

SECTION 932

INSPECTION CHECKLISTS

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932.01 SCOPE

The Contractor shall complete project specific checklists at project startup depending on the specific scope of work and submit the checklists to the Owner's Representative within two (2) weeks of project startup for review. All checklists shall be completed to the satisfaction of the Owner's Representative. The Owner's Representative shall be provided with five (5) business days for subsequent reviews required by resubmittals.

The Contractor shall ensure all inspection checklists are completed and submitted to the Owner's Representative for acceptance no later than 48 hours prior to concrete placement or as agreed with the Owner's Representative. If the work applicable to the checklist is not complete, is modified in anyway, has risk for rework or movement due to other activities, the Owner's Representative has the right to reject the work.

The Owner's Representative shall be provided access to verify the items within all checklists at all times.

Specific checklists and contents shall include but not be limited to the information provided below.

932.02 PROJECT SPECIFIC CHECKLISTS

All Checklists must include:

- Time and date the inspection was complete.
- Element being inspected.
- Signature location for each line item on the sheet.
- Signature location at the bottom of the sheet by the Contractor's construction manager or superintendent.
- Include: "DTI Owner's Representative acknowledges the receipt of this checklist (print name) _____". *Acknowledgement of this submittal does not alleviate the Contractor from performing the associated work as per the contract documents, Departmental Specifications, and provincial and federal regulations.*

932.02.01 PRE-CONCRETE PLACEMENT CHECKLIST

Pre-Concrete Placement Checklist (to be completed the morning of concrete placement):

- Concreting Placement Plan has been accepted by the Owner's Representative.
- Thermal Control Plan has been accepted by the Owner's Representative. Including a stamped protective housing drawing (if required). See 931.04.01.02.
- Temperature at the point of discharge of plastic concrete as per Section 930 Table 2.0.
- Incorporated any change notices, or changes to drawings.
- All items to be embedded inside the forms are clean and free of deleterious materials.
- Foundation is free of garage, saw dust and other deleterious materials.
- Hardened concrete surfaces are thoroughly saturated with water, for at least 1 hour in advance of placing concrete.
- Concrete Repair Checklist is completed and verified as required.
- Foundation Checklist is completed and verified as required.
- Reinforcement Checklist is completed and verified as required.
- Embedded Checklist is completed and verified as required.
- Formwork Checklist is completed and verified as required.
- Finishing Train Checklist (Screed Dry Run) completed and verified as required (See 931.05.03 and Section 907).
- Other checklists completed and verified as required.
- Finishing train support system installed and as per stamped drawing with verification provided.
- Surface temperatures checked and in compliance with this specification.

932.02.02 FOUNDATION CHECKLIST

Foundation Checklist (to be completed prior to rebar or formwork installation):

- Foundation at the required position and elevation.
- Soil and or rock has satisfactory bearing capacity verified by the Engineer of Record or delegate.
- Concrete scarified in compliance with 931.04.03.
- Incorporated any change notices, or changes to drawings.
- Conforms to Section 902.

932.02.03 REINFORCEMENT CHECKLIST

Reinforcement Checklist (complete progressively through installation and inspection):

- Installation compliance with IFC reinforcing steel drawings:
 - Bar type (glass fiber reinforced polymer (GFRP), carbon steel, stainless steel, galvanized).
 - Bar sizes.
 - Splices and development lengths.
 - Correct number of bars.
 - Spacing of bars.
 - Cover.
 - Correct tie wire used.
 - No dissimilar metals in contact.
 - Incorporated any change notices, or changes to drawings.
 - Conforms to Section 905.

932.02.04 EMBEDDED PARTS CHECKLIST

Embedded Parts Checklist (complete progressively through installation and inspection):

- Installation compliance with IFC embedded parts drawings:
 - Correct materials.
 - Correct dimensions.
 - No dissimilar metals in contact.
 - At least x1.5 max aggregate size around all embedded parts.
 - Location and verticality correct.
- Secured to prevent movement from concrete placement.
- Incorporated any change notices, or changes to drawings.
- Survey checks have been completed and within tolerance as per Section 926.
- Conforms to Section 918.

932.02.05 FORMWORK CHECKLIST

Formwork Checklist (complete progressively through installation and inspection):

- Installation compliance with submitted drawings:
 - Geometry, position and elevation.
 - Joint locations.
 - Correct form-ply.
 - Formwork panels in good condition.
 - Gaps in formwork panels closed.
 - Washout holes closed.
 - Formwork panel alignment.
 - Formwork built as per drawings (panel thickness, strong backs, whalers, panel stitching, formwork tie type/spacing/size/quantity etc.).
 - No dissimilar metals in contact.
 - Top of concrete markers in place.
 - Chamfer strips in place.
 - Survey checks have been completed and within tolerance as per Section 926.
 - Incorporated any change notices, or changes to drawings.
 - Approved by the formwork design engineer (if greater than 1.5m in height) with written verification provided.
 - Conforms to Section 907.

932.02.06 OTHER CHECKLISTS

Other checklists the Owner's Representative may require at project start-up may include but is not limited to:

- Dewatering, turbidity and erosion control - Complete during initial install and as required.
- Permanent material deliveries (i.e. box girders and rebar) - Complete at material arrival and after final installation.
- Pile driving and testing - Complete progressively through installation and inspection.
- Structural steel coatings - Complete at material arrival and after final installation.
- Rock Bolts - Complete progressively through installation and inspection.
- Rock Dowels - Complete progressively through installation and inspection.
- During Concrete Placement - Complete progressively through installation and inspection.
- Structural steel bolt torquing - Complete progressively through installation and inspection.

- Earthworks (material certifications/compacting/lifts etc.) - Complete progressively through installation and inspection.
- Post-Concrete Placement (defect maps) - Complete during the operation.
- Concrete Repairs - Complete progressively through installation and inspection.
- Pre-stressing operations - Complete during the operation.
- Post-tensioning operations - Complete during the operation.
- Finishing machine screed cover and deck thickness complete within 48 hours of the scheduled concrete placement.
- Riprap placement - Complete during the operation.