

# CONSTRUCTION EXECUTION PLAN CHECKLIST

Project Description: \_\_\_\_\_  
 Project Name: \_\_\_\_\_  
 Project Number: \_\_\_\_\_  
 Project Location: \_\_\_\_\_

Critical Level	Category	Applies	Action By	Required Date	Completed	Critical Level	Category	Applies	Action By	Required Date	Completed	Critical Level	Category	Applies	Action By	Required Date	Completed						
<b>1. INFORMATION</b>						<b>2. PEOPLE</b>						<b>3. WORK ENVIRONMENT</b>						<b>4. EQUIPMENT &amp; MATERIALS</b>					
<b>A. CONTRACT REVIEW (Commercial Terms/Management)</b>						<b>A. ORGANIZATION PLAN</b>						<b>A. HEALTH, SAFETY &amp; ENVIRONMENTAL PROGRAM</b>						<b>A. CONSTRUCTION EQUIPMENT &amp; TOOLS &amp; CONSUMABLES</b>					
<ul style="list-style-type: none"> <li>Commercial Terms</li> <li>Insurance/Bonding</li> <li>WCS Clearance</li> <li>Type of Contract &amp; Contract Structure</li> <li>Review COAA Contracts Library page @ http://contractors.ca</li> <li>EPCM</li> <li>Lump Sum</li> <li>Target Price / Reimbursable</li> <li>Unit Price</li> <li>Cost Plus Fixed Fee</li> <li>Cost Plus (Reimbursable)</li> <li>Reimbursable with Incentives</li> <li>Signed Contract including Review/Verification</li> <li>Warranties &amp; Guarantees</li> <li>Penalties/Rewards</li> <li>Milestones</li> <li>Delay Notice</li> <li>Invoicing Requirements / Signing Authority</li> <li>Owners Cost Coding Structure</li> <li>Change Management</li> <li>Signing Authority</li> <li>Technical Terms Review</li> <li>Permits / License</li> <li>IFC Drawings</li> <li>Latest Revisions</li> <li>Delivery Schedule / Milestones for Delivery</li> <li>IFC Specifications</li> <li>Latest Revisions</li> <li>Delivery Schedule / Milestones for Delivery</li> <li>General Execution Plan Overview</li> <li>Who supplies what</li> <li>Project General Contractor and Subcontractors</li> <li>Other Onsite Contractors</li> <li>Turnover Requirements (including Documentation)</li> <li>System definition for turnover &amp; Commissioning</li> <li>Scope Definition</li> </ul>						<ul style="list-style-type: none"> <li>Role Definition</li> <li>Organization Charts</li> <li>Owner</li> <li>Engineer</li> <li>Contractor</li> <li>Interface Plan</li> <li>Key Suppliers/Vendors Listing</li> <li>Tagged Equipment Vendors</li> <li>Bulk Materials Vendors</li> </ul>						<ul style="list-style-type: none"> <li>Site Specific Health and Safety Program</li> <li>Orientation</li> <li>Review COAA Best Practices and CSTS Training @ www.coaa.ab.ca</li> <li>MDSO</li> <li>Health, Safety and Environmental Responsibilities</li> <li>Hazard Assessment</li> <li>Review COAA Field Level Risk Assessment Tools</li> <li>Safe Work Practices and Job Procedures</li> <li>Rules / Disciplinary Action</li> <li>Drug / Alcohol Program</li> <li>Pre-Access Testing</li> <li>Personal Protective Equipment</li> <li>Maintenance Program</li> <li>Training</li> <li>Inspections</li> <li>Investigations</li> <li>Worker Health</li> <li>Emergency Response Plan</li> <li>Environmental Protection</li> <li>Security</li> <li>Subcontractor Management</li> <li>Modified Work Program</li> <li>Project Specific Safety Program</li> <li>Vehicle Safety and Safe Driving Program</li> <li>Safety Recognition Program - Awards and Incentives</li> <li>Records and Statistics</li> <li>Corporate Site Audit</li> <li>Glossary of Terms</li> <li>Site Specific Environmental Program</li> <li>Loss Control</li> <li>Overall Site Security</li> <li>Values and Beliefs - Mission Statement</li> </ul>						<ul style="list-style-type: none"> <li>Construction Equipment Requirements</li> <li>Availability of All Equipment</li> <li>Establish Equipment Control Log</li> <li>Procurement Strategy for Cranes and Rigging</li> <li>Seasonal Equipment requirements</li> <li>Sequencing</li> <li>Site Inspection &amp; Maintenance Plan</li> <li>Mobilization / Demobilization Logistics</li> <li>Procurement Strategy for Specialized Equipment</li> <li>Plan of Equipment Requirements and Utilization including Type, Resource Levelling (Overall Site Considerations)</li> <li>Rental Equipment Agreements</li> <li>Purchase / Residual</li> <li>Lease to Purchase</li> <li>Rental</li> <li>Hourly vs. Weekly vs. Monthly</li> <li>Wet vs. Dry</li> <li>Operated vs. Bare Rental</li> <li>Equipment Certifications (Cranes, Lifting Equip, Testing Equip)</li> <li>Internal Equipment Availability and Supply</li> <li>Personal Protective Equipment (PPE)</li> <li>Definition of Personal Protective Equipment</li> <li>Supply &amp; Distribution</li> <li>Cleaning &amp; Maintenance Plan</li> <li>Inspection &amp; Replacement Plan</li> <li>Confined Space Supplied Air Consideration (Bottled Air) Supply</li> <li>Storage</li> <li>Small Tools</li> <li>Definition of Small Tools</li> <li>Tool Loss Control Plan</li> <li>Tool Crib Strategy / Location</li> <li>Proximity to Work Face</li> <li>Supply Strategy (Own vs. Lease vs. 3rd Party Supply)</li> <li>Quantity Requirements &amp; Type Assessment</li> <li>Small Tool List</li> <li>Tool Inspection, Repair and Re-certification Program</li> <li>Mobilization &amp; Demobilization Logistics</li> <li>Consumables</li> <li>Definition of Consumables</li> <li>Supply &amp; Control Plan</li> <li>Storage &amp; Distribution Plan</li> <li>Special Storage Requirements</li> <li>Quantity Requirements &amp; Type Assessment</li> </ul>					
<b>B. PROJECT CONTROLS</b>						<b>B. LOCAL CONTENT PLAN</b>						<b>B. QA/QC PLAN</b>						<b>B. MAJOR EQUIPMENT &amp; TAGGED ITEMS</b>					
<ul style="list-style-type: none"> <li>Cost Control and Administration</li> <li>Workforce Planning</li> <li>Schedule</li> <li>Resourced and Levelled</li> <li>Document Control</li> <li>Document Distribution Matrix</li> <li>Estimate</li> <li>Work Breakdown Structure</li> <li>Productivity Control System</li> <li>Signing Authority Matrix</li> <li>Invoicing</li> <li>Changes</li> <li>Labour Mob/Demob</li> <li>Materials Purchase</li> <li>Construction Equipment Mob/Demob</li> <li>Sample Signature Record (employee number)</li> <li>Shop Drawing Review</li> <li>Project Control Systems Integration Plan (Owner/Engineer)</li> </ul>						<ul style="list-style-type: none"> <li>Local Community</li> <li>Aboriginal Content Plan</li> </ul>						<ul style="list-style-type: none"> <li>Site Specific ITP</li> <li>Responsibility Matrix</li> <li>Material QA/QC Control</li> <li>Operational QA/QC Interface</li> <li>Owner QA/QC Interface</li> <li>Testing Procedure (Isolation)</li> <li>Third Party Test &amp; Inspection Surveys</li> <li>Source Inspection Plan for Vendors, Fabricators, Major Certifications Audit program</li> <li>Welder Certifications</li> <li>Contractor Certifications</li> <li>Vendor Certifications</li> <li>Engineer Certifications</li> <li>QA/QC Conflict Resolution Process</li> </ul>						<ul style="list-style-type: none"> <li>Procurement &amp; Expediting Responsibility Matrix</li> <li>Logistics vs. Space on Site</li> <li>Preservation and Preventative Maintenance Plan</li> <li>Sequencing</li> <li>Warehousing &amp; Control</li> <li>Inspection Requirements and Plan (including at-source and on-site)</li> <li>Receiving / Offloading Procedure</li> <li>Schedule &amp; Mitigation Plan for Change</li> <li>Final Certified Weights for Rigging</li> <li>Ancillary Shipment Verification</li> <li>Shipping Notification &amp; Correct Instructions</li> <li>Operational Spares (Stock)</li> <li>Vendor Rep Requirements &amp; Schedule</li> <li>First Fill Responsibility - Supply</li> <li>First Fill Responsibility - Installation</li> <li>Special Equipment Preparation Requirements</li> <li>Picking</li> <li>Flushing</li> <li>Bearing Grease Removal</li> <li>Cleaning</li> <li>PSV &amp; Control Valves</li> <li>Testing &amp; Requirements</li> <li>Bench Testing Instruments</li> <li>Transfer of Vendor Data / Vendor Drawings</li> <li>Equipment Certification (i.e., CSA Certifications, etc.)</li> </ul>					
<b>C. PROJECT WIDE INTEGRATION PLAN</b>						<b>C. HUMAN RESOURCES PLAN</b>						<b>C. OFF SITE</b>						<b>C. MATERIALS PROCUREMENT</b>					
<ul style="list-style-type: none"> <li>Operations and Maintenance Interface Plan</li> <li>Other Contractors</li> <li>Size of Sites or Work Packages</li> <li>Conflicting Projects</li> <li>Precommissioning and Turnover</li> <li>Turnaround and Shutdown Plan</li> </ul>						<ul style="list-style-type: none"> <li>Staffing (Includes Manpower Forecast)</li> <li>Change Management Strategy</li> <li>Trades (Includes Manpower Forecast)</li> <li>Review COAA Manpower Forecast @ www.coaa.ab.ca</li> <li>Orientation</li> <li>Shift Plan (Work Week and Schedule)</li> <li>Mentoring</li> <li>Review COAA Mentoring Program @ www.coaa.ab.ca</li> <li>Labour Relations Plan</li> <li>Mixed Site</li> <li>Open Site</li> <li>Closed Site</li> <li>Skilled Trades, Technical, and Staff Recruiting Plan</li> <li>Team Building - Internal (Group Specific) / External (Overall)</li> <li>Training</li> <li>Supervisory Training Plan</li> <li>Apprentice Utilization</li> <li>Review COAA Effective Use of Apprentices Library @ www.coaa.ab.ca</li> <li>Retention Plan</li> <li>Integration and Use of Foreign Workers</li> </ul>						<ul style="list-style-type: none"> <li>Fabrication Plan</li> <li>Precast Concrete</li> <li>Piping</li> <li>Structural Steel</li> <li>Equipment</li> <li>Rabat</li> <li>Pre Engineered Buildings</li> <li>Formwork</li> <li>Modularization Plan</li> <li>Constructability</li> <li>Pipe-rack Modules</li> <li>Equipment Modules</li> <li>Structural Steel Modules</li> <li>Interface</li> <li>Size</li> <li>Sequencing Plan</li> <li>Facility Layout / Staging</li> <li>Trafficking &amp; Logistics &amp; Transportation</li> <li>Module transport Study</li> <li>Philosophy</li> <li>Plan</li> <li>Typical Loading Configuration</li> <li>Security</li> <li>Bussing</li> <li>Brassing</li> <li>Pedestrian Plan</li> <li>Specialized/Heavy Transport</li> <li>Road Bans</li> <li>Bridge Load Limits</li> <li>Subcontract Plan</li> </ul>						<ul style="list-style-type: none"> <li>Bulk (Piping / Electrical/EHT/Insulation)</li> <li>Procurement Responsibility Matrix</li> <li>Storage &amp; Distribution</li> <li>Care &amp; Control (Material Tracking)</li> <li>Expediting / Statusing / Reporting</li> <li>Preservation</li> <li>Supply Chain Management Plan</li> <li>Required on-site Dates</li> <li>Project Specific Definitions</li> <li>Shorts Procurement Procedure Matrix</li> <li>Definition</li> <li>Distribution to Workface Plan</li> <li>Surplus Management</li> <li>Order Release Timing</li> <li>Preferred Supplier List</li> <li>Receiving Procedures &amp; Inspections</li> <li>Process for Deviation from Preferred Supplier List</li> <li>Receiving Procedures &amp; Inspections</li> <li>Concrete, Civil &amp; Structural Material</li> <li>Procurement Responsibility Matrix</li> <li>Storage &amp; Distribution</li> <li>Availability &amp; Distance of Clay / Granular Materials</li> <li>Formwork Procurement / Rent / Build</li> <li>Receiving Procedures &amp; Inspections</li> <li>Seasonal Considerations</li> <li>Rabat Supply / Fabrication / Control</li> <li>Structural Steel Supply / Fabrication / Control</li> <li>Local Concrete / Asphalt availability vs. Batch Plant</li> <li>Local Stock Piling</li> </ul>					
<b>D. CHANGE MANAGEMENT (includes Change Orders)</b>						<b>D. COMMUNICATION &amp; REPORTING PLAN (Communicating Down vs. Info Communicating Up)</b>						<b>D. ON SITE</b>						<b>D. MATERIALS MANAGEMENT</b>					
<ul style="list-style-type: none"> <li>Change Management</li> <li>Dispute Resolution</li> <li>Delay of Contract (Impacts)</li> <li>Rework</li> <li>Metrics Definition</li> <li>Measurement and Trending Plan</li> <li>Reporting Plan</li> <li>Review COAA Rework Tools @ http://rework.coaa.ab.ca/</li> </ul>						<ul style="list-style-type: none"> <li>Communication Matrix</li> <li>Safety Communication</li> <li>Safety Performance Feedback Plan</li> <li>Provisions for Safety Stand Downs</li> <li>Legislative Requirements / Changes</li> <li>Plant Operation Changes</li> <li>Plant Emergency, N/A for Greenfield</li> <li>Community Interface</li> <li>Community Disaster/Emergency Plan</li> </ul>						<ul style="list-style-type: none"> <li>Construction Methodology</li> <li>Site Infrastructure</li> <li>General Overview</li> <li>Office Trailers/Dry rooms/Lunch rooms</li> <li>Washrooms</li> <li>Site Communication Plan</li> <li>Phones/Fax</li> <li>Radios</li> <li>Safety/First Aid/Medical Facilities</li> <li>Brass in Brass Out Facilities</li> <li>Temporary Power</li> <li>Temporary Water/Sewer</li> <li>Gas/Heating</li> <li>Fire Protection/Emergency Response Facilities</li> <li>Permit Requirements</li> <li>Daily Hot Work Permitting</li> <li>Site Traffic Plan</li> <li>Site Roads and Access</li> <li>Vehicles and Parking</li> <li>Site Trafficking &amp; Logistics &amp; Transportation</li> <li>Security, Bussing, Brassing, &amp; Pedestrian Plan</li> <li>Waste Disposal Plan</li> <li>Constructability Reviews</li> <li>Cranes &amp; Heavy Lift Strategies</li> <li>Review of COAA Best Practices @ http://safety.coaa.ab.ca</li> <li>Rigging Studies</li> <li>Window Limitations</li> <li>Access Restrictions</li> <li>Testing - Pneumatic/Hydrotesting</li> <li>Concrete Pour Plan</li> <li>Formwork Plan</li> <li>Shoring Plan</li> <li>False work</li> <li>Trenching</li> <li>Subcontract Plan</li> <li>General Overview</li> <li>IT Plan Information/Computers</li> <li>Seasonal Work Plan</li> <li>Scaffolding</li> <li>Laydown Plan/Assembly Yards</li> <li>Outside Fabrication Area</li> <li>Overall Warehousing Plan</li> <li>Size &amp; Location</li> <li>Heated vs. Cold Storage</li> <li>Size &amp; Number of Racks, Shelves &amp; Bins</li> <li>Fuel</li> <li>Fencing/Barricades/Secured Areas</li> </ul>						<ul style="list-style-type: none"> <li>Responsibility Matrix</li> <li>Receiving Procedures</li> <li>Storage and Laydown (Inside / Outside)</li> <li>Distribution</li> <li>Inventory Control System</li> <li>Documentation</li> <li>Surplus Management and Final Disposition</li> </ul>					
<b>E. REPORTING</b>						<b>E. RISK ASSESSMENT AND MITIGATION PLAN</b>						<b>E. RISK ASSESSMENTS</b>						<b>E. RISK ASSESSMENT</b>					
<ul style="list-style-type: none"> <li>Reporting Requirements (Contractual / Client) (Reporting U)</li> <li>Turnover &amp; Commissioning (Documentation Plan)</li> <li>Regular Construction Progress Reports</li> <li>Regular Construction Cost Reports</li> <li>Safety Performance Reporting/Tracking Plan</li> <li>Quality Control Reporting Plan</li> <li>Productivity Reporting Plan</li> <li>Schedule Reporting Plan</li> <li>Daily Work Plan / Progress Reports / Look Ahead</li> <li>Manpower Reporting &amp; Tracking Plan</li> <li>Local Content Reporting &amp; Tracking Plan</li> <li>Cost Reporting Plan</li> <li>Daily/Weekly/Monthly Reporting Plan</li> <li>Report Distribution Matrix</li> </ul>						<ul style="list-style-type: none"> <li>Safety &amp; Environmental</li> <li>OHS Order</li> <li>Facility</li> <li>EHS events</li> <li>Quality</li> <li>PRRT Assessment and Review at Critical Project Phases @</li> <li>Estimate Review</li> <li>Project Execution/Mitigation Review</li> <li>Schedule Review</li> <li>Allowances/Contingencies</li> <li>Risk Transfer or Assumption</li> <li>Dispute resolution breakdown</li> <li>Other Significant Risks</li> <li>Significant Change in Design</li> <li>Significant change in Market Forces - Commodity price dro</li> <li>Major Delivery problem - i.e., slip sinks with key equipment</li> <li>General Labour Issues</li> <li>Changes in government legislation</li> <li>Terrorism and Security Risks</li> <li>Breach of contract</li> <li>Bankruptcy</li> <li>Weather related events - flood, fire etc</li> <li>Significant Productivity Loss</li> <li>Reduced owner cash flow</li> <li>Global event</li> <li>Significant Forecasted Cost Overruns</li> <li>Pre-Commissioning</li> <li>Commissioning</li> <li>Start-Up</li> </ul>						<ul style="list-style-type: none"> <li>Work Outages</li> <li>Plant Outages</li> <li>Evacuations</li> <li>Permitting Risks</li> <li>Evaluation Plan / Muster Points</li> <li>Work Stoppages</li> <li>Funding Shortages</li> <li>QA/QC</li> <li>Major Schedule Change or Delay</li> <li>Safety</li> <li>Environment</li> <li>Force Majeure Type Items</li> <li>Weather</li> <li>Labour Strikes / Pickets</li> <li>WAR / FAM</li> <li>Terrain</li> <li>Off Tool Time</li> <li>Drug &amp; Alcohol Testing</li> <li>Owner Orientation Requirements</li> <li>House Keeping Requirements</li> <li>CSTS Training</li> <li>HSS Alone Training</li> <li>Task Specific Training</li> <li>Welder Testing</li> <li>Safety Incident Investigation Schedules</li> <li>Meeting</li> <li>Tailgate</li> <li>Union Info Meetings</li> <li>Safety Meetings</li> <li>Subcontract Risks</li> <li>Owner's Site Culture</li> <li>Unforeseen Conditions - Geotechnical Issues - Poor So</li> <li>Public Untrust</li> <li>Plant Upset</li> <li>Change in Government Legislation</li> </ul>						<ul style="list-style-type: none"> <li>Major Equipment/Tagged Items</li> <li>Late Ordering and Delayed Delivery</li> <li>Over, Short, Damage Risks</li> <li>Proper Documentation</li> <li>Supplier/Fabricator's Risk</li> <li>Material Procurement</li> <li>Construction Equipment</li> <li>Age and reliability</li> <li>Availability</li> <li>Delivery Logistics</li> <li>Loss Control/Mitigation</li> <li>Material Management Risks</li> <li>General Risk Assessment</li> <li>Concrete, Civil, Structural Risks</li> <li>Material Procurement Risks</li> <li>Bulk</li> <li>Availability</li> <li>Supplier/Fabricator's risk</li> <li>Late Ordering and Delayed Delivery</li> <li>Over, Short, Damage Risks</li> <li>Proper Documentation</li> <li>Supply Chain Management System Risks</li> <li>Shorts</li> <li>Procedural Risk Management</li> </ul>					
<b>F. RISK CONFIRMATION ASSESSMENT AND MITIGATION PLAN</b>						<b>GLOSSARY</b>																	
<p><b>CRITICAL FLAG ELEMENTS</b></p> <p>ENSURE THESE ELEMENTS ARE PROPERLY ADDRESSED PRIOR TO PROCEEDING WITH CONSTRUCTION</p> <ul style="list-style-type: none"> <li>RECOMMEND NOT PROCEEDING UNTIL COMPLETED / IN PLACE</li> <li>IF NOT COMPLETED / IN PLACE - PROCEEDING SHOULD BE DONE WITH CAUTION</li> </ul> <p>THESE FLAGS ARE BASED ON THE FOLLOWING IDEAL CASE ASSUMPTIONS</p>						<ul style="list-style-type: none"> <li>DBM Design Basis Memorandum</li> <li>EHT Electrical Heat Tracing</li> <li>FAT Field Acceptance Test</li> <li>FEED Front End Engineering Design</li> <li>GA General Arrangement</li> <li>HAZOP Hazardous Operation analysis</li> <li>HVAC Heating, Ventilation, Air Conditioning</li> <li>IFC Issued For Construction</li> <li>IFD Issued For Design</li> <li>IFQ Issued For Quotation</li> <li>IFR Issued For Review</li> <li>ISO Isometric</li> <li>LDT Line Designation Table</li> <li>MDMT Minimum Design Metal Temperature</li> <li>MSD Material Selection Diagram</li> <li>MTO Material Take Off</li> <li>NDE Non Destructive Examination</li> <li>P&amp;ID Process &amp; Instrumentation Diagram</li> <li>PFD Process Flow Diagram</li> <li>PRRT Project Rework Reduction Tool</li> <li>SIL Safety, integrity level</li> <li>SOC Supplier of Choice</li> <li>UFD Utility Flow Diagram</li> <li>VIP Value Improving Practices</li> <li>WBS Work Breakdown Structure</li> </ul>																	
<b>IDEAL CASE ASSUMPTIONS</b>																							
<ul style="list-style-type: none"> <li>CONTRACT AWARDED</li> <li>SCOPE DEFINED</li> <li>SCHEDULE DEFINED</li> <li>IFC DRAWINGS RECEIVED</li> <li>IFC SPECIFICATIONS RECEIVED</li> <li>WORK BY OTHERS IDENTIFIED</li> <li>SITE INFRASTRUCTURE DEFINED</li> <li>LOCATION - GREEN FIELD RATHER THAN BROWN FIELD</li> <li>ENVIRONMENTAL REQUIREMENTS PROVIDED</li> <li>FUNDING IN PLACE</li> <li>PROJECT PERMITS IN PLACE</li> <li>PROJECT CONTRACTS AND AUTHORIZATION FOR SIGNING</li> </ul>																							