

ASSOCIATED SCHOOLS OF CONSTRUCTION - REGIONS 6 & 7 - MECHANICAL 2024

Pre-Problem Statement and Information Package

Presented By:



Murray Company
MECHANICAL CONTRACTORS

Introduction

Welcome Students!

The Northern California Mechanical Contractors Association (NCMCA) and Murray Company (MC) are proud to be the sponsors of the ASC Regions 6&7 Open Mechanical Problem in Sparks, NV.

The objective of this problem is to expose students to a 'day in the life' for those of us working in the mechanical industry. As such, students will be asked to respond to various situations that a mechanical contractor's project team experiences on a daily basis. This will include reviewing and comprehending various documents including a scope of work (SOW), drawings, and specifications. In addition, students will be exposed to producing change orders, quality control, safety, and site logistics plans. Successful teams will demonstrate an ability to multi-task, prioritize effectively, and deliver comprehensive solutions.

During Saturday's Awards Ceremony, three teams are awarded and recognized along with an additional award for the Best Presenter. Regardless of final overall placement, throughout this event each student is gaining not only competition experience but more importantly, industry experience. This competition is an invaluable tool for career development, both inside and outside the mechanical industry. NCMCA/MC hopes every team will benefit from this 'real-life' experience.

All teams are required to provide actual resumes of each student along with a photograph to the contact listed below by January 26, 2024. All resumes shall be in the same format, font, organizational structure, etc. This effort will count towards your final score. Should any questions arise, please direct them to the NCMCA/MC representative below:

NCMCA/MC Representative: Lynn Dunk
E-mail: ldunk@murraycompany.com



Problem Premise & Deliverables

Your project team works for Murray Company, a mechanical contractor based in California.

You are assigned to a design build project in which Murray Company is responsible for the Plumbing, HVAC, and Process Piping Scope. The overall project is about 25% completed, and the next weekly Owner Architect Contractor (OAC) meeting is scheduled to take place on Friday, February 9, 2023.

Normally during the weekly OAC, the General Contractor (GC) updates the Owner of the status of the entire project and will usually highlight the Hot Open items. Due to the importance of these items to the overall project, Murray Company's Project Team has been asked to attend and provide updates on the below items:

- Upcoming Shutdowns
- Equipment Procurement

For each of these items your team will need to develop a plan (which may include cost, schedule, quality, and/or safety components) to present during the meeting. The intent of the OAC is to come prepared to present a concise plan for each item with the Owner's best interests in mind. Remember, the Owner will enjoy and live with the finished project long after the Contractors have completed it. Do not forget about the operation and maintenance of the Owner's new facility.

Senior level executives from Murray Company will be checking in with your project team throughout the day on Thursday, February 8, 2023 to help ensure you are prepared to represent Murray Company at the important OAC meeting the following day.

Keys for Success

To help prepare for this year's competition, teams should familiarize themselves with the following:

- Project Scheduling:
 - Evaluating current project schedule to identify risk or opportunities.
 - Adjustments to project schedule to reflect added or removed work activities.
- Manpower Productivity:
 - Understand labor factors and the impact to man-hours based on increased or decreased productivity.
- Change Orders:
 - Take-offs, material and equipment pricing & lead times, labor factors
- Operation and Maintenance Concepts:
 - Clearance requirements, Operation, and Maintenance of Equipment

Competition Rules

Without exception, the rules for the competition will be governed by the following guidelines:

- Adhere to the approved and posted ASC Regions 6 & 7 2024 Competition Rules available at <https://www.asc67.org/rules.html>
- Additional competition rules will be reviewed at the Competition Kick-off held on the morning of Thursday, February 8th, 2024 at 6:00 AM in NCMCA/MC assigned competition room.
- Internet use is allowed however the hotel internet bandwidth is limited. As such, bringing an alternative source is recommended. E-mail will be used as a source of communication throughout the competition.
- The following software will be required for the competition: Bluebeam Revu eXtreme (or alternative PDF viewer), Microsoft Project, Microsoft Excel, Microsoft Word and Microsoft PowerPoint.
- The use of “canned” or fluff materials in this competition is strongly discouraged.

Scoring

Scoring will be equally weighted between two main components - Team binder deliverables and Team presentation. Each will carry a total possible score of 100 points. The breakdown of how each component will be scored will be provided during the Competition Kickoff.

Binder: 100 Pts

Presentation: 100 Pts

Extra Credit: 10 Pts

- Resumes provide by January 29, 2024 deadline: 5 Pts
- Photos provided by January 29, 2024 deadline: 5 Pts

Timeline of Events

Thursday, February 8, 2024:

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| 6:00 AM | Competition Kickoff |
| 8:00 PM | Binders Due (both hard copy and electronic) |

Friday, February 9, 2024:

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| 7:00 AM | Presentation Materials Due & Team Presentation Order Announced |
| 8:00 AM | First Team Presentation |
| 6:30 PM | Problem Recap |
| 7:00 PM | Student Mixer sponsored by Northern California MCA |



Saturday, February 10, 2024:

8:00 AM – 12:00 PM Job Fair

12:15 PM Awards Ceremony

Conclusion

NCMCA/MC expects all teams to behave ethically, utilize problem solving skills, demonstrate professionalism, work as a team, and have fun throughout this competition. We are looking for future industry leaders and wish you the best of luck.



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