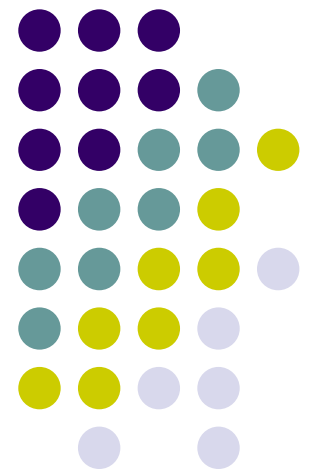
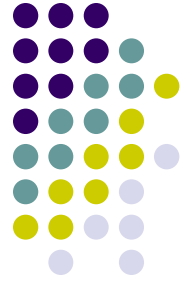


Pre-Construction Safety Planning

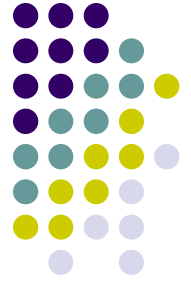
Carmen Shafer, CSP, CHST, CRIS
President
Shafer Safety Solutions, LLC





Objectives

- Corporate Safety Planning & Goal Setting
- Pre-Construction Planning
 - Bidding and Procurement
 - Pre-Mobilization
- Task Planning
 - JHA's
 - Daily Planning



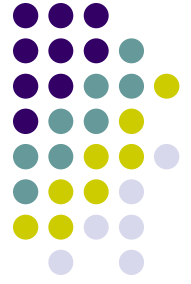
Why Plan?

- Saves Time
- Saves Money
- Saves Resources
- Saves Lives

- It's the Law?
- Expectations?

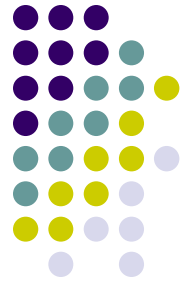


Corporate Level Planning and Goal Setting



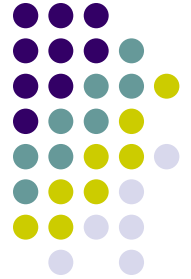
- The Strategic Plan
- Growth?
 - Personnel Additions
 - Site Locations
 - Changing/Adding Types of Work Bid
 - Pursuing New Clients
 - VPP?

Corporate Level Planning and Goal Setting

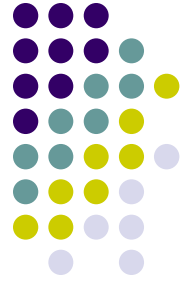


- Corporate Culture Development
- Safety Program Development
- Training, Education and Professional Development

Pre-Construction Planning



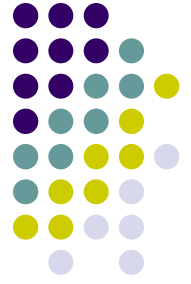
- Bidding and Procurement
- Pre-Mobilization



Bidding and Procurement

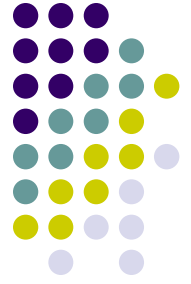
- Review of the Project
 - Site
 - Plans
 - Specifications
 - Preliminary Hazard Analysis





Bidding and Procurement

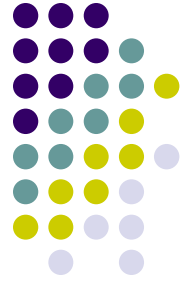
- Resource Allocation
 - Safety Budgeting
 - Personnel/Project Staffing
 - Equipment
- Subcontractor Selection



Pre-Mobilization

- Contract Language & Risk Management
- Site Specific Safety Plans
- Scheduling
- Project Goals





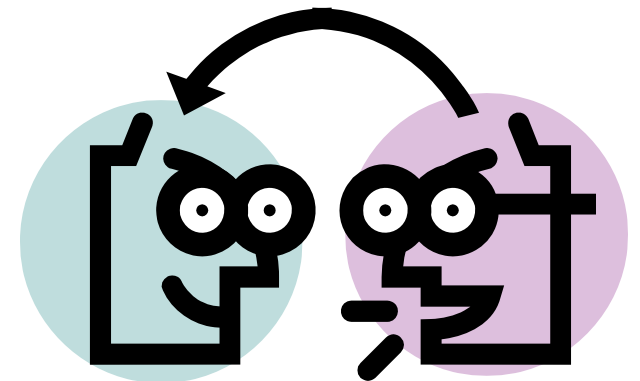
Pre-Mobilization

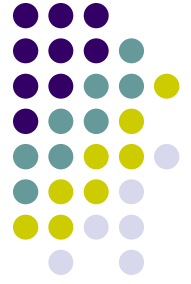
- Site Planning and Layout
 - Site Access and Egress
 - Emergency Plans
 - Material Staging
 - Neighbors?
 - Sensitive/Hazardous Locations
- Site Safety Orientation/Training
- Kickoff Meeting with the Subcontractors



Task Planning

- Job Hazard Analysis/Activity Hazard Analysis
- Contingency Plans
- Coordination Meetings
- Review



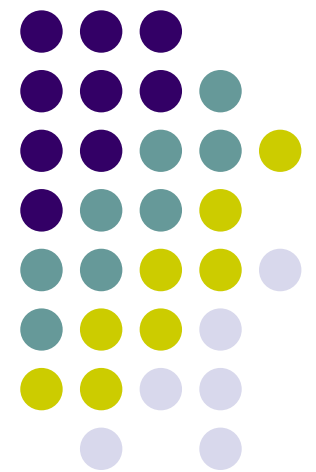


JHA Example

- Structural Steel Enclosure set on 4' high cantilevered platform edge
- Structure is approximately 200' X 20' X 20'
- Heaviest piece is #1,400 (column)
- Lightest piece is #300 (small header)
- Lifting with 2 Ton Carry Deck Crane
- Plug and finish welding, grinding, etc.



The First JHA



Job Hazard Analysis Form

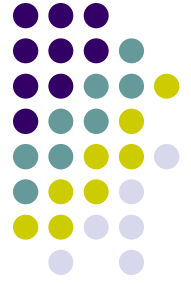
JOB TITLE:

DATE OF ANALYSIS:

JOB LOCATION:

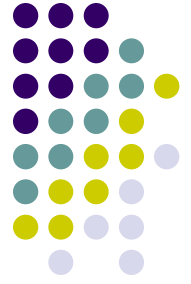
| STEP | HAZARD | NEW PROCEDURE OR PROTECTION |
|------------------------|---|--|
| 1. WELDING | A. BURNS B. FIRE | PROTECTIVE CLOTHING: GLOVES, HELMET, LEATHERS FIRE EXTINGUISHER ON HAND |
| 2. HOISTING WITH CRANE | A. OVERHEAD LIFTING B. RIGGING FAILURE | MAINTAIN COMMUNICATION BETWEEN WORKERS, CAUTION TAPE AROUND HOISTING AREA, HARD HATS CHECK ALL RIGGING FOR EXCESSIVE WEAR, CUTS, TEAR ETC. PRIOR TO USE |
| 3. SCAFFOLD | FALLS | MAINTAIN GUARDRAIL AT ALL TIMES |

After some additional work...

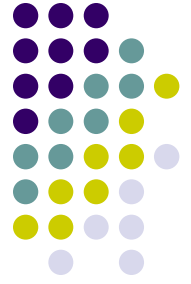


- JHA and steel erection plan with illustrations
 - 22 pages all together

Job Hazard Analysis Considerations



- How Much Detail?
- Who Creates the Document?
- Who Uses the Document?
- Changes and Contingencies?
- Pre-Activity Meeting
- Review

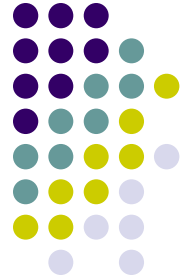


Daily Planning Activities

- Daily Safety Plans
 - Who, What, When, Where, How
 - ID previously unforeseen issues
 - Conflicts
 - Special Hazards
 - Confined Spaces
 - Lock/Tag/Try
 - Excavations
 - Others...
- Crew Huddles

DAILY SAFETY PLAN

- *Permit: Hot Work, Confined Spaces, LOTO, Etc.
- *PPE: Eyes, Ears, Face
- *Housekeeping
- *Site Specific Training
- Respiratory
- *Heavy Equipment
- *Tie-In Procedures
- Fall Protection
- *Scaffolding/Ladder
- *Excavation Procedures
- Overhead
- *Tool Condition



1. SPECIFIC TASKS TO BE COMPLETED: _____

2. UNSAFE CONDITIONS/EXPOSURES: _____

3. SPECIFIC SAFETY REQUIREMENTS: _____

4. SPECIFIC PREVENTATIVE MEASURES:

- a) PPE: _____

- b) POSITIONS: _____

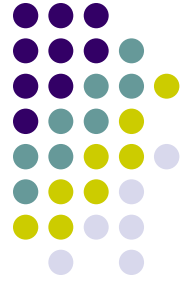
- c) TOOLS & EQUIP: _____

5. SPECIAL CONDITIONS OR RESOURCES: _____

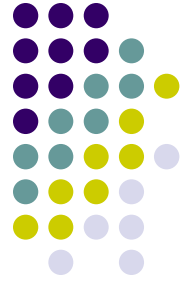
6. COMMENTS: _____

FOREMAN: _____ DATE: _____ PROJECT # _____

Crew Huddles

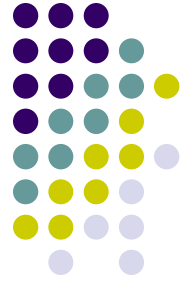


- Do your trades-people know when to stop and reevaluate the plan?
- What do they do when there is a difference between the plan and the conditions?



Review The Plan

- Was the Plan Understood?
- Did We Work the Plan?
- Did the Plan Work?



Reviewing the Plan

- Revisit the Strategic Plan and Goals
 - Do they still fit or do they need adjustment?
- Post Project Reviews
- Always review the JHA and daily plan following an incident or accident.
 - What did we miss?
 - Was the plan followed?
- Retain the plans for future use
 - Updating the Corporate Program
 - Training Tools

Any Questions?

Thank-You

