

ENGINEERING PRACTICE CHECKLIST

CONTRACT #:		PRODUCER:	
LOCATION:		CINs:	

YES	NO	N/A	INITIALS	PLANNING (COMPLETE PRIOR TO CONTRACTING)
<input type="checkbox"/>	<input type="checkbox"/>			Resource inventory and analysis to support practice needs and feasibility is documented. Examples: geologic investigations, hydrologic analysis, water savings estimates, field verification, prelim hydraulics, etc
<input type="checkbox"/>	<input type="checkbox"/>			Preliminary engineering sizing computations/calculations are thorough, correct, and within +/- 20% of final.
<input type="checkbox"/>	<input type="checkbox"/>			All reasonable alternatives to address the resource concern(s) were developed and provided to the producer. Documentation of producer decision (ND-CPA-6 notes)
<input type="checkbox"/>	<input type="checkbox"/>			Individual approving the planning work is clearly noted (ND-CPA-6 notes, email, or handwritten on calcs)
<input type="checkbox"/>	<input type="checkbox"/>			Individual approving planning has appropriate JAA for all practices

YES	NO	N/A	INITIALS	DESIGN (COMPLETE PRIOR TO CONSTRUCTION)
<input type="checkbox"/>	<input type="checkbox"/>			Final design computations are thorough, and meet all applicable agency policy and procedures.
<input type="checkbox"/>	<input type="checkbox"/>			Final design computations were checked, and initials/date for the checker are recorded.
<input type="checkbox"/>	<input type="checkbox"/>			Construction drawings with adequate detail to construct the practices prepared and referenced on the ND-ENG-1. ND standard cover sheet utilized (certification statement, JAA listing for all practices, etc.) and materials quantities provided. Survey benchmark and stakeout information provided if appropriate.
<input type="checkbox"/>	<input type="checkbox"/>			Construction specifications are complete, customized for the project, and referenced on the ND-ENG-1. ND-ENG-533 (pump) and/or ND-CPA-9 (grass seeding) included if necessary.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		For Job Class IV+ projects (except stockwater pumps and wells), an inspection plan and design report was prepared and referenced on ND-ENG-1.
<input type="checkbox"/>	<input type="checkbox"/>			O&M Plans prepared, customized for the project, and included in the specification package.
<input type="checkbox"/>	<input type="checkbox"/>			Design approver has signed and dated the ND-ENG-1
<input type="checkbox"/>	<input type="checkbox"/>			Design approver has JAA for all practices.
<input type="checkbox"/>	<input type="checkbox"/>			ND-CPA-52 and ND-CPA-106 updated as needed to reflect final design. Producer was provided assistance for obtaining necessary local, state, and federal permits required for construction.
<input type="checkbox"/>	<input type="checkbox"/>			Preconstruction conference held with producer. Producer signature on ND-ENG-1 and O&M Plans.

YES	NO	N/A	INITIALS	CONSTRUCTION (COMPLETE PRIOR TO CERTIFICATION)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		All required permits were obtained by the producer, and copies were filed in the contract folder. Permit conditions were followed during construction.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Notes of observations, measurements, and materials tests performed during construction inspection in file.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		If design modifications made during construction, supporting computations completed & checked by person with proper JAA.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Practice extents and quantity surveys/computations completed and methods documented.
<input type="checkbox"/>	<input type="checkbox"/>			Asbuilt drawings completed with installed quantities/computations noted, actual routes, elevations, materials, and installation details noted/edited on drawing in red.
<input type="checkbox"/>	<input type="checkbox"/>			Asbuilt coversheet is signed by individual approving construction (if construction is phased there may be multiple signatures for individual practices- list by CIN).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		If the project includes a pump, ND-ENG-533 completed and system hydraulics determined (pump curve overlaid on system curve to determine performance) for the installed motor or solar panels.
<input type="checkbox"/>	<input type="checkbox"/>			Individual approving construction has appropriate JAA for practices.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		One-Call ticket number is recorded on ND-ENG-1, if applicable.