



Canadian Construction
Association
Gold Seal Certification

Project manager occupational profile



BUSINESS SKILLS

Competency	Supporting competency/skill/knowledge/task
Communicate clearly and ethically	Produce written correspondence and reports
	Make presentations
	Create free-hand sketches
	Maintain good relationships with stakeholders
	Understand roles and responsibilities of stakeholders
	Follow company policies and procedures
	Understand and implement company "good neighbour policy"
	Conduct activities in a professional and ethical manner
	Understand and implement company media policy with respect to emergency site issues
	Understand confidentiality and non-disclosure agreements within contracts
	Organize meetings and inspections with authorities having jurisdiction
	Organize and conduct project meetings
Assist in long-term planning, marketing and bidding strategy	Analyze marketplace for potential new projects and diversity of projects
	Assist business development and estimating in pursuing new projects
	Maintain current and develop new business relationships
	Monitor performance of subcontractors and vendors
Keep current with changes and trends in the industry	Maintain and understand a current library of codes and regulations
	Be familiar with and use industry standard software applications
	Ensure estimating practices are current
	Be familiar with current design and construction trends and practices
Protect company interests against potential legal liability	Identify and manage the legal liabilities resulting from regulations and contract documents
	Identify and mitigate potential third-party claims
Manage field and project staff	Manage project management staff
	Participate in the development and retention of staff
	Motivate staff and maintain team morale
	Address OHS concerns
	Address any harassment complaints/issues
Be accountable and manage project financials	Implement and manage monthly progress billing and invoicing process for owner and sub-contractors as per legislation or contract
	Set-up cost code/phase codes in company financial management system
	Manage all costs throughout duration of project
	Maintain project cash flow
	Manage project collections
	Prepare financial reports for senior management

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Competency	Supporting competency/skill/knowledge/task
Develop and maintain project schedule	Prepare or assist in preparing the baseline construction schedule
	Monitor and update schedule as required throughout the duration of the project
	Work with vendors and subcontractors to develop an integrated project schedule
	Generate regular schedule progress updates
	Develop mitigation strategies for schedule slippage
Manage and negotiate deliverables with key vendors and subcontractors	Manage subcontract procurement process
	Manage procurement of equipment and material from suppliers
Manage documentation management system	Ensure document management system is in place
	Apply company and project procedures for document management
	Manage document process throughout project

TENDERING

Competency	Supporting competency/skill/knowledge/task
Assist company management with project selection	Assess company capacity and capabilities for potential new projects
	Evaluate potential new projects for risk and opportunity
	Assess potential owner and consultants
Provide support to request for prequalification (RFQ's) team	Understand project parameters and submission requirements of an RFQ
	Assemble multi-disciplinary design/build team
	Interpret client needs
	Prepare documents as required to satisfy RFQ submission
Provide support to request for proposal (RFP) team	Understand project parameters and submission requirements of the RFP
	Understand how to determine the Go/No Go decisions to pursue the RFP
	Understand the competition and your company strengths based on previous RFP competitions
	Assist in determining project costs and fees
	Participate as a partner providing constructability expertise for the design and construction solution in the multi-disciplinary design/build team
	Participate in the interview/presentation
Attend mandatory site meeting	Attend the mandatory site meeting
	Record and photograph the existing conditions of the site and/or buildings
	Meet with RFP team and discuss/ debrief on aspects of site visit
Review plans and specifications for constructability and constructability challenges	Assess requirements for project team including subcontractors and indirect costs
	Assess direct cost requirements for self-performed work
	Understand the methods of construction and cost-effective designs
	Determine access for equipment and deliveries, lay down areas, limits for site hoarding/fencing and security requirements
	Know alternate products and materials
	Provide input on alternate construction methods available
	Review contract documents
Participate in estimate process	Understand the fundamentals of an estimate
	Understand the impact of estimates on the construction operations
	Understand the scope of work for all subcontractors and suppliers
	Prepare a quantity take-off including subcontractors and indirect costs
	Assess direct cost requirements for self-performed work
	Review and understand requirements of contract documents
	Understand the scope of work of subcontractors and suppliers that may impact your company's scope of work
	Solicit quotations from subcontractors and suppliers
	Assess own-forces labour availability, rates, expenses and local union agreements

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Competency	Supporting competency/skill/knowledge/task
	Apply labour factors
	Know the cost implications related to project safety
	Analyze quotations submitted by subcontractors and suppliers
	Calculate costs for out-of-town work
	Understand cash allowances
	Determine who covers costs of testing and building permits
	Review all reports provided with the tendering documents
	Understand the “means and methods” of the proposed construction strategy, including phasing and staging
	Understand the requirements of a LEED project
	Finalize costs and estimate
	Understand competition and bid strategically
	Review and finalize bid submissions in consultation with management
Identify project risks and opportunities that could impact the final estimate and budget	Create a preliminary risk and opportunity matrix
	Complete risk evaluation and develop means to mitigate risk
	Understand liquidated damages and/or penalty clauses
	Understand impacts of any penalties and delay charges
Assist in selecting potential project resources and building project teams	Review company resources to determine who is available and/or best fit for the potential new project
	Identify and source external resources
Understand bid security, bonding and insurance requirements	Understand types of bid security
	Understand requirement for construction insurance
	Understand the requirements for construction bonding
Understand labour requirements and constraints	Understand company responsibility regarding signatory unions and the impact on project obligations
	Understand the labour division of unions
Provide input and support for the construction schedule	Consult with superintendent to develop a preliminary construction schedule
	Determine and evaluate milestones and critical path
	Ensure schedule implications are properly incorporated into the pricing model
	Provide input on phasing and construction flow

PROJECT MANAGEMENT

Competency	Supporting competency/skill/knowledge/task
Manage project documents	Understand the legal implications of properly kept records
	Ensure daily work records are kept
	Manage the transfer of all project documentation to the project team
	Manage document control process
Monitor and update schedule	Ensure that baseline schedule and Look Ahead schedules are updated, maintained and adhered to
	Ensure that subcontractors, equipment and materials are on-site when required
	Ensure delivery schedules from all subcontractors are supplied
	Ensure schedule buy-in by all relevant stakeholders
	Capitalize on opportunities to accelerate schedule
	Recognize the impact of changes and the late return of shop drawings on the schedule
Manage project resources	Review and manage performance of field supervisor, safety advisor, coordinators, and foremen
	Know the tools, equipment, materials, techniques and methods required for use for the project
	Understand the factors that impact productivity
	Approve time sheets of direct reports
	Ensure appropriate software management tools are being used
	Manage job discipline in conjunction with the field superintendent
	Confirm availability and allocate own forces, equipment and material in conjunction with the superintendent
	Monitor work of superintendent and others
	Expedite subcontracts and subcontract deliveries in conjunction with construction team
Oversee subcontractors and suppliers	Know the subcontractor methods and procedures
	Provide proper authorization of requisitions
	Maintain expediting/purchasing records
	Ensure invoiced materials have been delivered to site and invoiced work has been completed
	Authorize invoices as required
	Manage subcontractors and suppliers invoicing and payment
	Maintain co-operative relations with subcontractors and suppliers
	Ensure subcontractors and suppliers submit required documentation for payment
	Monitor work of subcontractors and suppliers
	Implement corrective action to meet budget and schedule requirements

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Competency	Supporting competency/skill/knowledge/task
	Support Superintendent in expediting subcontractors and suppliers
	Ensure that subcontractors and suppliers are on-site when required
	Know the cost/delivery effects of alternative modes of transportation
Organize and chair project meetings	Take and distribute minutes for meetings or ensure that they are taken
	Conduct owner consultant meetings
	Attend subcontractor meetings
	Attend on-site project safety committee meetings
	Ensure meetings are coordinated to achieving project milestones
	Understand the legal implications of complete and correct minutes
	Understand the requirements of issuing minutes to meetings within the timeframe outlined in the contract documents
	Understand the use of minutes of meetings as a tool in supporting or defending claims
Monitor and manage risk and opportunity	Understand the rules and practices for conducting effective meetings
	Organize and chair internal Risk and Opportunity meetings
	Monitor and update the Risk and Opportunity Matrix
	Understand that risk and opportunity are fluid and will change throughout the stages of a construction project
Monitor cash allowances and contingencies	Report risk and opportunity impact in internal financial reports
	Obtain owner approval prior to cash allowance expenditure
	Inform owner of cash allowance projected variance
	Understand the difference between a cash allowance and a contingency
	Understand the purpose of a contingency fund
	Understand when a cash allowance or contingency allows overhead and profit to be added
	Monitor and update cash allowance and contingency expenditures within the monthly owner billing
Manage project financials	Understand the importance of change orders for cash allowances and contingency expenditures
	Review costs-to-date and cost-to-complete with team on a monthly basis to ensure that the budget is tracking as expected
	Prepare and execute a mitigation plan if the budget is not being maintained or improved upon
	Identify cost variances and opportunities
	Know budget and schedule constraints
	Know the effects of introducing overtime and shift work
	Prepare monthly financial reports for senior management
	Prepare and participate in profit and loss meetings with senior management

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Competency	Supporting competency/skill/knowledge/task
Manage the submittals and approval process	Understand submittals requirements
	Review submittals for correctness and compliance to contract documents
	Approve mock-ups for correctness and compliance
	Submit final reports
	Ensure that submittals are being submitted and reviewed within the agreed upon timeframes
	Understand the impact to the schedule if submittals are not submitted and/or reviewed within the agreed upon timeframes
	Ensure that all mock-ups are accepted and paperwork has been issued to confirm
Manage processing of construction claims	Determine if a mediator is to be appointed at beginning of project
	Understand the claims resolution procedures according to the contract
	Analyze the impact on the schedule and associated costs
	Identify potential claims and mitigate if possible
	Assist general management and administration in preparing liens
	Administer insurance claims
	Understand the contractual causes for delays in work
	Understand non-conformance and non-performance by sub-contractors
	Process subcontractor liens by bonding off, letter of credit or cash in court
	Ensure proper notification prior to issuing a back charge
	Understand the impact of cumulative changes to the construction schedule
	Know the timeframe as outlined in the contract documents for the submissions of claims or notices
	Know how to prepare a claim using analysis of facts and supporting documents
	Know what the contract dictates with respect to what constitutes a claim and the allowance given
Process progress billings	Understand basic accounting procedures
	Understand legislated and contractual obligations to pay
	Prepare progress billing in format and with breakdown acceptable to owner
	Prepare a cashflow statement (anticipated billings) for the owner at the start of the project
	Know all work completed to cut-off date with input from superintendent and/or consultants
	Include change orders in schedule of values
	Know legislated mandatory holdback requirements
	Understand contractual set-off or holdbacks
	Monitor receivables

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Competency	Supporting competency/skill/knowledge/task
	Ensure the billings to the owner are submitted on time
	Review subcontractor billings for correctness and advise them if revisions are required
Manage change management process	Identify change in the work and advise consultant through Request for Information (RFI) or other method as defined in the contract
	Understand the differences between change documents and the legal/contractual requirements of each
	Review and log contemplated change orders and distribute to impacted subcontractors
	Ensure to receive pricing for changes from Subcontractors in a timely manner
	Identify costs of own forces work in contemplated changes
	Identify impact to schedule of changes
	Submit all costs in the prescribed format to the consultant for review and approval
	Monitor receipt of approval of costs via a change order
	Issue change orders to subcontractors
	Maintain a change orders log/system that includes the contemplated change order (CCO) numbers with corresponding change order numbers
	Understand the purpose of change directives and how to manage payment for work completed
	Record changes on plans in site offices
Manage request for information (RFI) process	Establish and maintain an RFI log
	Manage RFIs from subcontractors to consultant
	Review subcontractor RFIs and answer inquiries if possible, prior to sending to consultant to respond
	Monitor and manage the return of RFIs from consultant, issuing requests for response if not received in a timely manner
	Distribute responses to RFIs to subcontractors
	Ensure that all RFI responses are followed up with a site instruction, or a contemplated change order
Adhere to all contract-based and contractor based on-site consulting requirements	Know all contract items that require engineering by a subcontractor engineer
	Understand liability issues associated with on-site consulting requirements
	Understand applicable acts and regulations governing contracts
Ensure health, safety and environment (HSE) plan is implemented	Monitor construction safety
	Meet with safety officer and superintendent regularly to ensure safety plan is effective and complete
	Know applicable safety legislation and regulations
	Know and implement good safety practices

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Competency	Supporting competency/skill/knowledge/task
	Ensure accident investigation and reporting is completed
	Assess impact of loss time accidents/incidents
	Participate in the site HSE program
	Ensure public safety
	Ensure a positive safety culture at the site and lead by example
	Champion safety incident investigations
Implement and manage a quality control program	Understand quality control procedures
	Manage third-party and internal testing and inspection requirements
	Ensure that all reports from testing and inspection are reviewed and any non-conforming results are rectified
	Manage a non-conformance reporting system as per requirements of the contract documents
	Ensure consultants review the work on site according to the contract or their own professional associations
	Review all consultant field reports and issue any non-conforming work to the appropriate subcontractor to rectify
	Ensure that non-conforming work is completed and the consultant has reviewed and approved
	Ensure that rectified non-conforming work is removed from the consultant field review report
Manage procurement process	Ensure the proper authorization of requisitions and purchase orders
	Ensure that invoiced materials have been delivered to site and invoiced work has been done
	Ensure timely payment to suppliers
	Solicit competitive prices for goods and services
	Ensure alternates meet contract/specification requirements
Establish and support deficiency review process	Identify the deficiency review requirements within the contract documents
	Understand stakeholder responsibilities for creating punch lists and inspections
	Understand the timing for deficiency reviews by the consultant
	Understand the impact of incomplete deficiencies on establishing substantial performance
	Ensure that subcontractors are rectifying deficiencies in a timely manner
	Understand roles and responsibilities in deficiency review process
Manage commissioning process	Understand integration of mechanical, electrical and architectural (ME&A) systems
	Verify implementation of specified quality control programs for ME&A systems
	Ensure ME&A systems perform in accordance with the design intent
	Identify equipment required to perform startup or pre-commissioning process at manufacturer facility

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Competency	Supporting competency/skill/knowledge/task
Support superintendent to achieve occupancy permit	Understand requirements for achieving occupancy
	Develop and maintain a list of all required documentation and reports and identify who is responsible to provide
	Meet with subcontractors to review responsibilities for achieving occupancy
	Work with authorities having jurisdiction to achieve occupancy
	Prepare all required documents for submission to the authorities having jurisdiction
	Request and gather all consultant letters for occupancy
Manage substantial performance process	Know the contractual requirements for qualitative and quantitative tests to achieve substantial performance
	Work with the consultants to minimize the deficiency list to meet quantitative test
	Provide any documentation required by contract to consultant
	Understand the legislated documents that are required for the contractor to submit to the owner/consultant
	Ensure that all utilities are transferred to the owner
	Submit O&M and closeout documentation, attic stock, training materials
	Provide keys to owner
Understand provincial legislation regarding liens and holdbacks	Understand the legislated requirements for posting a certificate of substantial performance
	Understand warranty program
	Ensure that all utilities are transferred to the owner
	Determine if legislation allows for progressive, partial or early release of holdback
	Understand legislated requirements for release of holdback
	Understand contractual requirements for release of holdbacks, warranty holdbacks and deficiency holdbacks

POST CONSTRUCTION

Competency	Supporting competency/skill/knowledge/task
Finalize project closeout	Reconcile cash allowances and final billings with owner
	Provide as-built drawings
	Ensure the owner has property insurance in place after substantial completion
	Return rental equipment and trailers
	Resolve outstanding claims
	Issue invoice to owner for release of holdback
	Ensure that all deficiencies are rectified within time frame outlined in contract documents
	Prepare project handover documents
	Assist with compiling the maintenance manuals, warranty letters and as-builts
Participate in project closeout meeting	Organize internal “project evaluation and lessons learned” meeting with senior team members, estimating and senior management
	Understand agenda requirements of a project closeout meeting
	Review final cost report
Evaluate and manage warranty claims/items	Know contractor’s liability under warranties
	Expedite a written warranty claim process and procedure
	Determine if warranty claim is legitimate
	Arrange and attend inspection at the end of the warranty periods
	Support owner if subcontractors are not responding to warranty calls
Reconcile and ensure the final release of payments	Reconcile subcontractor and supplier accounts
	Obtain declaration of last supply from subcontractors
	Obtain release of holdback monies and pay subcontractors
Close permits and letters of credit	Understand importance of closing a building permit
	Close the building permit
	Determine when monies submitted for letters of credit will be released and inform the financial department
Conduct post-project review with owner	Solicit client feedback