

*Planting Quality Inspections:
assessment of planting contract performance*

Planting Quality Inspection Procedures (FS704)

Purpose

- The Planting Quality Inspection (PQI or FS704) procedures evaluate whether contract standards have been met, and determines contract payment based on plot data
- The PQI procedures do not define the planting standards; the planting standards and specifications are defined in the tree planting contract.
- Must be a link between the contract specifications and the quality inspection procedures

Inspector

- Must understand survey methodology and calculation of survey statistics
- Must have a thorough understanding of contract specifications and planting quality inspection procedures
- Must be present at all pre-work conference
- Establishes monitoring and payment plots in a timely manner
- Checks planting stock storage and handling
- Communicates the results of both monitoring and payment plots to the contractor in a timely manner

Procedures

- Review the contract specifications identified within the Schedules A, B, and C.
- Checks planting stock storage and handling
- Check the number of trees planted against the number of plantable spots
- Check that each tree has been planted on the best microsites available within the spacing limits specified in the contract
- Check that each tree has been properly planted
- The definitions and specifications needed for these assessments must be stated in the contract and/or made clear at the pre-work conference

Planting Specifications

- Specifications found in Planting prescriptions and in Schedules A, B and C of the planting contract

Sample Plot Size and Sampling Intensity

- Sample plot size, sampling intensity, and the statistical error specified in the PQI procedures ensure that the plot data accurately represents the planting density and quality over the entire area of the planting unit
- Benefits both the contractor and the ministry.

Monitoring Plots

- Contractor is responsible for completing internal planting quality inspections and must provide proof of such if requested by the contract coordinator or inspector
- Contractor should establish as soon as planting begins so that issues are identified and corrected early

Payment Plots

- Must be completed by the same person that completed the monitoring plots
- Established as soon as the contractor provides notification that a unit is complete
- Plots established on a systematic grid so that the entire planting unit is covered (if the entire planting unit is not covered uniformly, the estimate of trees planted will be biased). All plot locations within the defined boundary of the planting unit (unless the area has been specifically excluded from the contract), should be sampled regardless of the number of plantable spots, terrain, or naturals that the plot may contain

Planting Contract Best Practices

Contract Preparation: Ensure that planting specifications and requirements are clearly defined in and consistent between:

- Planting Prescriptions for each planting unit (if available)
- Schedule B, contains contract spacing, minimum inter-tree spacing and planting density (which defines M- the maximum allowable number of trees planted per plot)
- Schedule A, Article 3 contains specifications for acceptable and unacceptable microsites, planting spot preparation and planting (e.g., making the planting hole, plug placement, closing the planting hole)
- Schedule C may further specify requirements for planting such as; planting spot preparation, duff planting and obstacle planting. It may also provide definitions of acceptable naturals and additional planting fault codes depending on planting requirements (e.g., fault codes for establishment of seedling protectors and fertilizer placement).

Mandatory contractor meeting

- All contractors receive the same information on contract specifications and expectations for microsite selection and planting spot preparation prior to bid submission
- No surprises at the pre-work conference

Pre-work Conference

- All persons involved in assessing planting quality must attend (contract co-ordinator, inspector, contractor representative, planting supervisors and checkers).
- Recommend that the pre-work covers the requirements and specifications for each unit, especially when site conditions and contract specifications change
- Discuss and document contract requirements, e.g., contract and minimum spacing, minimum overall density, acceptable microsites, planting spot preparation, satisfactory and unsatisfactory trees, acceptable naturals. Discuss how these requirements will be assessed with the planting quality inspection procedures.
- Discuss and document payment calculations and reductions for low planting quality and excess
- Ensure the pre-work conference discussions are well documented.