

2017 ASC OPEN PROBLEM PRECONSTRUCTION

Phase II Deliverable Package

Presented by:



Introduction



Managing risk, optimizing opportunities and understanding obligations are an integral part of PCL's business practices. Design-build contracts provide a platform for greater collaboration between the owner, architect and contractor with more stakeholders at the table to maximize the project scope while staying within the project constraints. However, signing a design-build contract presents greater risk as the contract is typically based on limited design/project definition. It becomes the responsibility of the contractor to develop contract documents and deliver the completed project to the owner.

A project's risks are potential losses but can also result in opportunities if managed correctly. Asking the question "what if?" often helps anticipate risks. We must always look hard for opportunities that others have missed, uncover ways to improve efficiency and make the work more profitable. Once identified, risks can be managed to reduce our exposure to loss and opportunities can be managed to optimize our profitability.

Obligations are defined by the contract and legal responsibilities. Getting to know the job in detail is essential: check assumptions, ask questions, and consider alternatives. Only with a thorough understanding of the project and its contract can we be prepared to manage risks, act on opportunities and meet both our internal and external obligations.

We are excited to continue with the preconstruction process and look forward to your successful delivery of the preconstruction plan.

Problem Deliverables



Organize and tab your Deliverable Submittal according to the below outline. You should be as brief as necessary to convey your points.

1. Estimate and Schedule for Expansion
2. Existing Rail Line Demolition
3. Flatwork Pours
4. Roof Safety

The appearance and organization of your execution plan is typically an indicator of how you will manage and execute the project. Whether presented internally to the PCL Team or externally to a client, a professional image should always be portrayed. Points will be awarded/deducted based on appearance and organization. Provide one (1) hard copy in a 3-ring binder and one (1) electronic copy on USB thumb drive.

Request for information are to be submitted to mjmeunier@pcl.com by 10:00 AM on February 9, and responses will be issued to all teams at 11:00 AM.

Phase II: Preconstruction Detailed Deliverables



(30 points)

1. Requested Expansion to MOTORMEDS Project

Global Transportation District (GTD) has received more funding to construct an additional rail line which will require more rail vehicles to be added to their fleet. This in turn increases the demand that will be placed on the MOTORMEDS facility. In response to this, GTD has requested an addition to the project and has authorized PCL to incorporate this addition into the contract documents. Attached you will find the updated drawings incorporating this addition.

Following the requirements and guidelines provided in the Phase 1 Deliverable Section 5.B, please provide an updated concrete proposal for the additional work. This proposal is to include both a schedule and a concrete estimate for the expansion. Using the schedule provided with the Phase 1 Deliverables, please update the concrete schedule and manpower projection to include this added work. The concrete estimate is to be submitted with only the additional cost of the expansion included.

2. Existing Rail Line Demolition

After award of the project, the demolition of the existing rail line that runs along the east side of the project (parallel to Gridline A) has been delayed. Instead of being removed three months after start of construction, it has been moved to six months out. Evaluate the impacts (if any) this has on various sequencing, site plans, the concrete schedule as well as the structural steel erection.

Identify any impacts in a narrative, the concrete schedule, and overall schedule. Include ideas on how to recover any lost time as well as mitigating any impacts.

3. Pour Sequence – Slab on Grade

The quality and level of finish for the various portions of the shop floor are critical to the overall function of the project. GTD would like to review a pour sequence and placement plan for all slab on grade areas to confirm the contractors understanding of the slab on grade placement procedures are in line with both the project requirements (specifications) and end user's needs.

Put a narrative together as well as shop drawings showing pour placement, length, and sequencing. Evaluate any impacts to the original schedule and be prepared to discuss.

4. Roof Safety Plan

Safety is a cornerstone of GTD's culture and is critical to the success of any project. There are certain aspects of the MOTORMEDS project that have higher risks associated with completing the work, and one is the completion of the roofing and skylight installation.

One of the points that will help the MOTORMEDS project achieve LEED Silver Certification is the use of daylighting throughout the building. In order to achieve this in the large shop area, over 90 skylights are required on the roof. This creates a serious safety concern which could result in quite a bit of additional costs to the project to mitigate. This must be addressed during the preconstruction phase in order for PCL to ensure its design is constructible and include the cost of this work in with the proposal to GTD.

Review the condition on the roof and create an innovative safety plan to mitigate the hazards encountered during the installation of the roof and skylight. Please be sure to include a breakdown of the estimated cost of the solution with your plan.

Attachments

- A. Updated Project Documents

Scoring



It is critical to submit documents and materials on time. For those who do not adhere to the published times, point will be deducted according to the following schedule.

Overall Scoring:

Phase I Deliverables – 30 Points

Phase II Deliverables – 30 Points

Presentation – 40 Points

**Phase II Submittal - All teams submitting late on Phase II will automatically be deducted 10 points from this section.*

**Phase III Presentation - (on time = 0, up to 1 min late = -1; up to 2 min = -2; 3 = -3; 4 = -4; later = -5)*