

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Contractor shall provide the ITPs, Forms, and Quality Records indicated in the tables below. Failure of Contractor to provide the required Quality Records during the associated Work will result in Company rejecting the materials and/or workmanship. Any associated replacement or rework will be at Contractor's expense. The following table summarizes project Quality Record deliverables however it is the responsibility of the Contractor to review the Company Specifications and Scope of Work to ensure all deliverables are met.

Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
1.	<b>General:</b> General Documentation Requirements	<ul style="list-style-type: none"> <li>All plans as detailed in the SOW / Specifications (i.e. PQP, PSSSP, etc)</li> </ul>	<ul style="list-style-type: none"> <li>Calibration Certificates</li> </ul>	<ul style="list-style-type: none"> <li>Inspection Test Plan Template</li> <li>Request for Information (RFI)</li> <li>Design Change Notice (DCN)</li> <li>Non-Conformance Report (NCR)</li> <li>Geotechnical Report</li> </ul>	<ul style="list-style-type: none"> <li>Calibration Certificates</li> </ul>	<ul style="list-style-type: none"> <li>TES-CT-ITP-GL Inspection Test Plan Specification for Construction and Fabrication (CAN-US-MEX)</li> <li>Inspection Test Plan Master Index</li> </ul>	<ul style="list-style-type: none"> <li>Contractor shall adhere to the Company-accepted Inspection Test Plan (ITP). Contractor may choose to adopt the supplied Standardized ITP Template.</li> <li>Contractor shall issue RFIs to Company, as needed.</li> <li>Company will provide RFI responses back to Contractor.</li> <li>Company will issue DCNs and NCRs to Contractor, if/as needed.</li> <li>Contractor will submit applicable equipment calibration certificates to the Company</li> <li>Contractor will generate reports on activities that are being performed.</li> <li>Company will review all documentation for acceptance.</li> <li>Contractor will progressively maintain the permanent file with all associated records unless otherwise instructed by the Company. These records will be turned over to the Company by Substantial Completion.</li> </ul>
2.	<b>Operator Qualifications:</b> Ensure workers are qualified to perform tasks that fall under project's Op-Qual program	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Field Verification Report (Contractor personnel)</li> </ul>	<ul style="list-style-type: none"> <li>Field Verification Report (Company personnel)</li> <li>OQ Task List</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>TC Operator Qualification Program</li> </ul>	<ul style="list-style-type: none"> <li>Company will provide Contractor with OQ Covered Task List</li> <li>Contractor shall provide a List of Employees and Roles to Company Inspection weekly and each time a new employee comes to site.</li> <li>Contractor shall verify operator qualifications for all Contractor personnel in Veriforce and provide a Field Verification Report to Company Inspection weekly.</li> <li>Company Inspection will verify operator qualifications for all Company personnel in</li> </ul>

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
							Veriforce and maintain a Field Verification Report weekly. • Contractor to verify and document span of control when utilized. • Company Inspection will maintain the permanent file with all associated records.
3.	<b>Material Receiving &amp; Storage:</b> Inventory management and document collection for all Contractor-supplied and Company-supplied materials	• Material Receiving ITP • Material Management Plan • Material Receiving & Storage Inspection & Test Procedure	• Materials Receiving Report	• TEF-CT-ITPF-G Material Receiving & Storage ITP - Facilities (US-MEX)	• Third Party Inspection (3PI) Reports • Material Testing Reports (MTRs) • Certificates of Compliance (COC) • Packing slips • Pipe Tally Reports	• TES-CT-FCSTD-G Facilities Construction Specification (US-MEX) • TES-CT-THSSP-GL Transportation, Handling and Stockpiling of Steel Pipe and Pipe Assemblies Specification (CAN-US-MEX)	• Contractor shall maintain the Material Receiving Report until Substantial Completion is achieved. • Contractor shall collect all documentation as part of the material receipt process and maintain a file in an organized and accessible manner until Mechanical Completion is achieved. • Company Inspection will review the Material Receiving Report and documentation file at least once daily. • Contractor will turn over to Company Inspection the Material Receiving Report and documentation file at Substantial Completion.
4.	<b>Redline Drawings:</b> Capture as-built conditions using redlined drawings	• N/A	• Redline As-built drawings / Surveys	• Facilities Drawings Redline Checklist	• N/A	• TES-DR-REDLN-GLE Engineering Drawing Redline Specification	• Contractor will complete and submit the Facilities Redline Checklist (Appendix A of TES-DR-REDLN-GLE Engineering Drawing Redline Specification) • Contractor shall maintain a master set of redlined drawings for all Contractor fabrication and site construction Work until Mechanical Completion is achieved. • Company will provide Contractor with redlined drawings for Company-furnished fabrications and equipment, where applicable. Contractor shall incorporate into the master redline set. • Company Inspection will review the master set of drawing redlines at least once daily at all Contractor Work locations. • Contractor will turn over to Company Inspection the master set of drawing redlines at Mechanical Completion.

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
5.	<b>Survey:</b> Documentation required for site survey	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Survey Report</li> </ul>	<ul style="list-style-type: none"> <li>TES-CI-FSURV-GLE Facilities Survey Specification</li> </ul>	<ul style="list-style-type: none"> <li>Contractor will perform survey activities per the SOW</li> <li>Contractor shall complete Survey Reports, drawings, field notes, and closure calculations for all survey Work.</li> <li>Contractor shall have the final Survey Reports and drawings stamped by the licensed surveyor who performed or supervised the work.</li> <li>Contractor shall incorporate all surveyed locations into the master set of drawing redlines.</li> <li>Company Inspection will review the survey records at least once daily during survey Work.</li> <li>Contractor will turn over to Company Inspection the final survey records within ten (10) days of completing the survey Work.</li> </ul>
6.	<b>Site Preparation:</b> Documentation for Clearing, Stripping & Grading including timber salvage and initial site leveling	<ul style="list-style-type: none"> <li>Site Preparation ITP</li> <li>Water Management Plan</li> <li>Cold Weather Compaction Plan (if applicable)</li> <li>Site Preparation Inspection &amp; Test Procedure(s)</li> </ul>	<ul style="list-style-type: none"> <li>Site Preparation Inspection Report / Checklist</li> <li>One Call Report (as required)</li> <li>Stakeout Report (Contractor)</li> </ul>	<ul style="list-style-type: none"> <li>TEF-CI-ITPF-GLE Site Preparation ITP - Facilities (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>Proctor &amp; Sieve Analysis (if filling and compacting)</li> <li>Compaction Test Reports (as required)</li> </ul>	<ul style="list-style-type: none"> <li>TES-CI-EARTH-GLE Facility Earthwork Specification (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>Contractor will complete daily quality control reports to support required activities as stated on the Site Preparation and Grading ITP</li> <li>Contractor will perform and record utility sweeps including the development of a stakeout report and obtain One Call Reports for all areas requiring ground disturbance. One Call Reports will be kept current.</li> <li>Contractor will obtain Proctor / Sieve analysis reports for each soil type compacted.</li> <li>The Contractor will submit a Site Preparation Inspection and Test Procedure detailing how the activity will be inspected &amp; tested.</li> </ul>
7.	<b>Excavation:</b> Documentation for the Excavation of soils	<ul style="list-style-type: none"> <li>Excavation ITP</li> <li>Employee excavation training records and competency verifications</li> <li>When used, shoring or sheeting plans,</li> </ul>	<ul style="list-style-type: none"> <li>One Call Report</li> <li>Stakeout Report (Contractor)</li> <li>Excavation Report / Checklist</li> </ul>	<ul style="list-style-type: none"> <li>TEF-CI-ITPF-GLE Excavation ITP (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>TES-CI-EARTH-GLE Facility Earthwork Specification (CAN-US-MEX)</li> <li>TES-CT-EXC-GLE Excavation Specification (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>Contractor will perform and record utility sweeps including the development of a stakeout report and obtain One Call Reports for all areas requiring ground disturbance. One Call Reports will be kept current.</li> </ul>

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
		sketches, details, and Professional Engineer's calculations • Excavation Inspection & Test Procedure					• Contractor shall provide Company Inspection with employee training records and competency verifications prior to starting any excavation Work. • Contractor shall complete Excavation Checklists and Excavation Inspection Forms for each Excavation. • The Contractor will submit an Excavation Inspection and Test Procedure detailing how the activity will be inspected & tested.
8.	<b>Backfill:</b> Documentation for soil placement and compaction / testing	• Backfill ITP • Cold Weather Compaction Plan (as required) • Flowable Fill Mix Design (as required) • Proposed Dewatering Methods as required • Proctor & Sieve Analysis • Backfill Inspection & Test Procedure	• Backfill Inspection Form / Checklist • Redlined drawings showing all test locations	• TEF-CI-ITPF-GLE Backfill ITP – Facilities (CAN-US-MEX)	• Testing Equipment Calibration Certifications • Compaction Testing Report	• TES-CI-EARTH-GLE Facility Earthwork Specification (CAN-US-MEX) • TES-CT-EXC-GLE Excavation Specification	• Contractor will complete daily quality control report / checklist to support required activities as stated on the Backfill ITP. • Contractor shall submit calibration certifications for all compaction testing equipment to Company Inspection prior to testing. • Company or Contractor shall provide independent testing agencies and ensure Testing Reports are completed. • Contractor shall incorporate all third-party test locations into the master set of drawing redlines. • The Contractor will submit a Backfill Inspection and Test Procedure detailing how the activity will be inspected & tested.
9.	<b>Piling – Driven Steel:</b> Documentation for Driven Steel Pile Installation	• Driven Steel Pile ITP • Equipment being used (manufacturer and model) • Hammer weight, drop height, rated driving energy • Reinforcement details for pile head damage (as required) • AWS D1.1 Welder Qualification (Splices)	• Pile Driving Analyzer (PDA) report (as required) • Material Test Reports (if contractor purchased)	• TEF-CI-ITPF-GLE Driven Steel Piling Installation ITP (CAN-US-MEX) • TEF-DV31-6216 Pile Driving Non-Vibratory Record	• NDE Reports (Spliced Piles) as required	• TES-CI-SPILE-GLE Driven Steel Piles Specification (CAN-US-MEX)	• Contractor shall submit calibration certifications for all pile driving equipment to Company Inspection prior to installation. • Contractor shall complete a Pile Installation Reports for each pile installation. • Contractor will supply all required documentation for structural welding if splicing per Section 15 • The Contractor will submit a Driven Steel Pile Inspection and Test Procedure detailing how the activity will be inspected & tested.

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
		<ul style="list-style-type: none"> <li>• AWS D1.1. Weld Procedure (Splices)</li> <li>• Driven Steel Pile Inspection &amp; Test Procedure</li> </ul>					
10.	<b>Piling – Helical (Screw):</b> Documentation for Helical Pile Installation	<ul style="list-style-type: none"> <li>• Helical Pile Installation ITP</li> <li>• Helical Inspection &amp; Test Procedure(s)</li> </ul>	• N/A	• TEF-CI-ITPF-GLE Helical (Screw) Piling Installation	<ul style="list-style-type: none"> <li>• Torque measurement calibration certificate</li> <li>• Helical Pile Installation Report / checklist</li> <li>• Material Test Reports (if contractor purchased)</li> <li>• design and drawings for helical piles</li> </ul>	• N/A	<ul style="list-style-type: none"> <li>• Contractor shall submit calibration certifications for all pile driving equipment to Company Inspection prior to installation.</li> <li>• Contractor will submit MTRs for piles to the Company if purchased</li> <li>• Contractor will submit design drawings and calculations to the company if in scope.</li> <li>• The Piling Contractor will complete Pile Installation Reports / checklists for each pile installed.</li> <li>• The Contractor will submit a Helical Pile Inspection and Test Procedure detailing how the activity will be inspected &amp; tested.</li> </ul>
11.	<b>Piling – Drilled Pier (Concrete):</b> Documentation for Drilled Pier (Concrete) Pile Installation	<ul style="list-style-type: none"> <li>• Drilled Pier (Concrete Pile) Installation ITP</li> <li>• Engineering systems, which may include P.Eng. stamped drawings</li> <li>• Equipment maintenance records, which may include nondestructive testing reports</li> <li>• Inspection records and/or certifications by government agencies</li> <li>• Pile Installation Procedure</li> </ul>	• N/A	<ul style="list-style-type: none"> <li>• TEF-CI-ITPF-GLE Drilled Pier Installation (US)</li> <li>• Drilled Pile Installation Record</li> </ul>	• Concrete Test Reports	<ul style="list-style-type: none"> <li>• TES-CI-CPILE-GLE Drilled Piers Specification (US)</li> <li>• TES-CI-CONC-GLE Cast-In-Place Concrete (US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor will submit any Engineered records to the company as required by the scope of work</li> <li>• Contractor will submit equipment maintenance, inspection and certification records to the company</li> <li>• The contractor will produce a Pile Installation Procedure and submit to the company.</li> <li>• Contractor will submit a Tremie Concrete Placement Procedure (if required – can be included in the pile installation procedure).</li> <li>• Contractor will submit all applicable documentation for the rebar, formwork and concrete per section 12 of this document.</li> <li>• The Contractor will complete Drilled Pile Installation Records for each pile</li> <li>• Contractor will retain all Concrete test reports for each pour.</li> </ul>

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
		<ul style="list-style-type: none"> <li>• Tremie concrete placement method procedure (if required)</li> <li>• Concrete submittal requirements per Section 12.</li> <li>• Drilled Pier Inspection &amp; Test Procedure</li> </ul>					<ul style="list-style-type: none"> <li>• The Contractor will submit a Drilled Pier Inspection and Test Procedure detailing how the activity will be inspected &amp; tested.</li> </ul>
12.	<b>Structural Concrete Installation:</b> Documentation for Structural Concrete including pre/post inspection.	<ul style="list-style-type: none"> <li>• Reinforcement Shop/Placement Drawings</li> <li>• concrete mix design with proof test results for specified performance criteria</li> <li>• batch plant certification</li> <li>• material certifications for cement and aggregate (coarse and fine)</li> <li>• methods for delivery and installation</li> <li>• procedures for cold and hot weather installation and curing</li> <li>• Manufacturer data for admixtures, form release and sealants</li> <li>• personnel certifications as required</li> <li>• Structural Concrete Inspection &amp; Test Procedure</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-Concrete Placement Report / Checklist (base, rebar / embedment / form inspection)</li> <li>• Concrete Installation Report / Checklist</li> <li>• Post Concrete Installation Report / Checklist (Curing, finishing, etc)</li> <li>• Redlined drawings showing mix locations</li> </ul>	<ul style="list-style-type: none"> <li>• TEF-CI-ITPF-GLE Structural Concrete Installation ITP (US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Testing Equipment Calibration Certifications</li> <li>• Slump Testing Report</li> <li>• Wet Density Testing Report</li> <li>• Air Content Testing Report</li> <li>• Cylinder Break Testing Report</li> <li>• Redlined drawings showing concrete test locations</li> <li>• Redlined drawings showing mix design locations</li> </ul>	<ul style="list-style-type: none"> <li>• TES-CI-CONC-GLE Cast-in-Place Concrete Specification (US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor will submit any Engineered records to the company as required by the scope of work</li> <li>• Contractor will submit equipment maintenance, inspection and certification records to the company</li> <li>• The contractor will produce a Pile Installation Procedure and submit to the company.</li> <li>• Contractor will submit a Tremie Concrete Placement Procedure (if required – can be included in the pile installation procedure).</li> <li>• Contractor will submit all applicable documentation for the rebar, formwork and concrete per section 12 of this document.</li> <li>• The Contractor will complete Drilled Pile Installation Records for each pile</li> <li>• Contractor will retain all Concrete test reports for each pour.</li> <li>• The Contractor will submit a Structural Concrete Installation Inspection and Test Procedure detailing how the activity will be inspected &amp; tested.</li> </ul>

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
13.	<b>Grout Placement – Cementitious:</b> Documentation for Cementitious Grout Installation	<ul style="list-style-type: none"> <li>• Cementitious Grout Placement ITP</li> <li>• Cementitious Grout Inspection &amp; Test Procedure</li> </ul>	<ul style="list-style-type: none"> <li>• Cementitious Grout Placement Report / Checklist</li> <li>• Product Information</li> </ul>	<ul style="list-style-type: none"> <li>• TEF-CI-ITPF-GLE Cementitious Grout (US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Compressive Strength Report (if required)</li> </ul>	<ul style="list-style-type: none"> <li>• TES-CI-CONC-GLE Cast-in-Place Concrete Specification (US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor shall submit calibration certifications for all concrete testing equipment to Company Inspection prior to testing.</li> <li>• Contractor shall provide third party Compressive Test Reports (as required)</li> <li>• Contractor will complete daily Cementitious Grout Placement Report / Checklist to support required activities as stated on the ITP.</li> <li>• The Contractor will submit a Cementitious Grout Placement Inspection and Test Procedure detailing how the activity will be inspected &amp; tested.</li> </ul>
14.	<b>Grout Placement – Epoxy:</b> Documentation for Epoxy Grout Installation	<ul style="list-style-type: none"> <li>• Epoxy Grout Placement ITP</li> <li>• Grout Data Sheets (if not a pre-approved type)</li> <li>• Grouting Plan (if required)</li> <li>• Expansion Joint Plan (if required)</li> <li>• Epoxy Grout Inspection &amp; Test Procedure</li> </ul>	<ul style="list-style-type: none"> <li>• Epoxy Grout Placement Report / Checklist</li> <li>• Ambient temperature log during placement</li> <li>• Ambient temperature log – product storage</li> <li>• Product Information</li> </ul>	<ul style="list-style-type: none"> <li>• TEF-CI-ITPF-GLE Epoxy Grout (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Compressive Strength Report</li> </ul>	<ul style="list-style-type: none"> <li>• TES-CT-MCR-GL Mechanical Construction Requirements (CAN-US-MEX)</li> <li>• API 686 - Recommended Practice for Machinery Installation and Installation Design</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor shall complete a Grout Placement Report for each grout location.</li> <li>• Contractor shall submit calibration certifications for all concrete testing equipment to Company Inspection prior to testing.</li> <li>• The contractor will monitor ambient temperature of material storage and placement.</li> <li>• Contractor shall provide third party Compressive Test Reports (as required).</li> <li>• Contractor will complete daily Epoxy Grout Placement Report / Checklist to support required activities as stated on the ITP.</li> <li>• The Contractor will submit a Epoxy Grout Placement Inspection and Test Procedure detailing how the activity will be inspected &amp; tested.</li> <li>• The contractor will supply all documentation (checklists / reports) to satisfy the requirements of the Grout Manufacturer have been satisfied.</li> </ul>
15.	<b>Structural Steel and Miscellaneous Metal Installation:</b> Documentation for the Installation of Structural Steel and	<ul style="list-style-type: none"> <li>• Structural Weld Procedure</li> <li>• Repair Procedure(s)</li> <li>• AWS D1 Welder Certifications</li> </ul>	<ul style="list-style-type: none"> <li>• Structural Steel Installation Report / Checklist</li> <li>• Mill Test Reports (as required)</li> </ul>	<ul style="list-style-type: none"> <li>• TEF-CI-ITPF-GLE Structural Steel Install ITP - (US-MEX)</li> <li>• Visual Weld Inspection Report (performed by the Company)</li> </ul>	<ul style="list-style-type: none"> <li>• NDE Report (as applicable)</li> </ul>	<ul style="list-style-type: none"> <li>• TES-CI-STEEL-GLE Structural Steel and Miscellaneous Metals Specification (US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor shall submit Welding Procedures and Welder Certifications to Company for acceptance at least two (2) weeks prior to starting welding.</li> <li>• Contractor shall submit accepted Welding Procedures and Welder Certifications to Company Inspection.</li> </ul>

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
	Miscellaneous metals including welding.	<ul style="list-style-type: none"> <li>• Shop Drawing Designs (per Section 2.3 of Specification)</li> <li>• Erection Diagrams (per Section 2.3 of Specification)</li> <li>• NDE methods /Procedures</li> <li>• Cold Galvanizing Compound data sheets (as required)</li> <li>• Structural Steel and Miscellaneous Metal Installation Inspection &amp; Test Procedure</li> </ul>					<ul style="list-style-type: none"> <li>• Contractor shall complete a daily Structural Steel Inspection Report that supports the activities in the ITP.</li> <li>• Company Inspection will complete the Visual Inspection Report.</li> <li>• The Contractor will submit a Structural Steel Inspection and Test Procedure detailing how the activity will be inspected &amp; tested.</li> </ul>
16.	<b>Welding:</b> Documentation required for welder qualification	• N/A	• N/A	• TEF-WELD-QUA-US Welders Qualification Form / Supporting Test Documents	• N/A	• TES-WL-APIWL-GL Welding of Pipelines and Facilities Specification (US-MEX)	<ul style="list-style-type: none"> <li>• Company Inspection will conduct welder testing and complete the associated Welders Qualification Form.</li> <li>• Company Inspection will maintain the permanent file with all associated records.</li> <li>• Company Inspection will compile a list of Contractor's qualified welders.</li> </ul>
	<b>Welding:</b> Documentation required for weld procedures	<ul style="list-style-type: none"> <li>• Welding Procedures (if submitting)</li> <li>• Repair Welding Procedure</li> </ul>	• Qualified Weld Procedure Specifications	• N/A	• N/A	• TES-WL-APIWL-GL Welding of Pipelines and Facilities Specification (US-MEX)	<ul style="list-style-type: none"> <li>• Contractor shall submit alternative Welding Procedures and PQRs to Company for acceptance at least two (2) weeks prior to starting welding.</li> </ul>
	<b>Welding:</b> Documentation required for welding	<ul style="list-style-type: none"> <li>• Welding ITP</li> <li>• Welding Inspection &amp; Test Procedure</li> <li>• Consumable Management Plan</li> <li>• Post Weld Heat Treatment (PWHT) Procedure (as required)</li> </ul>	<ul style="list-style-type: none"> <li>• Weld Map</li> <li>• Weld Log</li> <li>• Welding Inspection Report / Checklist</li> </ul>	<ul style="list-style-type: none"> <li>• TEF-ME-PRESW GL Non-Pressure Tested Tie-in Weld Waiver Approval Request Form</li> <li>• TEF-WELD-TIE-IN Tie-in Weld In-Process Examination Form</li> </ul>	• N/A	• TES-WL-APIWL-GL Welding of Pipelines and Facilities Specification (US-MEX)	<ul style="list-style-type: none"> <li>• Company Inspection will witness production welding and complete Inspection Daily Report.</li> <li>• Contractor shall complete Weld Maps and submit to Company Inspection. Weld Maps shall include name of qualified welder that completed each weld.</li> <li>• Contractor will complete a Welding Inspection Report / Checklist daily to support requirements in</li> </ul>

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
		<ul style="list-style-type: none"> <li>Welding Plan</li> </ul>		<ul style="list-style-type: none"> <li>TEF-WELD-BACKBEVEL Back Bevel Transition Weld Parameter Form</li> </ul>			<p>the ITP. This report will include all welds from that day.</p> <ul style="list-style-type: none"> <li>Contractor will keep an up to date weld log of all welding performed unless otherwise instructed by the Company.</li> <li>Company will complete the Non-Pressure Tested Tie-in Weld Waiver Approval Request Form, where applicable, prior to starting the associated pressure test.</li> <li>Company Inspection will witness all tie-in welds and complete the In-Process Examination Form and Back Bevel Transition Weld Parameter Form, where applicable.</li> <li>The Contractor will submit a Welding Inspection and Test Procedure detailing how the activity will be inspected &amp; tested. This procedure will include Visual Inspection requirements.</li> </ul>
17.	<b>Non-Destructive Examination (NDE):</b> Documentation requirements for the qualification of NDE personnel and performing NDE	<ul style="list-style-type: none"> <li>NDE Procedures (if not already approved)</li> </ul>	<ul style="list-style-type: none"> <li>Visual Weld Inspection Report / log</li> <li>NDE Log (can be included on the weld log)</li> <li>Visual Inspection Competency Documentation</li> </ul>	<ul style="list-style-type: none"> <li>TFF-RT-QUAL Radiographic Examination Procedure Qualification Form</li> </ul>	<ul style="list-style-type: none"> <li>Level II or Level III radiographic testing certification</li> <li>Level II or Level III certification for other testing methods used</li> <li>Visual Acuity Report</li> <li>Radiographic Test Reports</li> <li>Magnetic Particle Inspection Reports</li> <li>UT Inspection Reports</li> <li>Liquid Penetrate Inspection Reports</li> </ul>	<ul style="list-style-type: none"> <li>TES-RT-API Radiographic Examination of Welds Specification</li> <li>TES-UT-API Ultrasonic Examination of Girth Welds Specification (US-MEX)</li> <li>TES-NE-MT-GLE Magnetic Particle Inspection (CAN-US-MEX)</li> <li>TEP-NE-VT-GLE Visual Examination (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>NDE technicians will provide Company Inspection with all certifications and test radiographs.</li> <li>Company Inspection will complete the Radiographic Examination Procedure Qualification Forms.</li> <li>Company NDE technicians will complete all NDE Reports and Film and submit to Company Inspection.</li> <li>Company will review all NDE Reports and Film as they are completed and either accept or reject.</li> </ul>
18.	<b>Cathodic Protection:</b> Documentation required for Cathodic	<ul style="list-style-type: none"> <li>Cathodic Protection ITP</li> <li>Cathodic Protection Inspection &amp; Test Procedure</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>TET-CP-ITP-GL Cathodic Protection Installation - ITP</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>TEN-CP-BUILD-GL Corrosion Prevention Construction Standard (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>Contractor will complete (as applicable) C1, C2, C3, and C4 Cathodic Inspection Forms.</li> <li>The Contractor will submit a Cathodic Protection Installation Inspection and Test Procedure</li> </ul>

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
	Protection Installation			Workbook Template (CAN-US-MEX) • Cathodic Protection Forms (CP1, CP2, CP3, C4)		• TEN-CP-DELVR-GL Corrosion Prevention Execution and Deliverables Standard (CAN-US-MEX)	detailing how the activity will be inspected & tested. • The Contractor will submit a Cathodic Protection Inspection and Test Procedure detailing how the activity will be inspected & tested.
19.	<b>Pressure Testing:</b> Documentation for Pre-Testing	• Pressure Testing ITP • Pressure Testing Inspection & Test Procedure	• Documentation per Section 20 of TES-ME-PRES-GL Pressure Testing Specification	• TEF-ME-PTTMP-GL Test Plan Form • TEF-CT-ITPP-GL Pressure Testing ITP (US-MEX)	• N/A	• TES-ME-PRES-GL Pressure Testing Specification	• Contractor shall submit the Pressure Test Form, Test Plan and Pre-Test Documentation Package to Company for acceptance at least ten (10) days prior to start of test. Company acceptance is required prior to starting the test. • Company will provide minimum and maximum test pressure. • Contractor will turn over to Company Inspection the Pre-Test Documentation Package after Company has accepted.
20.	<b>Pressure Testing:</b> Documentation for Pressure Testing and Post-Testing	• Pressure Testing ITP • Pressure Testing Inspection & Test Procedure (may be included in plan)	• TEF-CT-ITPP-GL Pressure Testing ITP (US-MEX) • Per Section 20 of TES-ME-PRES-GL Pressure Testing Specification	• TEF-CT-ITPP-GL Pressure Testing ITP - (US-MEX) • TEF-ME-PRES-GL Pressure Test Form	• N/A	• TES-ME-PRES-GL Pressure Testing Specification	• Contractor shall submit the Pressure Test Form and Post-Test Documentation Package (per Section 20 of TES-ME-PRES-GL Pressure Testing Specification). to Company for acceptance after testing is complete, but before dewatering the test assemblies. Company acceptance is required before dewatering. • Contractor will turn over to Company Inspection the Pressure Test Form and Post-Test Documentation Package after Company has accepted.
21.	<b>Pipe Drying:</b> Documentation required for Pipe Drying	• Dewatering and Drying Plan	• Test Assembly Sketch including Dewpoints	• N/A	• Dew Point Tester Calibration Certifications	• TES-ME-PRES-GL Pressure Testing Specification	• Contractor shall submit calibration certifications for all dew point testing equipment to Company Inspection prior to testing. • Contractor shall complete Dew Point Testing Report. • Contractor shall incorporate / record all dewpoint measurements into the Test Assembly Sketch

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
							completed as part of the Pre-Test Documentation Package.
22.	<b>Piping, Valve and Inline Component Installation:</b> Documentation required for the installation of Piping, valves, and inline components including the tightening of mechanical connections, tubing, threaded piping and installation of shoes	<ul style="list-style-type: none"> <li>• Piping, Valve and Inline Component Installation ITP</li> <li>• Piping, Valve and Inline Component Installation Inspection &amp; Test Procedure (including Tubing / Threaded Piping Installation and Mechanical Connections)</li> </ul>	<ul style="list-style-type: none"> <li>• Bolt Torque Map (Connections 12" or larger)</li> <li>• Tubing Installation Report / Checklist</li> <li>• Threaded Piping Installation Report / Checklist</li> </ul>	<ul style="list-style-type: none"> <li>• TEF-CT-ITPF-GL Piping, Valve and Inline Component Installation ITP (CAN-US-MEX)</li> <li>• TEF-ME-FBTQC-GL Flange Bolt Tightening Quality Control Form</li> </ul>	<ul style="list-style-type: none"> <li>• Bolt Torque Equipment Calibration Certifications</li> </ul>	<ul style="list-style-type: none"> <li>• TES-ME-FBT-GL Flange Bolt Tightening Specification</li> <li>• TES-ME-FIT-GL Tubing, Tube Fittings, and Threaded Pipe Fittings (CAN-US-MEX)</li> <li>• TES-CT-MCR-GL Mechanical Construction Requirements (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor shall submit calibration certifications for all bolt torque equipment to Company Inspection prior to use.</li> <li>• Contractor shall complete Flange Bolt Tightening Quality Control Form for each flanged connection.</li> <li>• Contractor shall indicate completed flange torquing on drawing redlines.</li> <li>• Contractor will complete a tubing Inspection Report / Checklist daily to support requirements in the ITP.</li> <li>• Contractor will complete a threaded pipe inspection report / checklist daily to support the requirements in the ITP.</li> <li>• Contractor will complete the Company Inspection the Flange Bolt Tightening Quality Control Forms as they are completed.</li> <li>• Contractor will maintain the Bolt Torque Map as required.</li> <li>• The Contractor will submit Inspection and Test Procedures for each activity detailing how the activity will be inspected &amp; tested.</li> </ul>
23.	<b>Coating &amp; Painting:</b> Documentation for above ground painting, transitions, and below ground coating	<ul style="list-style-type: none"> <li>• Below Ground Coating ITP</li> <li>• Above Ground Painting ITP</li> <li>• Contractor Above / Below Ground Painting &amp; Coating Inspection &amp; Test Procedure(s)</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>	<ul style="list-style-type: none"> <li>• TEF-CO-ITPP-GL Below Ground Coating ITP (CAN-US-MEX)</li> <li>• TEF-CO-PETX-GL Coating Inspection Form for Transitioning Coating Systems</li> <li>• TEF-CO-ITPF-GL Above Ground Coating ITP (CAN-US-MEX)</li> <li>• TEF-CO-PAINT-GL Coating Inspection</li> </ul>	<ul style="list-style-type: none"> <li>• Manufacturer Training Record for each applicator</li> <li>• Dry Film Thickness Testing Equipment Calibration</li> <li>• Micrometer Gauge Calibration</li> </ul>	<ul style="list-style-type: none"> <li>• TES-CO-EPU-GL Field-Applied External Liquid Coating Systems for Steel Pipe Specification (CAN-US-MEX)</li> <li>• TES-CO-PAINT-GL Paint Systems for Above Ground Facilities (Coastal and Non-Coastal) (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor shall submit Manufacturer Training Record for each coating applicator and the Contractor-furnished NACE Level 1 CIP inspector to Company Inspection prior to coating.</li> <li>• Contractor shall submit calibration certifications for all dry film thickness testing equipment to Company Inspection prior to use.</li> <li>• Contractor's NACE Level 1 CIP inspector shall complete all applicable Inspection Forms for above, transition and below grade coating application.</li> </ul>

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
				Form for Above Ground Painting • TEF-CO-EPU-GL Coating Inspection Form for Below Ground Liquid Coatings • TEF-CO-PETX-GL Coating Inspection Form for Transitioning Coating Systems			• The Contractor will submit a Coating / Painting Inspection and Test Procedure(s) detailing how the activities will be inspected & tested.
24.	<b>Electrical Installation:</b> Documentation for Electrical Installation including cable, equipment, conduit and tray	• Electrical Installation ITP • Contractor Electrical Installation Inspection & Test Procedure • Cable pull calculations / plan	• Megger Test Report • VLF Report • Electrical Installation Report	• TEF-EL-ITPF-GLE Electrical Installation ITP (US)	• Testing Equipment Calibration Certifications	• TES-CT-FCSTD-G Facilities Construction Specification	• Contractor shall submit calibration certifications for all Megger testing equipment to Company Inspection prior to use. • Contractor shall complete Megger Test Report for each conductor before and after the cable pull. • Contractor shall indicate completed megger testing on drawing redlines. • VLF Testing to be conducted when required • Contractor will complete Daily Electrical Installation Report(s) daily to support requirements in the ITP. • The Contractor will submit a Electrical Installation Inspection and Test Procedure(s) detailing how the activity will be inspected & tested.
25.	<b>Grounding:</b> Required documentation for Ground installation, testing and inspection	• Grounding ITP • Grounding Inspection & Test Procedure • personnel qualification for Exothermic Welders (if applicable) • insulating gravel physical properties / resistivity test(s)	• Grounding Installation Report	• TEF-EL-ITPF-GLE Grounding ITP - (CAN-US-MEX) • Ground Installation and Test Report	• Ground Testing Equipment Calibration Certifications	• TES-CT-FCSTD-G Facilities Construction Specification • TEP-ELEC-GRM FOP Ground Resistance Measurement Procedure	• Contractor shall submit calibration certifications for all ground testing equipment to Company Inspection prior to use. • Contractor shall complete Ground Test Report. • Contractor shall indicate completed ground testing on drawing redlines. • Contractor will complete a Grounding Inspection report daily to support requirements in the ITP. • The Contractor will submit a Grounding Installation Inspection and Test Procedure(s)

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
							detailing how the activity will be inspected & tested
26.	<b>HVAC Installation:</b> Required documentation for field installation HVAC	<ul style="list-style-type: none"> <li>HVAC Installation ITP</li> <li>HVAC Inspection &amp; Test Procedure</li> </ul>	<ul style="list-style-type: none"> <li>HVAC Installation Report</li> <li>Commissioning, Testing &amp; Balancing Report</li> </ul>	<ul style="list-style-type: none"> <li>TEF-CT-ITPF-GLE HVAC Field Installation ITP CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>Equipment Calibrations</li> </ul>	<ul style="list-style-type: none"> <li>TES-ME-HVCIN-GLE HVAC Installation, Ductwork, Refrigeration Piping and Accessories, System Testing, Balancing, and Commissioning Specification (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>Contractor will complete a HVAC Inspection Report daily to support requirements in the ITP.</li> <li>Contractor will complete Commissioning, Testing &amp; Balancing Report(s)</li> <li>The Contractor will submit a HVAC Installation Inspection and Test Procedure(s) detailing how the activity will be inspected &amp; tested</li> </ul>
27.	<b>In-Service Welding:</b> Required documentation for In-Service Welding	<ul style="list-style-type: none"> <li>In Service Welding ITP</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>TEF-CT-ITPF-GL In-Service Welding ITP (US-MEX)</li> <li>In-service welding / tapping assessment</li> <li>In-service Welder Qualifications</li> <li>In-service Welding Checklist</li> <li>TEF-WELD-CRT Cooling Rate Test Form</li> </ul>	<ul style="list-style-type: none"> <li>Hot Tap Coupon Testing Report</li> </ul>	<ul style="list-style-type: none"> <li>TES-WL-APIIS-GL Welding on In-service Pipelines Specification</li> </ul>	<ul style="list-style-type: none"> <li>Company Inspection to complete Welding Checklist &amp; Cooling Rate Test Form.</li> <li>Company to provide In-service welding / tapping assessment</li> <li>Company Inspection will maintain the permanent file with all associated records.</li> </ul>
28.	<b>Hot Tapping:</b> Required documentation for Hot Tapping	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Pipeline Inspection Report</li> <li>Ultrasonic Testing Report</li> <li>In-Service Stopple, Sleeve, Branch Inspection Report</li> <li>Pipeline Hot Tap Stub Installation Form</li> <li>Pipeline Hot Tap Measurement Report</li> <li>TEF-MECH-TRANS-US Transition Inspection Report Form</li> </ul>	<ul style="list-style-type: none"> <li>Hot Tap Coupon Testing Report</li> </ul>	<ul style="list-style-type: none"> <li>TES-ME-STR-GL Design and Fabrication of Butt-Welded Transition Joints Specification</li> <li>TEP-WELD-HTC Procedure for Hot Tap Coupon Testing</li> <li>Pipeline Hot Tap Procedure</li> <li>Branch Connection Epoxy Grout Injection Procedure</li> </ul>	<ul style="list-style-type: none"> <li>Contractor shall survey distance between the centerline of the hot tap to centerline of nearest named road and include this measurement on drawing redlines.</li> <li>Company will complete Pipe Inspection Report.</li> <li>Company NDE technicians will complete Ultrasonic Testing Report and submit to Company Inspection.</li> <li>Company Inspection will complete In-Service Stopple, Sleeve, Branch Inspection Report.</li> <li>Company Inspection will complete Hot Tap Stub Installation Form.</li> <li>Company will complete Hot Tap Measurement Report.</li> </ul>

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
							<ul style="list-style-type: none"> <li>• Company Inspection will complete Transition Inspection Report for transition joints, where applicable.</li> <li>• Company's testing lab will provide Hot Tap Coupon Testing Report.</li> <li>• Company Inspection will maintain the permanent file with all associated records.</li> </ul>
29.	<b>Electrical Heat Tracing:</b> Required documentation for the installation, inspection and testing of electrical heat trace	<ul style="list-style-type: none"> <li>• Electrical Heat Trace ITP</li> <li>• Electrical Heat Trace Inspection and Test Procedure</li> </ul>	<ul style="list-style-type: none"> <li>• Electrical Heat Trace Installation Report / Checklist</li> <li>• Megger Test Report</li> <li>• Resistance Test Report</li> </ul>	<ul style="list-style-type: none"> <li>• TEF-EL-ITPF-GLE Electrical Heat Tracing Installation (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>	<ul style="list-style-type: none"> <li>• TES-EL-EHT-GLE Electrical Heat Trace Equipment Specification (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor to complete Electrical Heat Trace reports to support activities in ITP</li> <li>• Contractor will turn over to Company Inspection the Megger and Resistance Test Reports as they are completed.</li> <li>• Contractor will complete a Electrical Heat Trace Inspection Report daily to support requirements in the ITP.</li> <li>• The Contractor will submit an Electrical Heat Trace Installation Inspection and Test Procedure(s) detailing how the activity will be inspected &amp; tested</li> </ul>
30.	<b>Insulation Installation:</b> Required documentation for the installation of Insulation	<ul style="list-style-type: none"> <li>• Insulation Installation ITP</li> </ul>	<ul style="list-style-type: none"> <li>• Insulation Installation Report / Checklist</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>	<ul style="list-style-type: none"> <li>• TES-ME-INSUL-GLE Piping and Equipment Insulation Specification (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor shall complete Insulation Installation reports to support activities in ITP and submit to Company</li> <li>• Contractor will complete a Insulation Inspection Report daily to support requirements in the ITP.</li> <li>• The Contractor will submit an Insulation Installation Inspection and Test Procedure(s) detailing how the activity will be inspected &amp; tested</li> </ul>
31.	<b>Instrumentation &amp; Communication Installation:</b> Required documentation for the installation of Instrumentation and	<ul style="list-style-type: none"> <li>• Instrumentation &amp; Communication Installation ITP</li> <li>• Cable pull calculations</li> </ul>	<ul style="list-style-type: none"> <li>• Conduit Installation Report / Checklist</li> <li>• Duct Bank Installation Report / Checklist</li> <li>• Cable Tray Installation Report / Checklist</li> </ul>	<ul style="list-style-type: none"> <li>• TEF-CT-ITPF-GLE Instrumentation and Communication Installation (CAN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Torque equipment calibration</li> <li>• Fiber optic test equipment</li> </ul>	<ul style="list-style-type: none"> <li>• TES-AE-EQPT Instrumentation and Controls Equipment Specification (CDN-US-MEX)</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor shall complete applicable Installation reports / checklists to support activities in ITP and submit to Company</li> <li>• Contractor shall complete Fiber Optic Testing and submit to Company</li> <li>• Contractor shall complete Continuity Reports and submit to Company</li> </ul>

**Appendix A-11**  
**Quality Record Requirements – Facilities Construction**  
**Revision 5/11/2022**



Facilities Construction							
No.	Activity / Description	Pre-Activity Deliverable	Quality Records			Governing Specification	Responsibilities
			Contractor Supplied	Company Supplied	3 <sup>rd</sup> Party Supplied		
	Communication scope		<ul style="list-style-type: none"> <li>• Cable Installation Report (including cable pull stress)</li> <li>• Fiber Optic Installation &amp; Testing Report (OTDR and Attenuation)</li> <li>• Continuity Test Report</li> <li>• Ethernet Cable Permanent Link Test</li> </ul>			<ul style="list-style-type: none"> <li>• TEN-IC-ICSN-G Industrial Control System Network (US)</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor will submit applicable equipment calibration certificates to the Company</li> <li>• The Contractor will submit applicable Inspection and Test Procedure(s) detailing how the activities will be inspected &amp; tested</li> </ul>