Interior finishes (floors, walls & ceilings) shall adhere to the range of standards that SLAC has established lab-wide for finishes. These finishes shall be a part of SUSB Program requirements.
- g. Other Value Management/Engineering concepts: SLAC encourages creative design responses and is prepared to review an alternate design if the result retains the desired SUSB Building program scope and design requirements at a minimum.

Some potential ideas: combine the two exit stairs from the Community room and exterior stair on the first floor, reduce sunshades and light shelves, use different blinds and delete shade pocket, use different ceiling system at Auditorium, reduce amount of glass at exit stairs and replace with solid and substantial walls, move Dining room walls out to enclose more of the patio area, reduce/revise acoustical wall panels in conference rooms, move Auditorium towards office tower, reduce

number of column covers, use fiberglass reinforced panels in place of ceramic tile in back of house at Kitchen, use of Metal-Clad cable in office space, potential lighting control reduction, remove underfloor air system at Auditorium and conference rooms and go to overhead system, reduced number of motorized windows, delete arcade at office tower on first floor, reduce width of Community Room (1053), reduce height of Exhibit (1010), and reduce amount of interior glass sidelight to private offices and conference rooms. This list is a potential list that is not all inclusive of value management ideas.

- G. Existing trees are to be relocated north of loop roadway per SLAC Arborist's report.
- H. Existing soil that does not remain on site is to be relocated to Sector 22, graded in accordance with the approved Storm Water Pollution Prevention Plan (SWPP) plan, and hydroseeded in accordance with "**SECTOR 22 SOIL DISPOSAL SITE DESIGN GUIDANCE**". Existing site soil characterization is as recorded in SLAC's soil report "SP-04-12-04_small."
- I. Removal of all hazardous waste from existing building and site and separation and disposal into SLAC storage bins per SLAC's Waste Management requirements.

2.03 SLAC PROVIDED SERVICES:

- A. SLAC will provide independent inspection and testing services in accordance with Section 014000 of these specifications.
- B. SLAC will provide final terminations in data networking, voice technologies, and structured cabling scope in accordance with Chapters 20, 21, and 25 of the DGPS, as well as complete temporary data and voice services to the Cafeteria in B042 during the SUSB construction to keep the Cafeteria operational with telephone and data services during SUSB construction. All other work is to be completed by D-B Subcontractor.
- C. D-B Subcontractor shall turn all hazardous waste over to SLAC's Waste Management Group for acceptance and final disposition. SLAC is responsible for management and final disposition of existing hazardous waste. D-B Subcontractor is responsible for their generated hazardous waste, construction debris, and relocation of all soil spoils.
- D. SLAC has identified existing underground utilities such as electrical sanitary sewer, domestic water, heating water, chilled water and communications as shown on the Topographic Plan. All existing utilities and conditions are to be verified in the field by D-B Subcontractor before any construction work on that item commences.

2.04 FACILITY CRITERIA

A. General Criteria:

1. Provide fully distributed power, fire alarm, telecommunications, lighting, HVAC, plumbing, fire protection, and controls for a complete and fully operational office Building as described. The term "Building" means the entire facility and installations that are related to the operation of an office building, including to the following items: SUSB Building and support systems, paved areas, outdoor equipment pads and covers, sidewalks, and like items.
2. The Building shall be designed to be an attractive, safe, efficient, and comfortable place for occupants to work. In general, exposed conduit, electrical cabinets or panels, cable trays, power or communications drops, piping, ductwork, and HVAC equipment are unacceptable. In instances where an aesthetic decision is made to propose inclusion of exposed services (as an example, fire sprinkler piping or light fixtures mounted from the overhead deck in an area without a suspended ceiling) keep routings neat, aligned, and orderly, with all surfaces painted-out to match background. Even in such situations, minimize or eliminate exposed service routings wherever possible. Conflicts between structural elements and workstations are, likewise, unacceptable, and shall be eliminated or minimized to maximize the functionality of the workspace.
3. Design of the Building shall incorporate the best principles to the HPSB (High Performance Sustainable Building) Guidelines as shown in the Design Guidelines and Performance Specifications (DGPS) and provide a minimum of 30% savings over ASHRAE 90.1 (2007). The completed facility shall provide a healthful, resource-efficient, and productive working environment. The design-builder is encouraged to suggest measures and develop integrated solutions to meet the HPSB requirements.
4. High performance sustainable building principles to be considered in design shall include, but not be limited to, concepts such as orienting the facility to maximize heating and cooling efficiencies obtained by solar gain, performance of thermal mass, day lighting and individually Internet Protocol (IP)-addressable lighting with occupant control, strategic use of glazing both in materials and placement, means to control seasonal variations in direct solar gain through glazing, such as external screens or other shading devices, to minimize summer cooling loads, and energy efficient equipment. Site design shall include landscape based drainage features, and room for such features shall be provided within the project site.

5. The Building shall be a stand-alone four-story structure. In addition to the above criteria, Subcontractor shall evaluate the site and locate the facility in accordance with the following:
 - a. Use the shortest runs to connect to SLAC provided utilities and minimize the use of any pumping and lifting devices.
 - b. Provide a design for the most cost-effective total building infrastructure with low-cost maintenance, and low Life-Cycle costs to SLAC.
 - c. Site the Building so that construction over existing utility lines, including existing fire protection system piping, is avoided. If site constraints make such construction unavoidable and it is approved by SLAC, design the office building foundation system to prevent building loads from being transmitted to the utilities.
 6. Building Program: DGPS lists the desired interior spaces and finishes and their approximate square footages for the SUSB Office Building.
- B. Space Planning Criteria: Integrate all Building system and space requirements into cost-effective, highly flexible, efficient, code compliant and functional structure in accordance with the requirements stated in these specifications. Configure the Building shell, core elements, and private offices in such a manner as to maximize daylight penetration to the core elements, while minimizing solar heat-gain from the less desirable orientations. Spaces shall be sized to accommodate the actual equipment and systems designed, selected, and incorporated into Subcontractor's office Building design.
- C. Site Work Criteria:
1. Tapping and extending heating hot water from adjacent CUP building shall be coordinated with site work; chilled water received from tap at northwest corner of B050. Verify and coordinate actual site conditions, topography and utility elevations prior to design and construction.
 2. Provide concrete landing slabs at all Building entrances with PVC pipe sleeves, beneath the slabs to accommodate landscaping plumbing and wiring. Entrances shall be handicapped accessible based on ADA/UFAS requirements.
 3. Provide exterior lighting to illuminate Building entrances and all new pathways/walkways, parking lot and refuse/recycling dumpster area and meet Crime Prevention Through Environmental Design (CPTED) design guidelines.

4. Provide 4- inch PVC pipe sleeves every 20' beneath all walkways for future irrigation lines. Location of these sleeves shall be marked on a least one side of the walkway with stakes.
 5. A site boundary that defines the limits of the project and a building envelope has been noted on the site plan. Place the facility within the building envelope located within the site boundary, except for any connections required to extend the utilities from adjacent sites.
 6. Excavations will be required at the construction site and adjacent area where applicable. Restore any disturbed existing structures, not slated for demolition, to their original condition, remove all excavated soil/rubble from the construction site if not used as backfill or otherwise reused on the construction site. Confirm all waste disposals with SLAC Waste Management. Excess soil shall be delivered to Sector 22 and distributed per the "SECTOR 22 SOIL DISPOSAL SITE DESIGN GUIDANCE".
 7. Provide a construction trailer and all necessary temporary utilities at the equipment lay-down area, and temporary fencing, construction site security, site signage, and lighting of the construction site. Location and installation to be approved by SLAC through the Building Inspection Office (BIO) review process.
 8. Prepare the site, provide grading, retaining walls and establish the finish floor elevation. Provide drainage facilities, including landscape based storm water treatment in bio-swales within the limit of the site/project area.
 9. Existing driveways and fire lanes affected by construction shall remain open at all times during construction of the facility. On-site fire hydrants and Building perimeter areas shall be accessible by fire trucks as required by the SLAC Fire Marshal's Office.
- D. Structural Criteria: Structural items shall provide the facilities with safe, cost-effective and space-efficient systems that will support the loadings imposed by Building equipment, and operations, as well as the effects of natural phenomena. While structural steel frame construction has proved appropriate in the past for a variety of building types here at SLAC, D-B Subcontractor to determine which structural system to use on this project.
- E. Architectural Criteria:
1. Design Statement: The Building should reflect SLAC values: primarily space efficiency and the use of advanced technology, and as defined in the preliminary design drawings and DGPS.

2. Systems and products to facilitate the flexibility required to rapidly re-configure the space use, partitions, furniture, and all related building services such as HVAC, lighting, controls, power and communications. The character of the facility should be architecturally in harmony with the existing setting while not being ostentatious, while providing for practical adaptive flexibility in the future. The Building finishes and layout should reflect an economically efficient level of quality, and assure long-term expected use, with minimal materials degradation or maintenance repair or replacement.
3. The Building orientation should take solar heat-gain/glare and wind driven rain conditions into account, including maximizing daylight penetration into the Building from desirable orientations, while minimizing heat-gain from less desirable orientations.
4. Building Levels: The office Building shall be four-stories tall from Loop Road elevation and three-stories from the SLAC Campus Green.
5. Buildings life cycle costs analysis shall include all phases of the facility life cycle including planning, design, start-up, operational/use, closure, and disposal

F.Mechanical Criteria:

1. Provide HVAC systems, utility metering, heating hot water piping, chilled water piping, hydronic specialties, domestic hot water distribution, plumbing systems, fire protection systems, mechanical equipment, instrumentation, controls system, and testing and balancing required by these specifications.
2. Plumbing systems shall include potable water for domestic uses, sanitary sewer and drainage systems for roofs and sewage, and require metering.
3. Locate any portion of roof mounted mechanical equipment a minimum of 10 feet from the edge of roof or inside face of parapet. Provide a 42-inch high constraint (e.g. cable rail, parapet, guardrail or screen wall) to meet OSHA fall-protection requirements.
4. Provide all thermostats for the spaces indicated.
5. No special requirements have been established for fixture water-usage but SLAC will evaluate Subcontractor's proposal for initial and/or long-term water savings in order to achieve HPSB.
6. Natural Gas: D-B Subcontractor to provide needs summary to SLAC including advanced meter connected to the SLAC enterprise BMS.

G. Electrical Criteria:

1. Provide interior power distribution systems, grounding systems, lighting systems, telecommunication systems, metering, and fire alarm systems in accordance with these specifications.
2. The power supplied for this facility will be 1000 KVA. The power is supplied from the existing SLAC 12.47KV medium voltage distribution system utilizing existing manhole 64, Switch 3: See SLAC drawing 616-700-02-C1E that shows manhole 64 located to the southeast of the proposed site.
3. Provide products listed and labeled for their application, installations conditions, and the specified purpose by a nationally recognized testing laboratory (NRTL) recognized under 29 CFR 1910.7, such as UL or FM.
4. Electronic Door Locks: Provide conduit and pull string for future installation of card reader system at ALL Building exit doors and Building office suite entry and exit doors.
5. New fire alarm system shall be compatible with and tie into the existing SLAC fire alarm system

H. Fire Protection and Safety Criteria:

1. Fire Hazard Analysis (FHA): Prepare an FHA in accordance with Section 4.0 of DOE G420.1. Model FHA's are available for Subcontractor's use in preparing the FHA and two model analyses are available electronically from the SLAC at Subcontractor's request.
2. The Building shall be fully protected with an automatic fire sprinkler system.
3. All fire alarms, emergency lighting, fire blocking, fire separation, fire detection, fire suppression, and emergency access/egress systems shall comply with 2007 CBC, NFPA 101, and other applicable codes and standards.
4. Fire hydrants shall be provided on site per the 2007 California Fire Code.

I. Energy Conservation Criteria: See DGPS for additional information.

J. Environmental, Safety, and Health (ES&H) Criteria: In matters of facilities design, consideration for the safety and health of the employees and public, and mitigation of impacts to the environment take precedence over other aspects, such as function, cost, and expediency.

K. Sustainable Design Criteria:

1. Objective: The objective of sustainable design is to design and build a facility to minimize waste generation and resource consumption of a facility in all of its life cycle phases: construction, operation and ultimately, closure. The built environment has a profound impact on our natural environment, economy, health and productivity. Because of this, sustainable design is one of the core design goals for the new SUSB Office Building.
2. Sustainable Design Standards: The SLAC sustainable design criteria calls for addressing the Federal sustainable guidelines addressed in Division 1 specifications.

L. Interior Space Flexibility Criteria:

1. Configure mechanical systems, corridors, and structural grid for flexibility to accommodate future change. Integrate and plan modular construction systems into the design to allow for ease of construction and future maintenance interchangeability.
2. Use a system grid modular perpendicular to the corridor or hallway such that walls may be added or removed in the future with a minimum of interference with established (or potentially relocated, within the approximately 70% flexible space) locations of lighting fixtures, HVAC registers, electrical outlets, thermostats, windows, structural elements, telecommunications outlets, and fire-sprinkler heads.
3. Design shall include optimization of functionality for all workstations in offices and open areas. Conflicts between structural elements and workstations are unacceptable, and shall be eliminated or minimized.

2.05 SLAC – FURNISHED EQUIPMENT AND MATERIALS

- A. The following will be furnished by SLAC as reference reports only; **please note that the D-B Contractor is to rely on their own reports for their design and construction purposes:**
 1. Geotechnical Report and Soil characterization report for site
 2. Site Topographic layout with underground utility information
- B. SLAC will furnish temporary points of connections for construction power and water for construction trailer and construction site. These connection points are located as follows:
 1. Electrical: 100A 480V existing feeder located at B040 from 40S-4A.

2. Water connection after SLAC approval: FHY #1117 located at loop roadway, north of existing Panofsky Auditorium/B043, and FHY#115 and 116, east of Cafeteria/B042.
 3. Sewer: no sewer connection is provided
- C. Color selection criteria, based on collaborative consultation between SLAC and the D-B Subcontractor's design team.
- D. Identification System:
1. Assigned equipment numbers, based on SLAC's approved design
 2. Assigned room numbers, based on SLAC's approved design

3 ANTICIPATED SCHEDULE, dates may be changed:

Event	Date
Final RFP issued to D-B Subcontractors for Qualifications	December 17, 2012
Statement of Qualifications due from D-B Subcontractors	January 7, 2013
Statement of Qualifications reviewed	January 16, 2013
RFP released to selected qualified D-B Subcontractors	January 17, 2013
RFP due	February 21, 2013
RFP response reviewed	March 7, 2013
Notify date of interviews	March 8, 2013
Interviews	March 15 - 19, 2013
Negotiations	March 20 – April 9, 2013

Best and Final Price Negotiations	April 10–23, 2013
SSA source selection Approval obtained	April 24, 2013
Subcontract award (after DOE ESAAB)	June 3, 2013

Deliverables: Refer to Specifications in “SLAC National Accelerator Laboratory Science and User Support Building.”

Science and User Support Building (SUSB)

Tier 1: Mission Critical Goals; all goals are in order of preference:

- 1) Meet Building program's quantitative and functional needs within 58,000 to 72,000+ square foot Building in a four story building with 80+ Staff Capacity
- 2) Provide an energy efficient and sustainable Building per High Performance Sustainable Buildings (HPSB) Summary Checklist for New Buildings
- 3) Optimize energy performance of Building with a minimum of 30% savings over measurable ASHRAE 90.1 (2007)
- 4) Provide a high quality Building as SLAC's front door and gateway to public which enhances SLAC's open collaborative culture
- 5) Provide total Building energy use of 40k BTU/SF/year

Tier 2: Highly Desirable Goals:

- 1) Optimize energy performance of Building with a minimum of 40% savings over measurable ASHRAE 90.1 (2007)
- 2) Provide a flexible open workspace with a steel/concrete moment frame and easily reconfigured enclosed spaces.
- 3) Provide latest "state of the art" technology in Auditorium, Visitor's Center, Breakout and Conference rooms for Users
- 4) Completion of all construction two months before SUSB's baseline completion date: SUSB final Certificate of Occupancy.
- 5) Provide total Building energy use of 35k BTU/SF/year

Tier 3: If Possible Goals:

- 1) Optimize energy performance of Building with a minimum of 50% savings over measurable ASHRAE 90.1 (2007)
- 2) Provide latest "state of the art" technology in Main Lobby showing Building's energy savings through the use of visual displays with integrated flat screen panels showing Building's current Energy Efficiency and energy use
- 3) Provide total Building energy use of 31k BTU/SF/year
- 4) Provide a Net Zero Energy Building: provide net zero energy use and waste

- 5) Support Building amenities program by providing a Building with upgraded/enhanced finishes and architectural design for Users and employees