



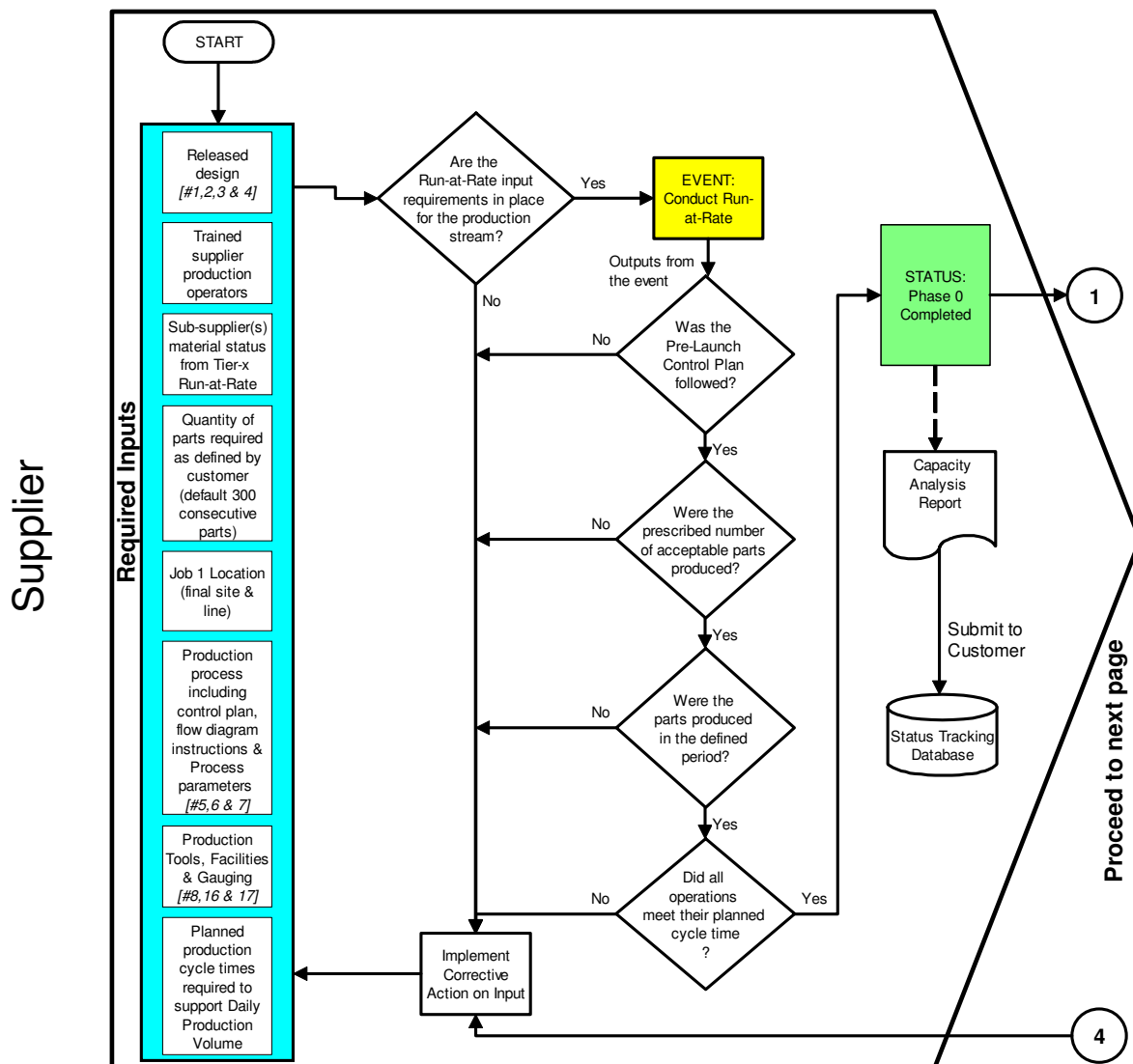
Process Map Phase 0 Run-at-Rate

Objectives: To confirm that all production input requirements are available and understood, and can support a limited production run.

To provide an early indicator that the design of the process/tool/facility has the potential to produce at rate the required number of acceptable parts as determined by the Pre-Launch control plan.

Refer to web link https://web.gpr.ford.com/sta/Capacity_Analysis_Report.xls for Capacity Analysis Report and supporting documentation.

Phase 0 Run-at-Rate



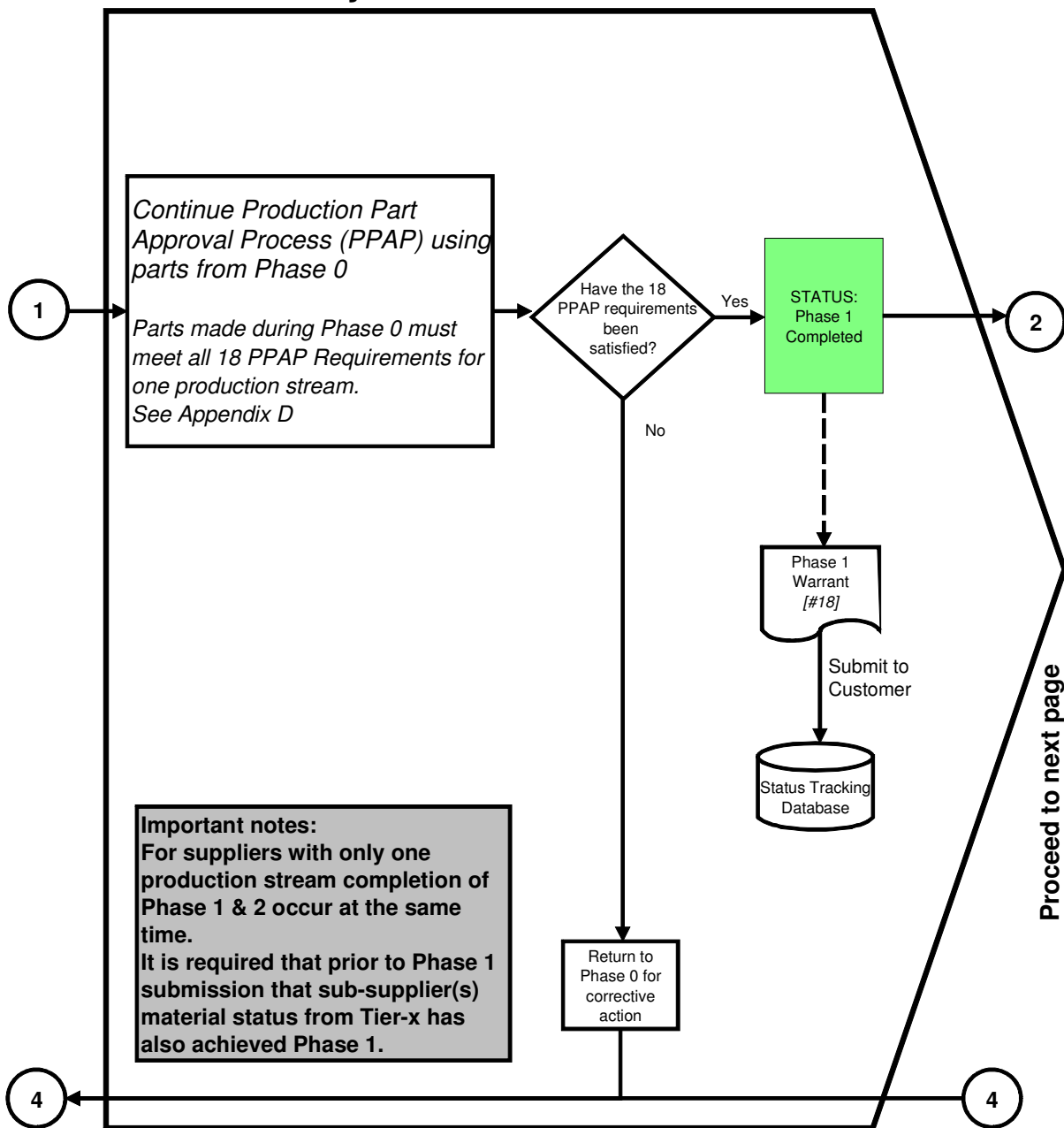
Note: [#x] refers to the Requirement Number in PPAP 4th Edition that will assist in confirming requirements



Process Map Phase 1 Quality Verification

Objectives: To determine if all customer engineering design record and specification requirements are properly understood by the Supplier. To provide an early indicator that the design of the process/tool/facility has the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate by operating a minimum of one selected production stream. Phase 1 demonstrates that *all PPAP requirements have been met for one production stream.*

Phase 1 Quality Verification



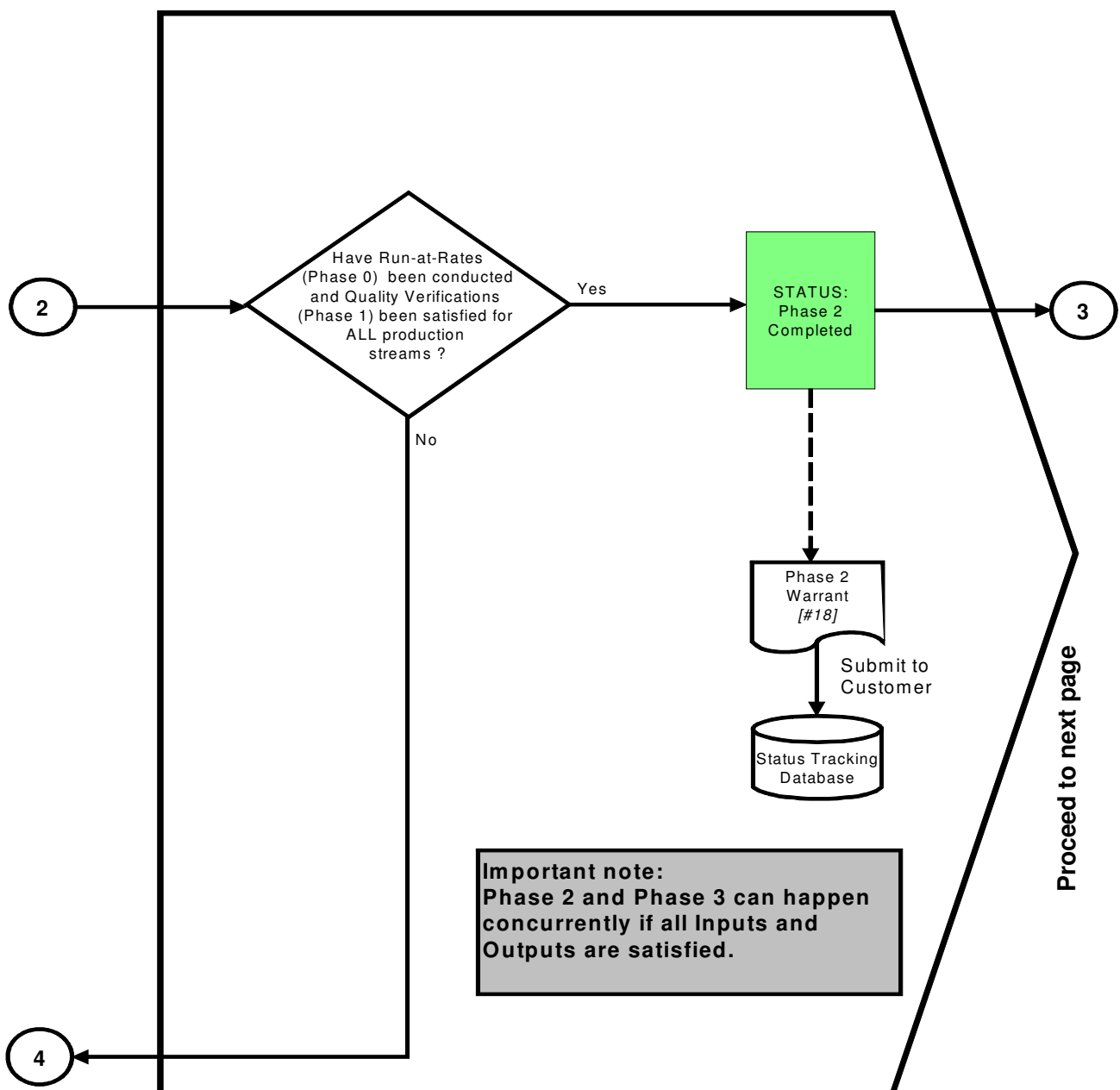


Process Map Phase 2 Production Verification

Objectives: To determine if all customer engineering design record and specification requirements are properly understood by the Supplier, and that ALL production streams have the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate. **Phase 2 demonstrates that all PPAP requirements are met for all production streams.**

Note: The approach adopted for PPAP of multiple production streams is scenario-specific and must be agreed between the Supplier and STA. In general terms each production stream should be assessed for Run-at-Rate and Quality Verification separately. Consideration should also be given to the risk that the introduction of further production streams may impact the validity of the Phase 1 approval. (e.g., Phase 1 achieved on cavity #1 of a four cavity tool - the introduction of cavity #2, 3 & 4 may impact the cavity #1 part and it may no longer be to specification).

Phase 2 Production Verification





Process Map Phase 3 Capacity Verification

Objective: Verify the Supplier's production system can support customer declared **volume requirements** while meeting Phase 2 requirements.

Refer to web link https://web.qpr.ford.com/sta/Capacity_Analysis_Report.xls for Capacity Analysis Report and supporting documentation.

Phase 3 Capacity Verification

