



# ASSOCIATED SCHOOLS OF CONSTRUCTION

ROCKY MOUNTAIN REGION  
REGION VI  
AK, AZ, CO, ID, MT, NV, NM, UT, WY

FAR WEST REGION  
REGION VII  
CA, HI, OR, WA

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National Preconstruction Problem  
February 12-14, 2009

Problem Statement  
Phase II: Request for Proposals

New Office Building Project  
Los Angeles, CA

Problem Sponsor:



PCL Construction Services, Inc.  
700 N. Central Avenue, Suite 700  
Glendale, CA 91203

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**I. PRECONSTRUCTION PROBLEM TIME TABLE**

**CENTRAL PACIFIC ABC ROOM**

**THURSDAY, FEBRUARY 12 TH**

Turn in Phase I RFQ .....	6:00 AM
Phase II Pre-Proposal Conf.....	6:00 AM
Written Questions (RFI's) Due.....	10:00AM
First Progress Meeting .....	11:00 AM
Visits to Student Rooms .....	1:00 PM to 3:00 PM
Visits to Student Rooms .....	6:00 PM to 8:00 PM
Phase II Proposals Due .....	10:00 PM

**FRIDAY, FEBRUARY 13TH**

Interview Start Times Posted .....	7:30 AM
Interview Materials Due (All Teams) .....	7:30 AM
Interviews Start .....	8:00 AM
Project Debriefing .....	6:45 PM
Reception .....	8 PM – 10 PM

**SATURDAY, FEBRUARY 14<sup>TH</sup>**

Career Fair .....	8:00 AM – 12:00PM
Awards Banquet / Luncheon .....	12:00 PM

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**II. PREFACE**

Welcome to the 2009 ASC Student Competition. PCL Construction Services, Inc. is proud to be the sponsor of the Preconstruction Services National Problem at the 2009 Competition in Sparks, NV.

We believe this problem will enhance each student's experience to the everyday occurrence of preconstruction services in today's construction environment. Clients require varying levels of preconstruction services including design coordination, budget development and construction planning.

The problem proposed will be typical to the services provided to a client including the proper selection of your construction team, and in some cases, consultants and subcontractor team. Other services include risk analysis, contracts, design creation, estimating, constructability review, resource requirements, budgeting, scheduling, purchasing, safety and contracting.

This competition is an invaluable tool for your career development. It is designed to enhance and expose each team member in different facets of the construction industry. Each team members' technical knowledge of estimating, scheduling, planning, leadership, and communication skills will be put to the test during the next two days.

PCL hopes every team benefits from this 'real-life' experience. We are here to support the ASC and its members, so please ask questions after the competition is complete or any time throughout the school year.

Understand there are many dynamic elements to every project whether in design or under construction, including this actual project constructed by PCL. Please keep an open mind to the challenges that are presented during this event. Learn from our own project experience, as well!

At the end of the day, only three teams are awarded a placement and these teams will be recognized at the ASC Awards Ceremony on Saturday. Regardless of your final overall placement, each competitor is truly a winner when you combine the experience of the competition, coupled with the industry exposure you have gained throughout the event.

We look forward to great thinking, fellowship and sportsmanship throughout the week. We are proud to serve our great industry with this problem and advancing construction education to all the member schools, faculty and students of the Associated Schools of Construction! Good luck!

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**III. PROBLEM SCENARIO**

Congratulations. The development team of PRIHD Development Partnership has short listed your firm based upon your response to the Phase I RFP. Your team is now invited to continue on to the next stage of the Contractor selection process. You and several other competing teams will now be responding to the Phase II Request for Proposal.

Your team will develop the Phase II RFP Response based upon the design drawings and specification documents prepared by the Owners' design consultants.

Your team will be asked to establish a project budget, prepare a preconstruction schedule and provide various other deliverables as defined in the succeeding portions of this Problem Statement. You must submit your documentation to the development team by 10:00 PM on February 12, 2009 and be prepared to present your findings to the developer's panel in a presentation to them on February 13, 2009. Interim progress meetings are scheduled for 11:00AM and 2:00 PM on February 12<sup>th</sup>. Any questions should be delivered, in writing on the Request for Information (RFI) form to the management team up until 10:00 AM. Response to these RFI's will be provided at or before the 11:00 AM meeting. The RFI form is provided in Section X - Supplemental Information.

For the oral presentation on Friday, all teams shall include students representing at a minimum your project executive, preconstruction manager, project manager, sr. estimator, project superintendent and project engineer. You will be allowed 20 minutes for the team presentation and 10 minutes for questions and answers from PRIHD management.

At a minimum, your presentation should cover the following areas:

- Budget
- Schedule
- Safety
- Site Utilization
- Team Differentiators

**PROJECT INFORMATION**

The Fox Entertainment Group Office Building is located on one of the most prestigious and busiest studio lots in the world. The building consists of a 4 level subterranean parking structure and a 5 level office building. The parking structure is cast-in-place, post-tension concrete, 325,000 SF, 890 parking spaces. The office building is structural steel with slab on metal decks and 200,000 SF of space. The exterior is a composite of plaster, curtain wall and punched windows. This active studio lot is home to various productions including American Idol, The Simpsons, Bones, and Family Guy television shows.

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The geotechnical report indicates the site has methane gas present in the soils. A methane mitigation system will need to be designed and approved prior to final building department approval.

It is anticipated the project will break ground in September 2009. The intent is to begin preconstruction in February 2009 for a six month duration. The construction schedule is expected to be 19 months.

Langdon Wilson, the design firm has progressed the design to the 75 % construction document design stage, and the developer now wishes to engage the contractor to provide preconstruction services including design coordination, constructability review, budget development and construction planning prior to moving into 100% construction document phase. The developer has a history of teaming with contractors and design consultants who understand the studio and filming environment.

Your firm has an extensive office portfolio of both mid-rise and high-rise product. You recently completed an office building with Langdon Wilson in Pasadena less than two years ago.

The developer has decided that the form of contract will be AIA102-2007 with A201 General Conditions.

**Any information concerning the size and scope and timelines provided in previous correspondence has been superseded by the information provided in this written problem statement.**

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**IV. PROBLEM OUTLINE**

Organize and tab your documentation submittal according to the following outline. Include only the information requested in **Section VI, Submission Requirements**. Remember to be as brief as necessary to convey your points.

1. Cover Letter
2. Executive Summary
3. Project Budget
  - a. Preconstruction and Construction Services Agreement
  - b. Conceptual Estimate Summary
  - c. Preconstruction Services Fee
  - d. General Conditions
  - e. Concrete Estimate
  - f. Steel Estimate
  - g. Subcontractor Recap
4. Project Schedule
5. Site Logistics
6. Cash Flow Analysis
7. Mechanical Load Analysis and Alternate Design Solution
8. BIM Analysis of shoring tiebacks and fiber optics
9. LEED Analysis
10. Bonus – “Red Light” procedure and impact analysis

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**V. SUBMISSION REQUIREMENTS:**

The appearance and organization of proposals is important in our industry, as it is often our first opportunity to interact with a new client and/or impress the upper management in your company. We want them to see the professional image we are trying to portray and be able to find and understand the information we are presenting. Points will be awarded in this section based upon appearance and organization, as well as the clear and concise responses the following requirements. Six copies on your Phase II response are to be submitted.

If you utilize a new company logo for your submission, include it on the cover of the proposal book. Also, include the school logo in the lower left hand corner of the proposal cover.

A disc has been included with some of the forms referenced so you do not have to recreate them. *Always, check formulas to ensure that proper extensions are made.*

**1. Cover Letter**

Provide a brief cover letter. At a minimum, you must acknowledge all addenda, provide a company logo and sign the letter.

**2. Executive Summary**

An Executive Summary is an important part of your proposal. It identifies, in a summary fashion, the key benefits and features you want an Owner to know about your Company, and why they should choose your team over others for their project. It is an important sales tool. It lets you be creative and points out your most important differentiators from your competition. It should key in on what you have learned from your research of the Owner's "hot buttons" (most important factors of the project) and should address how you will make sure those "hot buttons" are addressed. Your response to a Request for Proposal should always include a Cover Letter and an Executive Summary. See the Supplemental Information section for the Cover Letter and Executive Summary exercises.

**Deliverables:**

1. Cover Letter
2. Executive Summary

**3. Project Budget**

**A. Preconstruction and Construction Services Agreement**

Should your firm be selected, you will be expected to execute a Preconstruction and Construction Services Agreement. It will serve as an interim agreement to authorize the start of preconstruction services and memorialize agreed business deal points (commercial terms) until superseded by an executed contract.



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The Preconstruction and Construction Services Agreement should cover the services you anticipate providing in your preconstruction and construction budgets.

**Deliverable:**

1. *Signed and Completed Preconstruction and Construction Services Agreement*

**B. Conceptual Estimate Summary**

You will be finalizing the estimate to determine the budget price that you will submit to the developer. The estimate will be prepared on the 75% Construction Document Pricing set of documents that have been provided. The Conceptual Estimate Summary form has been filled out with the values for the items that have already been analyzed, priced and summarized, but you will be taking proposals on a few remaining trades, preparing a detailed concrete and structural steel estimate, estimating your General Conditions and determining your required fee for the Project. See Supplemental Information section for forms. You will also prepare an estimate of the costs anticipated to be incurred during the preconstruction period of the project. You must plug the values of these items into the Conceptual Estimate Summary Form, apply your required fee for the project, and determine what the overall budget for the project should be.

**Deliverable:**

1. *Completed Conceptual Estimate Summary*

**C. Preconstruction Costs**

In an ever increasingly competitive industry and the requirement of many of our clients to operate in a collaborative environment with design professionals, the scope of preconstruction services continues to grow. Preconstruction services can tie up significant amount of personnel resources who are not engaged in our core business of building actual projects. What was once considered as a loss leader and relatively inexpensive cost of project pursuit, preconstruction costs often represent a significant cost that need to be reimbursed by our clients as a professional service, much like that of our design consultants.

As part of your overall budget for the project you will need to prepare an estimate of preconstruction services. A preconstruction personnel billing rate worksheet and estimate form has been included in Supplemental Information section for your use in developing the estimate. A description of required services for preconstruction services to be included in your estimate has also been included. Preconstruction costs shall be calculated to include personnel directly working on the project. Preconstruction personnel generally work on multiple projects at one time and are generally not charged full time against any given project. Home office overhead is not to be included in preconstruction costs.

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**Deliverable:**

1. *Preconstruction Services Estimate*

**D. General Conditions**

General Conditions are defined as the on-site project management and supervision costs incurred throughout the duration of the project to support and supervise subcontracted and self performed work. General condition costs are to be categorized by Project Staff for jobsite personnel costs only, and Project Overhead and Equipment related to rental equipment, and the balance of general conditions costs not included as Project Staff.

Prepare a detailed breakout of General Conditions that your team anticipates for the project. Use the forms provided for each of the two categories of General Conditions costs as included in the Supplemental Information Section. One excel file has both worksheets, tabbed at the bottom of the spreadsheet. Personnel rates and equipment rental are included for your use. You may also use R.S. Means manuals for any information required to complete your estimate, but not provided on the rate sheets. Home office overhead is not included in the General Conditions for the project. You do not have to include costs for the Owner and subcontractors.

Supervisory staff positions are to be provided as deemed necessary by your team. The staff worksheet lists suggested positions as a starting point, but add or subtract as your team deems necessary. Remember there are 2080 work hours in a year.

Supervision costs for self performed work do not need to be included.

Prepare a Staffing Matrix/Schedule showing the duration and period for each member to be assigned to the project.

**Deliverables:**

2. *Completed General Conditions Estimate Forms and Staffing Matrix/Schedule*

**E. Concrete Estimate**

Your company prides themselves on being a builder, not a broker, and has a long history of self-performing many scopes of work, including concrete work. Your team has completed the subterranean and parking structure concrete takeoffs and pricing, but must still analyze the slab-on-metal-deck (SOMD). Using the plans and specifications you've been furnished, as well as pricing guidelines and forms furnished with the Supplemental Information, complete the quantity and pricing analysis of the SOMD and incorporate that budget into the Conceptual Estimate Summary.

**Deliverable:**

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1. *Completed Concrete Estimate Form*

**F. Steel Estimate**

The structural engineer is still completing the detailed design for the office structural steel frame. In order to complete the budget analysis, as well as to help select the steel subcontractor, the engineer has provided a note on the drawings which gives a parameter to be used for budget analysis and comparison. Using the plans and specifications you've been furnished, as well as pricing guidelines and forms furnished with the Supplemental Information, complete the quantity and pricing analysis of the structural steel frame and incorporate that budget into the Conceptual Estimate Summary.

**Deliverable:**

1. *Completed Steel Estimate Form*

**G. Subcontractor Bid Recaps**

You have received proposals from three electrical firms. You are assigned the task of "recapping" the bids to determine the lowest responsible proposal. In order to arrive at the value of work to be loaded into the Conceptual Estimate Summary you must recap the quotes to determine the most advantageous value to use. The Recap sheet has been created and "check questions" written on them to determine if the subcontractors have the correct scope per the plans and outline specifications. You may find that additional check questions are necessary to define the complete scope or differentiate between the proposals. Feel free to add to the check questions as you deem necessary. Choose your subcontractors carefully to ensure that they will perform the correct scope, staff the project adequately, and that they are financially stable.

Once you have arrived at a recapped total for each firm, take the lowest responsive and responsible bid and load that number in the electrical line of the Conceptual Estimate Summary.

What risks do you see in the electrical quotes? Provide a brief narrative of any concerns.

**Deliverables:**

1. *Completed Subcontractor Recap Form and Narrative*

**4. Schedule**

As part of your review with management, you will be required to present a complete, workable Critical Path Schedule (CPM) to plan the work within the guidelines prescribed below. As this is a preconstruction services problem, PRIHD management is equally interested in the activities and

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your thought processes in the preconstruction phase as in the construction phase. The schedule is to convey your teams plan to fully execute the project from cradle to grave.

The following criteria explain the background information and requirements of the CPM schedule your team will present.

1. General Schedule Criteria:
  - a. Presentation Criteria:
    - i. Format:
      1. At minimum, show Activity ID, Activity Description, Original Duration (OD), Early Start (ES), Early Finish (EF), and Total Float (TF), per activity (see Figure "A" below)
      2. Organize and sort Preconstruction activities grouped together with construction activities following.

**Figure A: Schedule Activity Example**

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float	
2008 ASC Student Competition						
Design						
01010	Contractor Selection/Notice to	1	14FEB08	14FEB08	0	Contra
Permitting and Entitlements						
01020	MUP Submittal	1	14FEB08	14FEB08	0	MUP S

- ii. Activity Count: 150- 200 activities
  - iii. Provide a sufficient amount of preconstruction and construction activities. Include design, permitting and entitlements, easement negotiations, long lead and construction activities
  - iv. Show the logic between activities
  - v. Clearly show the critical path of the schedule
  - vi. Organize activities so they are easy to read, activities are grouped intuitively and the schedule flows well.
- b. Contractual Criteria
    1. Project Start Date for Preconstruction (Notice to Proceed): February 12, 2009
    2. Preconstruction Period: 7 Months
    3. Project Duration: 19 Months
    4. Minimum Milestones to be presented on CPM Schedule:

Contract Award	Permit Submittal (S)
Design Complete	GMP Estimate
Begin Demolition	Parking Structure Complete
Completion of Shoring and Excavation	C of O Inspections

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Final Completion	Structural Steel and Metal Decks Complete
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5. Assume the following calendar holidays: May 26, 2009, July 4, 2009, September 1, 2009, November 26-27, 2009, December 25, 2009, January 21, 2010, May 31, 2010, July 5, 2010, September 6, 2010, November 25-26, 2010, December 24, 2010, December 31, 2010, May 30, 2011, July 4, 2011, September 5, 2011.
2. Preconstruction Phase Criteria:
- a) The Architect and consultants will be 75% complete with the construction documents on February 12, 2009.
  - b) The permitting agency will allow phased permitting for demolition, excavation and shoring, structure and finishes.
  - c) Estimates will be required at the completion of each design phase
  - d) The project may be contracted under a phased GMP contract.
3. All other work criteria:
- a) Original durations for the demolition, excavation, shoring, concrete structure, steel, etc. shall be derived on a (rough) quantitative basis per the "Typical Construction Activity" worksheet and explanation included in the scheduling section of the Supplemental Information. Use the worksheets to calculate durations based upon (rough) quantities that you survey, then divide by a productivity rate that you derive. You may use RS Means or other productivity data resources to help if needed.
  - b) The remainder of the work will be handled by subcontractors your team will manage.
  - c) Scheduling of all work should support the assumptions made by the Site Utilization Plans drafted in Section 5 below
  - d) Review the plans thoroughly. Ensure that your schedule encompasses as much of the work possible in the limited number of activities you are required to provide.
  - e) Your team may begin construction anytime, provided you have your first permit in hand. You may lag activities as you see fit and this should be based on reasonable, logical assumptions.
  - f) The last activity in your schedule should be Contract Completion.

General comments:

- 1. Do not resource load or cost load your schedule
- 2. Remember preconstruction period encompasses all project activities prior to the actual commencement of work in the field and may overlap the initial construction phases of the project.

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3. When it comes to scheduling, there are no right or wrong answers. Ensure that you team can substantiate and explain all of the assumptions and decisions made in the process of developing your schedule.

**Deliverables:**

1. *Preconstruction Schedule & Preliminary Project Schedule*

## 5. Site Logistics

The Fox Studios 103 Project is located on the corner of Pico and Ave of the Stars, bordered by the main entrance to Fox Studios and an existing office building. There are currently no nearby parking lots, no parking on Ave. of the Stars and Pico. The PCL trailer will be 60' X 24'; the Plumbers and Electricians trailers will be 30' X 12' each. Assume at least 1 storage container for the Plumbers, Electricians, Mechanical sub and Rebar sub.

### Site Plan

Use the full size drawing to create your site logistics plan. Other drawings may be used if you determine them necessary to fully explain your plan. Your plan can add or omit items from the basic list below, as long as a valid reason is present and that your logic does not violate code requirements or jurisdictional limits. Ensure that the locations of all items listed below are coordinated with future work activities, so they do not impede construction progress. In addition, if your site utilization changes/evolves throughout the project, describe any such changes. Include the following without limiting to:

- Project Office location
- Parking
- Location of subcontractor offices, dryshacks, etc.
- Locations for temporary fences
- Location of access roads and gates (union and non-union)
- Project and required signage (location and what signs are needed)
- Location of temp services; Water, Power, Trash, etc
- Temporary Toilet Locations for 100 workers
- Laydown areas
- Personnel/material hoist location (at different times in the project if needed)
- Concrete Pumping locations
- Delivery locations for staging and unloading
- Stair towers, if used.
- Emergency evacuation location
- Any SWPPP necessary
- North Arrow
- Any other items that your team thinks should be on the plan

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In addition to a graphical plan provide written narrative to further explain the site utilization plan prepared by your team. When site work is to take place, briefly explain any conflicts that might occur with locations of trailers, etc. and completing all of the landscaping and site work. Provide a brief explanation of how these conflicts will be coordinated and resolved. If there are no foreseen conflicts, briefly explain how the site utilization plan was coordinated with the final site work.

**Deliverable:**

1. *Site Logistics Plan and Narrative*

## **6. Cash Flow Analysis**

As part of its financial analysis, PRIHD Development Partnership needs to understand its cash flow requirements. As part of your submittal, prepare separate cash flow analyses for the Preconstruction and for the Construction phases of this project using the following assumptions:

- Use the Contractual Criteria for durations of each phase.
- Assume no retention for the Preconstruction phase.
- Assume 10% retention for the Construction phase to be paid 60 days after completion.
- Assume payments will be on the last day of each month.
- Assume a tolerance of Zero.

**Deliverables:**

1. *Preconstruction and Construction phase cash flow analysis*

## **7. Mechanical Load Analysis and Alternate Design Solution**

Due to the current economic downturn, the Fox management has decided to shelve the \$35 million central plant expansion project. This creates a major problem of how to provide chilled water for the air conditioning of the new office building, which has been contracted and been released for construction about 2 months ago. For this exercise you will need to calculate total capacity of chilled water needed for the Office Building, size the chillers and pumps and provide a rough order of magnitude (ROM) budget to add a chilled water plant to your building.

**Deliverables:**

1. *ROM Budget, Cooling Load Analysis and Equipment Size required*

## **8. Building Information Modeling**

The new Fox Office Building is just south of an existing office building (FNC Operations Building) with similar 4 stories of underground parking, see sheet A-1.02A. There is a bundle of fiber optic cables running underground between the two buildings, see sheet C-1.02. These fiber optic cables transmit the entirety of Fox's programming to the outside world. The cost of damaging these

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cables is \$5 Million a minute of interrupted service. All necessary precautions need to be taken to avoid damaging these cables when drilling shoring tie-backs for the new building.

The shoring engineer designed the tiebacks for the north underground wall to enter the ground per the SH- series drawings, but he did not have all of the as-built information of the existing conditions.

Determine if the tiebacks, 2 of them at soldier piles #34 and #1 violate this safety zone and if they conflict with any other existing conditions.

There is a 7'-0" "safety zone" that the tieback can not violate surrounding the 11"x11" conduit bank. See C-1.20.

If the tiebacks conflict with the safety zone or any other existing conditions, determine the most efficient tie-back angle to resolve the conflict using the angle to length chart.

**Deliverables:**

1. *A narrative describing any changes required to the shoring system to avoid conflicts with existing infrastructure. A 3D Model or sufficient 2D sketches of the proposed modifications to the shoring system to graphically demonstrate that the proposed changes avoid conflicts with existing infrastructure and conform to the desired factor of safety of the Owner*

## **9. LEED™ Analysis**

The developer has questioned the team about possibly marketing a LEED™ for Core and Shell project.

Certifying a LEED™ project requires the combined effort of the entire project team. The owners, architect, consultants, and the construction team must all contribute in order to successfully certify a LEED™ building. After initial meetings conducted between the owner and the design team, 22 points have already been determined to be achievable. It is time for the construction team to provide their input on the amount of additional LEED™ points that they consider feasibly attainable.

Make a recommendation stating the number of LEED™ points attainable as follows:

- 1) Determine which additional points can be achieved at no additional cost to the owner to reach LEED Certified. Fill out a scorecard for LEED Certified and provide a narrative on the reasoning behind the selection of the points your team used to achieve LEED Certified.
- 2) Determine which additional points can be achieved at the lowest cost to the owner to reach LEED Silver. Fill out a scorecard for LEED Silver and provide a narrative on the reasoning behind the selection of the points your team used to achieve LEED Silver and an estimate of the additional costs.
- 3) Determine which additional points can be achieved and the cost to the owner to reach LEED Gold. Fill out a scorecard for LEED Gold and provide a narrative on the reasoning



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behind the selection of the points your team used to achieve LEED Gold and an estimate of the additional costs.

The following is a list of points that have been predetermined by the owner and design team. This information is also reflected in the LEED™ CS score card provided. Your Team only needs to evaluate the credits in the “?” column of the scorecard provided. Do Not change any previously predetermined credits by the owner and A/E Team.

**Sustainable Sites**

- Credit 1 – Site Selection – 1pt
- Credit 2 - Development Density and Community Connectivity – Unattainable
- Credit 3 – Brownfield Redevelopment – Unattainable
- Credit 4.1 – Alternative Transportation, Public Transportation – 1pt
- Credit 4.4 – Alternative Transportation, Parking Capacity – Unattainable
- Credit 5.1 – Site Development, Protect or Restore Habitat - Unattainable
- Credit 5.2 – Site Development, Maximize Open Space – Unattainable
- Credit 8 – Light Pollution Reduction – 1 pt
- Credit 9 – Tenant Design & Construction Guidelines – 1pt

**Water Efficiency**

- Credit 1.1 Water Efficient Landscaping, Reduce by 50% – Unattainable
- Credit 1.2 Water Efficient Landscaping, No Potable Use or No Irrigation – Unattainable
- Credit 3.2 Water Use Reduction, 30% Reduction - Unattainable

**Energy and Atmosphere**

- Credit 1.5 – Optimize Energy Performance – 24.5% New Buildings – 5pts
- Credit 2 – On Site Renewable Energy – Unattainable
- Credit 3 – Enhanced Commissioning – 1pt
- Credit 4 – Enhanced Refrigerant Management – Unattainable
- Credit 5.2 - Measurement and Verification: Tenant Sub-Metering – 1pt
- Credit 6 – Green Power – 1 pt

**Materials and Resources**

- Credit 1.1 Building Reuse, Maintain 25% of Existing Walls, Floors & Roof – 1 pt
- Credit 1.2 Building Reuse, Maintain 50% of Existing Walls, Floors & Roof – Unattainable
- Credit 1.3 – Building Reuse, Maintain 75% of Interior Non-Structural Elements - Unattainable
- Credit 3 - Materials Reuse, 1% - 1 pt
- Credit 4.1 – Recycled Content, 10% ( Post Consumer + ½ Pre-Consumer ) – 1 pt
- Credit 4.2 – Recycled Content, 20% ( Post Consumer + ½ Pre-Consumer ) – 1 pt
- Credit 5.1 – Regional Materials, 10% Extracted, Processed and Manufactured – 1pt.
- Credit 5.2 – Regional Materials, 20% Extracted, Processed and Manufactured – Unattainable
- Credit 6 – Certified Wood – Unattainable

**Indoor Environmental Quality**

- Credit 1 – Outdoor Air delivery Monitoring – 1 pt

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Credit 2 - Increased Ventilation – Unattainable  
Credit 4.1 – Low- Emitting Materials, Adhesives & Sealants – 1 pt  
Credit 4.2 – Low- Emitting Materials, Paints and Coatings – 1 pt  
Credit 4.3 – Low-Emitting Materials, Carpet Systems – Unattainable  
Credit 4.4 – Low Emitting Materials, Composite Wood & Agrifiber Products – Unattainable  
Credit 5 – Indoor Chemical & Pollutant Source Control – 1 pt  
Credit 6 – Controllability of Systems, Thermal Comfort – 1 pt  
Credit 7 – Thermal Comfort, Design – 1 pt  
Credit 8.1 – Daylight & Views, Daylight 75% of Spaces – Unattainable  
Credit 8.2 – Daylight & Views, Daylight 90% of Spaces – Unattainable

**Innovation & Design Process**

Credit 1.1, 1.2, 1.3, 1.4 – Innovation in Design - Unattainable

**Deliverables:**

1. *Completed LEED™ Scorecard and Narrative for each of 3 levels of LEED (Certified, Silver & Gold)*

**10. Bonus – “Red Light Procedure”**

A very unique aspect of this project is that it is being built on a working TV & Movie production lot. While most TV and Movie filming is done inside of sound controlled buildings, the Fox lot has an outdoor filming area, which replicates a New York City street, hence the name NY Street. Film for TV and Movies is extremely sensitive to sound and vibration and must be carefully controlled, especially when filming occurs in an outdoor environment. An actual tripod with a flashing red strobe light is used to signal when the cameras are rolling, hence the name “Red Light” and that all noise and vibration which may impact the filming must be ceased immediately.

Some other interesting information is that a normal 8 hour filming day, which begins at 10:00 AM, breaks for lunch from 2:00 PM to 3:00 PM and is finished by 7:00 PM. During the 8 hour day, much of the time, 90%, is spent setting up a scene and rehearsing. Only about 10% of the time are the cameras and sound equipment actually recording. Although the overall 8 hour +1 hour for lunch day is known, the actual time when the filming and sound recording occurs happens when everything is ready and rehearsal is done, so it is not possible to know in advance when the actual “Red Light” will be turned on.

For the purpose of this problem, please assume that shooting on NY Street will occur a maximum of 2 days Monday through Friday per week, the TV & Movie Industry is on hiatus all of the Month of December and from June through August each year.

For this problem please develop a one page procedure of how your project team will successfully manage “Red Lights” Include contact information, how communications will flow and how you will track “Red Light” impacts against the Contract Allowance of 10 days. Describe in a narrative of steps your team will take to minimize the cost & schedule impacts from “Red Lights” and ensure

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the allowance is not exceeded during the course of the project. Provide an analysis, based upon your team's procedure and efforts to minimize the cost & schedule impacts, of the anticipated cost and schedule impact to the project due to "Red Lights".

**Deliverable:**

1. *"Red Light" Management Plan, Narrative and Projected Cost & Schedule Impact to the project*

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VI. COMPETITION SCORING SYSTEM:

<u>Item</u>	<u>Description</u>	<u>Points</u>
	Phase 1 RFP Phase I	20
	Phase 2 RFP Phase II	50
	Phase 3 Interview	30

*Note: Late Submittal Point Deduction*

Time Adherence Scoring

It is critical to submit proposals on time. For those who do not adhere to the published times, points will be deducted according to the following schedule:

- Phase I Submittal
  - (on time = 0, up to 1 min late = -1, up to 10 min late = -2, later = -4)
- Phase II Submittal
  - (on time = 0, up to 1 min late = -2, up to 10 min late = -3, later = -6)
- Phase III Presentation
  - (on time = 0, up to 1 min late = -1; up to 2 min = -2; 3 = -3; 4 = -4; later = -5)

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**VII. LIST OF JUDGES:**

Jeff Miller, Construction Manager  
(818) 246-3481  
*Acting as President, PRIHD*

Los Angeles District  
700 N. Central Avenue, Suite 700  
Glendale, CA, USA 91203

Wil Painter, Regional Manager, Preconstruction  
(818) 246-3481  
*Acting as Project Director, PRIHD*

Los Angeles District  
700 N. Central Avenue, Suite 700  
Glendale, CA, USA 91203

Craig Warner, Operations Manager  
(808) 541-9101  
*Acting as Operations Manager, PRIHD*

Hawaii District  
1099 Alakea Street, Suite 1560  
Honolulu, HI, USA 96813

Michael Koury, Project Manager  
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*Acting as VP, Finance, PRIHD*

Los Angeles District  
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Scott Viola, Project Manager  
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*Acting as Facilities Manager, PRIHD*

Hawaii District  
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Honolulu, HI, USA 96813

Bruce Winer, Business Development Manager  
(858) 657-3400  
*Acting as Facilities Safety & Risk Manager, PRIHD*

San Diego District  
4690 Executive Drive, Suite 100  
San Diego, CA, USA 92121

**Alternates:**

Kurt Boyd, Manager Business Development  
(425) 454-8020

Seattle District  
15405 SE 37<sup>th</sup> St, Su 200  
Bellevue, WA 98006

Dale Kain, Director of Corp. Development  
(303)365-6500

Denver Head Office  
2000 South Colorado Blvd Tower Two  
Suite 2-500 Denver, CO 80222

Dave Yount, Operations Manager  
(818) 246-3481

Los Angeles District  
700 N. Central Avenue, Suite 700  
Glendale, CA, USA 91203

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**VIII. COMPETITION RULES:**

The rules for the competition are designed to provide each team with an equal opportunity to apply their knowledge in developing their respective solutions and an equal opportunity to present their problem solutions to the judges. The following rules apply to the National Preconstruction Services Problem and supplement the ASC Competition Rules:

1. While the competition is in progress, only the six students identified as being team members shall be present in the teams' room. Faculty advisors may not interface with their team once the competition has begun.
2. Six (6) copies of the proposal must be turned in at the prescribed time. **Proposals will not be returned to the teams.** If you require some of the material in your proposal for your oral presentation, please make the appropriate copies prior to your submission of the written problem for your use.
3. The number of computers per team and use of the internet is to be as outlined in the ASC Competition Rules.
4. Once the presentations begin, only the teams who have presented their solutions may be present at the presentations of subsequent teams. This will mean that the first team up gets to see them all, while the last team does not get to see any of the others. The purpose of this rule is to prevent those participating in later sessions from gaining an advantage as to the contents of previous sessions.
5. Presentation materials for all teams are to be turned in to the judges prior to the first interview, by 7:30 AM on Friday, February 13th. No other presentation material will be allowed into the presentation that is not turned into the judges by this time. NO EXCEPTIONS.
6. All decisions of the judges are final.
7. The problem presented is an actual project completed by PCL. To avoid any conflict of interest or unfair advantage, any student who may have potentially worked on the project in any way shall identify themselves to PCL immediately. This issue will be reviewed, and if appropriate we may request that an alternate be assigned to the project. PCL shall make the final decision as to equity in such a case.
8. Points will be deducted if proposals are submitted late per the Scoring System noted in Section VI. Written proposals will be due as indicted in Section I. The submission location will be announced at the commencement of the competition. Other deliverables will be as noted elsewhere in the Problem Statement.
9. No phone calls, emails, or communication of any kind shall be made to the Owner, Architect, Engineer or design consultants that may be listed in the documents provided for this competition. They are aware that no team is to contact them and have been notified to contact the judges if any contact occurs. Contact with the any of the above shall disqualify team from the competition.
10. Do not submit any extraneous materials with your written proposal, including company profiles, marketing materials etc. Please limit your response to the information requested. Be brief, clear and concise.
11. Any information concerning the size and scope and timelines provided in previous correspondence has been superseded by the information provided in the written problem statement and is not to be used in response to Phase 2.

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12. The last and most important rule: Have fun, learn, and develop new relationships.

**Violation of any of these rules will be grounds for disqualification from the competition**

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**IX. COMPETITION EVALUATION FORM:**

Please complete the evaluation form included in the Supplemental Information section. Your feedback is important to our team as we strive to continually improve the problem in years to come. Please be honest and forthright with your responses.

Please complete one questionnaire per team and turn it in at the problem debrief. This form will be your admission ticket to the Debrief and Answer Session.



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**X. SUPPLEMENTAL INFORMATION**

<u>Description</u>	<u>Electronic Form on Disk</u>
0.0 RFI Form	X
1.0 Cover Letter Exercise	
2.0 Executive Summary Exercise	
3.0a Preconstruction and Construction Services Agreement	X
3.0b Conceptual Estimate Summary Worksheet	X
3.0c Preconstruction Staff Worksheet Preconstruction Billing Rates	X
3.0d Construction Staff Worksheet Project Overhead & Equipment Estimate Form Staff and Equipment Billing Rate Schedules	X
3.0e Concrete Pricing Form	X
Concrete Work Productivities	X
Other Pricing Data	X
Metal Deck Cut Sheets	X
Drawings with Tables	X
3.0f Steel Pricing Form	X
3.0g Electrical Recap Card	X
Subcontractor Bid Quotes	X
5.0 Site Logistics Exercise Full Size Drawing Sheet	X
4.0 Project Schedule Information Common Construction Activity Durations	X
6.0 Cash Flow Exercise Instructions Electronic Cash Flow Worksheet	X
7.0 Mechanical Exercise Narrative	X
Mechanical Charts	X
Table of Equivalentents	X

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8.0	Building Information Modeling Narrative	
	Drawing Sheets	X
	Electronic Files	X
9.0	LEED Narrative	
	LEED Predetermined Scorecard	X
	LEED Core and Shell Guide	X
	LEED Blank Scorecards (3)	X
10.0	Red Light Procedure	
IX.	Evaluation Form	