



## 18<sup>th</sup> Annual ASC Region 1 Student Competition (2007)

# Heavy / Highway Competition Sponsored by Skanska USA Civil

### **INTRODUCTION:**

The project chosen for the 2007 Region 1 Heavy / Highway Competition will require each team and team member to demonstrate skill in the following main categories:

- QUANTITY TAKE-OFF
- PROBLEM SOLVING / SCHEDULING
- PHRASING AND SUBMITTING REQUESTS FOR INFORMATION (QUESTIONS) DURING PROPOSAL PREPARATION
- WRITTEN PROPOSAL / FORMAT
- COMPLETING ALL DELIVERABLES REQUIRED BY PROPOSAL DOCUMENTS
- ORAL PRESENTATION

Scoring criteria will be assigned to each main category and to subcategories to establish a consistent scoring guide. The sponsor will score each Team's written proposal, and a panel of judges from the sponsor will judge each Team's oral presentation.

### **SIMULATION:**

The exercise will simulate negotiated best value project delivery with the Sponsor holding the role of the Owner and the Competition Teams taking the role of Contractors bidding the work. The bid opening is planned to simulate that of an actual bid submission process. The oral presentation will be an opportunity for the Contractor to defend his proposal and the Owner to seek clarifications and question the Contractor as necessary.

- PREBID CONFERENCE (8:00 AM FRIDAY)
- DISTRIBUTION OF BID DOCUMENTS / PLANS AND SPECIFICATIONS (IMMEDIATELY FOLLOWING THE PREBID CONFERENCE)
- BID / PROPOSAL PREPARATION (16 HOURS – BIDS AND DELIVERABLES REQUIRED BY THE PROPOSAL DUE AT MIDNIGHT)
- ORAL PRESENTATIONS – SATURDAY AS SCHEDULED BY ASC REGION 1

## **PROBLEM:**

The problem will involve application of scheduling techniques, excavation, sheeting / shoring, pile driving, formwork (including formwork w/ architectural liner) rebar, and structural steel erection for a bridge located within the Tri State region surrounding New York City. All labor will be union labor. The successful team will be required to demonstrate: full knowledge of the plans and specifications, problem solving and method analysis, technical ability, cost analysis and communication skills.

## **PREPARATION:**

Teams and team members are advised to prepare for the competition by utilizing the following skills:

### **I. QUANTITY TAKE-OFF**

A. Earthwork, piles, sheeting and shoring, reinforcing steel, concrete, etc.

### **II. PROBLEM SOLVING**

A. Specification reading, plan reading, method analysis, scheduling, etc.

B. Construction methods, concrete placing, excavation planning and layout, equipment analysis, etc.

C. Site planning and logistics.

D. Means and methods of crane placement and steel erection.

### **III. COST ESTIMATING**

A. Labor, material, equipment, subcontract analysis.

B. Production calculations, crew analysis.

C. Presentation organization and readability.

### **IV. PRICING**

A. Unit pricing extension, overhead and profit, use of estimating spreadsheet.

B. Job indirects.

### **V. CONTRACT**

A. Special Provisions

B. Contract review.

C. Submit proper bid package with all required deliverables.

### **VI. PROPOSAL PRESENTATION**

A. Project overview, problem solutions, schedule, etc.

B. Verbal skills, presentation graphics, charts, etc.

C. Logic, order, clarity, technical accuracy, etc.