

Drinking Water Revolving Loan Fund • Guidance for
CONSTRUCTION INSPECTIONS

LOUISIANA DEPARTMENT OF HEALTH • OFFICE OF PUBLIC HEALTH

Once construction begins on a project, inspections will be made periodically, typically monthly or in association with submitted payment requests, until all construction has been completed. The inspections will be conducted by the DWRLF Project Engineer, whom may also request the attendance of other parties involved in the project as needed.

Inspections will be conducted for each contract under construction, so a single inspection may include inspections of multiple contracts for the same project if they are concurrently under construction and seeking reimbursement.

The DWRLF Project Engineer will schedule inspections in advance with the water system's Consultant Engineer. Every attempt will be made to establish a routine schedule that is convenient for all parties asked to attend. Participants that may wish to attend or that may be asked to attend include representatives from the water system, resident inspectors, prime contractors, labor compliance officers, etc.

PURPOSE

The purpose of the inspection and items typically observed during an inspection may include the following:

1. Adequacy of engineering supervision and resident inspection.
2. Conformance of construction with the approved plans and specifications, including any approved addenda and change orders, as well as the most recent payment request.
3. Progress of construction and adherence to construction schedules.
4. Protection and storage of delivered equipment.
5. Conformance with federal or program requirements (e.g. Davis-Bacon and Related Acts, Executive Orders (i.e. EEO), American Iron and Steel Requirements (if applicable), etc.).

RESIDENT INSPECTOR

The Consultant Engineer or the water system is responsible for hiring a resident inspector to monitor the construction as it progresses (they do not need to be on-site full-time). A resume showing the qualifications of the prospective inspector must be submitted to DWRLF for acceptance in order for them to be eligible for reimbursement from DWRLF loan funds.

There are various reasons and circumstances when water systems may wish to utilize staff personnel or contracted personnel as resident inspectors. However, there are ethical considerations that should be evaluated when deciding to do this. The DWRLF does not recommend this practice, but will allow it under certain conditions and with the appropriate authorization and supporting documentation (*See the DWRLF Engineering Contract Guidance Document and the DWRLF Force Account Labor Guidance Document for more details*).

Once construction has begun, the resident inspector should make themselves available for DWRLF Construction Inspections if requested to be there. Additionally, the Resident Inspector's Daily Inspection Reports should be available for review. If not using the DWRLF RI Daily Inspection Report Form, the report forms used must include, at a minimum, the same information as provided for on the DWRLF RI Daily Inspection Report Form. Lastly, the Resident Inspector's Daily Inspection Reports *must* be submitted (electronically is preferred) to DWRLF with all payment requests that include reimbursement for "Project Inspection" services.

NOTE: For projects where the American Iron and Steel (AIS) Requirement applies (loans closed after January 17, 2014 and contract Plans and Specifications approved after January 17, 2014): In accordance with the Engineering Contract (*See the DWRLF Engineering Contracts Guidance Document*), the Engineer will be responsible for ensuring that Contractors maintain and provide adequate AIS verification documentation (i.e. AIS Manufacturer's Certifications, AIS Waiver Documentation, Materials Invoices, etc.) to the water system and DWRLF for meeting the project's AIS Requirement. This should be monitored or completed through the use of the Resident Inspector (RI) and noted on the RI's Daily Inspection Report Form (an AIS Requirement section has been added to the DWRLF RI Daily Inspection Report Form). The RI should note all materials delivered to the site wherein the AIS Requirement would

apply and collect Manufacturer Certifications for those materials or add them to the project's AIS De Minimis Waiver list, wherein invoices for those particular materials would need to be collected. The Engineer must maintain an up-to-date AIS Materials List with Certifications and an up-to-date AIS De Minimis Waiver List with Invoices to be reviewed by DWRLF during inspections and provided to the water system at the end of the project. If an AIS De Minimis Waiver is being used, invoices for ALL project components will be needed to compare total materials cost to the AIS De Minimis Waiver materials cost in order to come up with a % of AIS De Minimis Waivered materials – this will also need to be kept up-to-date for inspections. A separate line item for doing this work may be provided on the project budget (Pay Request Form 105). The Engineer may also pass this requirement onto the Contractor(s), but ultimately the Engineer will be responsible.

DISCREPANCIES

In the event that any discrepancies are observed during the inspection, these will be included in an inspection report that will be sent to the Contracting Engineer and/or water system. Correction of discrepancies is the owner's responsibility and by virtue of the Engineering Contract is also the Contracting Engineers responsibility to ensure they get corrected. If a discrepancy is considered significant or critical, the owner may be advised that payment for that portion of the work will be withheld until the discrepancy is corrected.

When change orders are proposed or anticipated, the LDH-OPH Project Engineer will verify the conditions that make a change order necessary (*See Addenda and Change Orders Guidance Document*).

FINAL INSPECTION

After construction is completed for a particular contract, a final inspection should be requested. The following should be noted regarding DWRLF final inspection:

1. The final inspection performed by the DWRLF Project Engineer is not intended to replace the final inspection performed by the consulting engineer or resident inspector. That inspection should be performed first and a punch list detailing any discrepancies must be provided to the contractor, water system, and DWRLF before requesting a final inspection from DWRLF.
2. The DWRLF Project Engineer will not perform a final inspection until the system owner certifies that the facilities are complete and in operation as per the requirements of the contract.
3. During the final inspection the DWRLF Project Engineer will verify that all components are in operation and are meeting design criteria, and that the completed project is in conformance with the approved plans and specifications, any addenda, the requirements of the contract, and any change orders.
4. Once the items on the punch list have been addressed, the DWRLF Project Engineer must be informed that all items on the punch list have been cleared.

RETAINAGE

Any retainage withheld from progress payments during construction for a specific contract will be released under the following conditions*:

1. The DWRLF final inspection is completed for that contract and a DWRLF Final Construction Inspection Completion letter issued.
2. A copy of the letter recommending substantial completion from the consultant engineer for the contract is provided.
3. A copy of the water system owner acceptance letter or board resolution for the contract is provided.
4. A copy of the consultant engineers final punch list for the contract is provided and DWRLF informed that all items on the punch list have been cleared.
5. A copy of the project's executed LDH Certification of Construction has been provided to DWRLF.
6. Conformance documentation with all federal or program requirements has been provided and met.
7. A clear lien certificate for the contract is provided to indicate that there are no outstanding liens against the project.

**Retainage will also be withheld on the FINAL CONTRACT pending DWRLF receipt and acceptance of the required Operation and Maintenance Manual, Executed Form 1044 Initiation of Operation Certificate, and Final As-Built Drawings (required to be submitted electronically).*