



## **COAA BEST PRACTICE WORKSHOP**

# **CONSTRUCTION MANAGEMENT COMPETENCY**

Presenters: John Boddy, Sr. Manager Construction, Husky Energy  
Terry Grant, Director of Business Development, Graham Construction



# AGENDA

- “ Opening Remarks
- “ Benefits of Competency Management
- “ The Sample Competency Management Tool
- “ Participant Input Session (Workshop Participation)
- “ Conclusion



## OPENING REMARKS

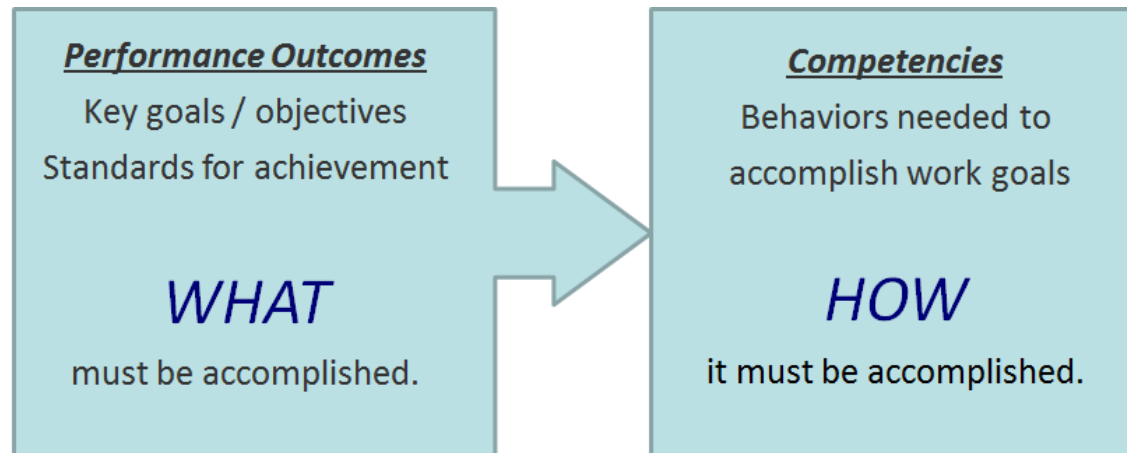
“ Competency does not equal Productivity (but it sure helps)



“ COAA Goal: to create a Construction Management Competency Best Practice

## OPENING REMARKS

“ Competency does not equal Productivity



“ COAA Goal: to create a Construction Management Competency Best Practice



# BENEFITS OF COMPETENCY MANAGEMENT

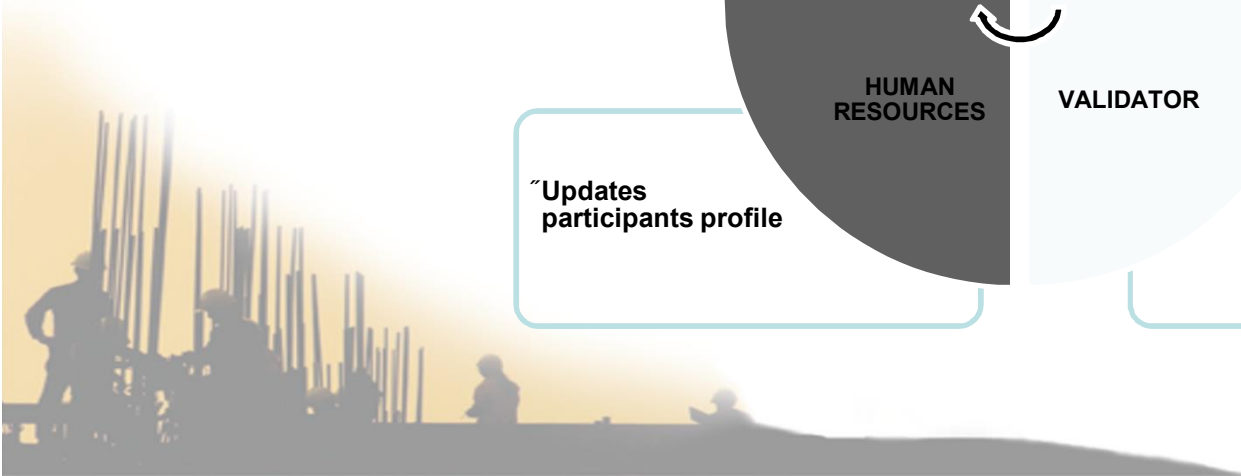
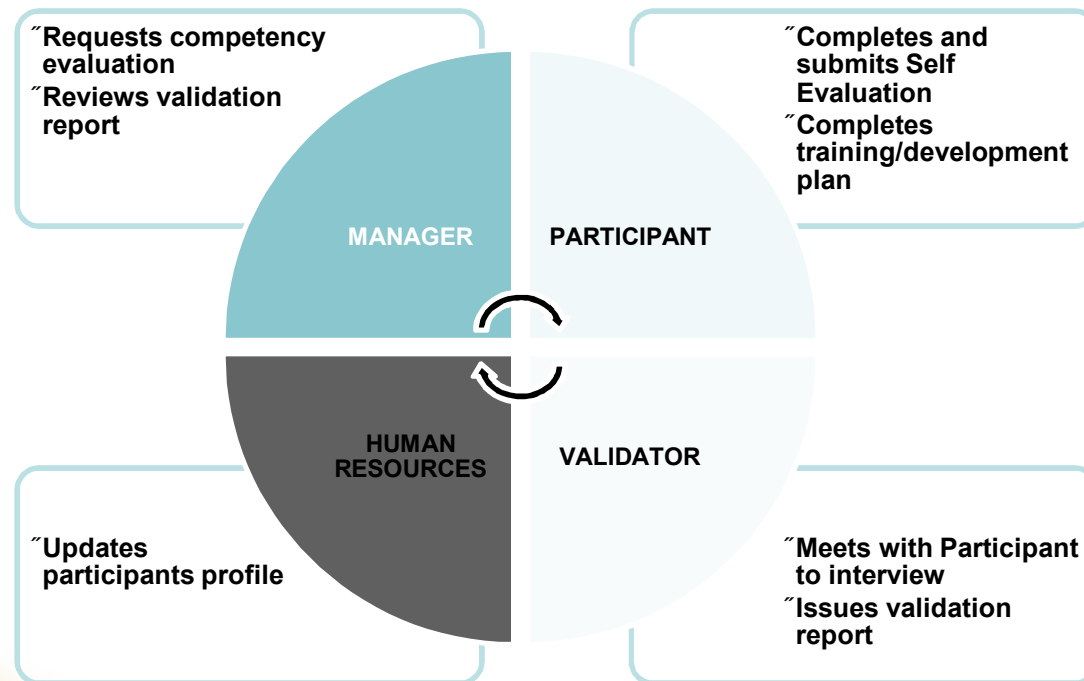
- “ Ensure Regulatory Competency is met
- “ Support Project Outcome (safety, schedule, cost and quality)
- “ Employee Development
- “ Company Resources (Strengths, Weakness, Opportunities, Threats)
- “ Understand Training Requirements



# **SAMPLE COMPETENCY MANAGEMENT TOOL**



# COMPETENCY MANAGEMENT LIFECYCLE





# COMPETENCY TOOL FRAMEWORK

10  
Competency  
Groups

31 Competencies

81 Example Tasks

Construction Management Competency Framework		
Competency Group	Competency	Description (Tasks)
Construction Planning	Manage Construction Planning	Use and/or develop construction plan (e.g. Construction Execution Plan (CEP), job book, etc.)
		Provide construction input in planning phases of the project (e.g. constructability reviews, model reviews, issued for assessment (IFA) reviews, etc.)
		Apply Workface Planning / Advanced Work Packaging
		Use and/or develop Construction Work Packages (CWP's), Engineering Work Packages (EWP's), etc.
		Apply modularization and feasibility planning
Construction Planning	Administer Construction Schedule	Apply construction sequencing to planning phases of the project
		Use heavy haul planning and restrictions (e.g. transportation corridor, rail/ship/truck, weight and size, etc.)
		Execute Construction Lift Planning, Cranes, and Rigging Requirements
		Use Construction Critical Path understanding in Construction Planning
		Use and develop Construction Schedules
Construction Planning	Support Construction Cost Estimates and Quantities Development	Use and develop Construction Cost Estimates and Quantities
		Apply types of estimates (Factor-based, K-based, Bottom-up, different classes, etc.)



# PROFICIENCY RATINGS

## PROFICIENCY RATING SCALE - use the numbers on the self-assessment

Rating	Proficiency	Details
1	Awareness	Has knowledge; isn't actually performing the work; or isn't applying skills (may not have attained skills yet)
2	Basic Application	Applies existing or new skills but generally needs feedback or supervision
3	Skilled Application	Is fully qualified/capable; is self-initiating; can be deemed competent
4	Mastery/Expert	Highly skilled; usually can perform cross-functionally; advanced troubleshooting; coaches others or manages



# CONFIDENCE RATINGS

## CONFIDENCE RATING SCALE - use the numbers on the self-assessment

Rating	Can Coach/Mentor Others	Details
1	Not overly comfortable coaching/mentoring others	Still needs to ask others to confirm technical knowledge & skills
2	Willing to coach others	Can demonstrate to others the concepts and skills required
3	Coaches/mentors others easily / intuitively (automatically)	Can explain without effort in plain language to others the concepts and skills required by demonstrating, providing comparisons, scenarios and examples



**COAA**  
Construction Owners  
Association of Alberta

# CONSTRUCTION MANAGEMENT ROLES

Construction Management Roles - use for the self-assessment	
Role	Details
<b>Construction Director</b>	Highly experienced (Canadian and International) in managing, planning and execution of projects of various sizes and complexities up to mega project level
<b>Tier 1 Construction Manager</b>	Highly experienced in managing, planning and execution of projects of various sizes and complexities up to mega project level
<b>Tier 2 Construction Manager</b>	Experienced in managing planning and execution of projects of various sizes and complexities up to \$150MM
<b>Tier 3 Construction Manager</b>	Experienced in managing planning and execution of projects of various sizes and complexities up to \$10MM
<b>Tier 1 Construction Superintendent</b>	Highly experienced in execution of projects of various sizes and complexities with scope responsibilities up to \$150MM
<b>Tier 2 Construction Superintendent</b>	Experienced in execution of projects of various sizes and complexities with scope responsibilities up to \$40MM
<b>Tier 3 Construction Superintendent</b>	Experienced in execution of projects of various sizes and complexities with scope responsibilities up to \$5MM
<b>Tier 1 Construction Coordinator</b>	Highly experienced in execution of project coordination related to various sizes and complexities up to large projects
<b>Tier 2 Construction Coordinator</b>	Highly experienced in execution of project coordination related to various sizes and complexities up to small projects

# SELF EVALUATION TOOL

Construction Management Competency Self Evaluation							
Personnel Name:		John Doe					
Position Title		Construction Superintendent					
Competency Role (see 'Rating Scales to Use' tab for more information)		g) Tier 3 Construction Superintendent					
Business Unit:		Industrial Projects					
Reports to:		Jane Smith					
<p>Click on "+" to expand on tasks related to the Competencies. Click on "-" to hide tasks.</p>							
Competency Groups	Competencies	Proficiency Self Rating (use number from scale on Tab2)	Confidence Rating (use number from scale on Tab2)	Select the Importance of Each Competency Performed	Select the Frequency of Each Competency Performed	Need or Want More Training/Learning	Self-Evaluator's Comment Field (add comments or more detail on which type of training you may want in this column)
	Manage Construction Planning	2	2	Is important	Weekly	NO	I would like an opportunity to manage the construction / project planning on complex projects
	Administer Construction Schedule	2	2	Critical	Daily	YES	I would like an opportunity to either develop construction / project schedule or be actively involved in the development of the schedules.
	Support Construction Cost Estimates and Quantities Development	2	2	Is important	Monthly	NO	I would like an opportunity to either develop construction / project cost estimate or actively involved in the development of the estimate.

[Self&Guided Assessment](#)
[Rating Scales to Use](#)
[Dropdowns](#)
[Validator's Tab](#)
 Result: ... 
 +
⏮
⏭

# VALIDATION TOOL

Competency Groups	Competencies	Proficiency: Role Requireme nt	Proficiency Self Rating (use number from scale on Tab2)	Result (use formula)	Confidence Rating (use number from scale on Tab2)	Select the Importance of Each Competency Performed	Select the Frequency of Each Competency Performed	Need or Want More Training/ Learning	Validator's Focus / Direction	Validator's Proficiency Rating	Self-Evaluator's Comment Field (add comments or more detail on which type of training you may want in this column)	Validator's Comment Field (add comments or more detail on which type of training you may want in this column)
<b>Construction Planning</b>	Manage Construction Planning	2	2	0	2	Is important	Weekly	NO	●	0	I would like an opportunity to manage the construction / project planning on complex projects	Look for coaching opportunity with project manager of buildings
	Administer Construction Schedule	2	1	-1	2	Critical	Daily	YES	●	-1	I would like an opportunity to either develop construction / project schedule or be actively involved in the development of the schedules.	look for involvement with different teams to engage in planning sessions
	Support Construction Cost Estimates and Quantities Development	2	2	0	2	Is important	Monthly	NO	●	0	I would like an opportunity to either develop construction / project cost estimate or actively involved in the development of the estimate.	look for involvement with senior cost estimator for mentoring
	Manage Construction Risk Assessment & Analysis	2	2	0	2	Is important	Monthly	NO	●	0		Shows excellent grasp of risk management and able to coach others
	Manage Construction Stakeholders Interfaces	1	2	1	3	Is important	Few times / year	NO	●	-1		

Self&Guided Assessment

Rating Scales to Use

Dropdowns

Validator's Tab

Results ...

+

:

◀

▶



70

# COMPETENCY REPORT

<b>Personnel Name:</b>	John Doe
<b>Position Title:</b>	Construction Superintendent
<b>Business Unit:</b>	Industrial Projects
<b>Personnel's Supervisor:</b>	Jane Smith
<b>Date of Validation :</b>	December 25, 2017
<b>Location of Validation:</b>	Edmonton Field Office
<b>Validator:</b>	Mike McDornish



## 1 COMPETENCY SUMMARY

Item	Value
Total number of competencies for profile	31
Number of competencies "needs training"	5
Number of competencies for career growth opportunity	8
Number of competencies "not applicable"	0

## 2 VALIDATOR'S COMMENTS

John Doe shows an excellent grasp of the major concepts of Construction Management. John would benefit from some additional experience coupled with minor coaching and mentoring to ensure he maintains confidence while learning. Identified competencies show areas for improvement.

## 3 PERSONNEL COMPETENCY DEVELOPMENT PLAN (IF APPLICABLE)

Validator to meet with John Doe's manager to discuss plan

## 4 CAREER GROWTH OPPORTUNITY

John Doe shows an understanding of Construction Management Competencies at the Tier 3 Construction Manager level.

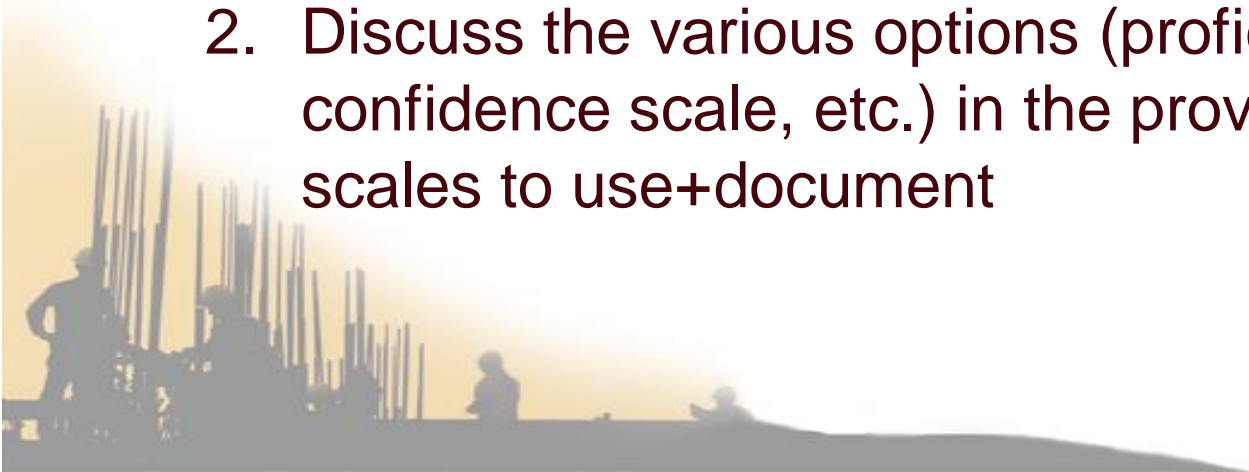


# PARTICIPANT INPUT SESSION



# INSTRUCTIONS

1. Use the scenario provided to complete *the assigned* section of the self-evaluation tool given to your group
2. Discuss the various options (proficiency self rating, confidence scale, etc.) in the provided rating scales to use+document



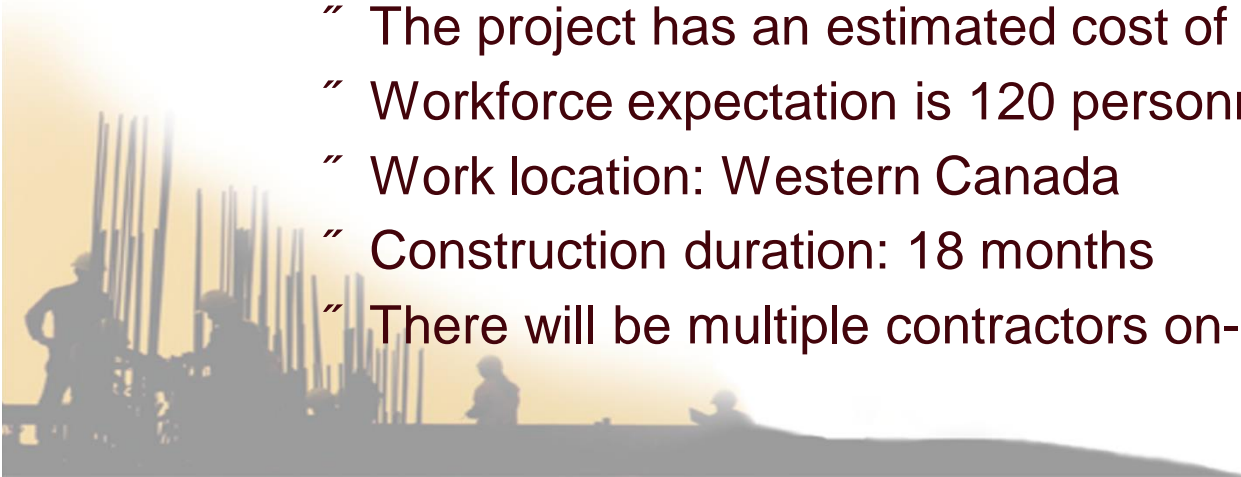


## SCENARIO

- “ You would like to assign a Construction Manager to a sizeable construction project. To support project success and regulatory requirements you are responsible to ensure that the CM has the appropriate competency level.

### **Details:**

- “ The project has an estimated cost of \$160 M
- “ Workforce expectation is 120 personnel (peak on site)
- “ Work location: Western Canada
- “ Construction duration: 18 months
- “ There will be multiple contractors on-site



# STICKY NOTES EXERCISE

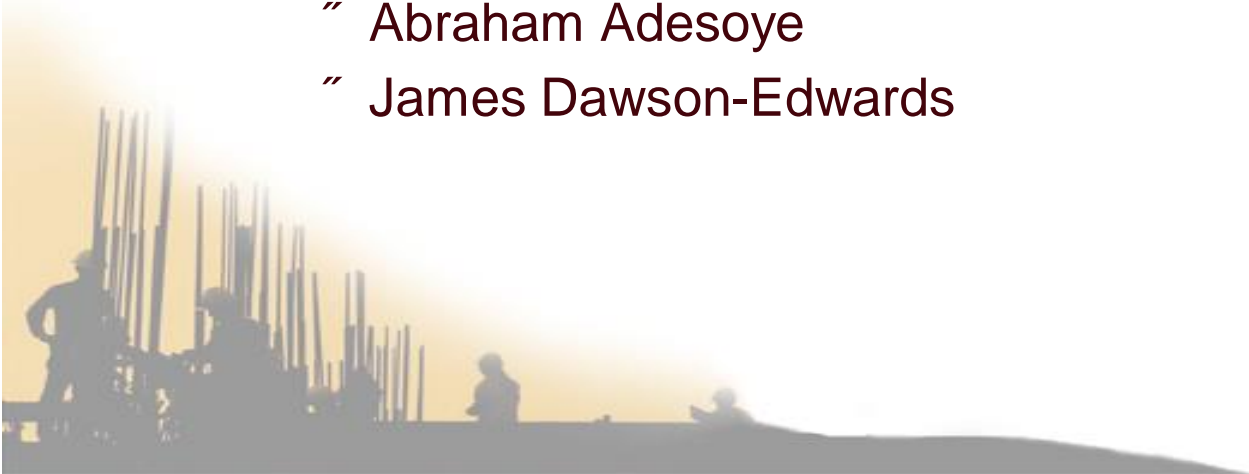




## SPECIAL THANKS

**" We would like to thank the following sub-committee members:**

- " Corey Langford**
- " Mike Yorke**
- " Ryan Timmermans**
- " Abraham Adesoye**
- " James Dawson-Edwards**



# CONCLUSION





## CONTACT INFORMATION

If you would like to provide additional information to this COAA Best Practice please contact:

John Boddy, Sr. Manager Construction, Husky Energy  
[john.boddy@huskyenergy.com](mailto:john.boddy@huskyenergy.com)

Terry Grant, Director of Business Development, Graham Construction  
[terrygr@graham.ca](mailto:terrygr@graham.ca)

Thank you

