NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Construction Management and Administration Guidelines

This document serves as an overview on construction management requirements and expectations of the Designer working on Ecosystem Enhancement Program (EEP) design-bid-build projects. An emphasis is placed on the roles and responsibilities of the Designer, Contractor, Owner, and the State Construction Office (SCO) as defined in the design contract, the construction contract, the SCO Manual, and EEP requirements. Construction management and administration tasks, reporting requirements, and other expectations that must be followed to ensure successful completion of a project are outlined.

Roles and Responsibilities of Involved Parties

1. **Role of the Designer**
    a. The Designer's status and responsibilities are described in 01 NCAC 30A .0403, the Designer Contract, Construction Contract General Conditions (Form OC-15), the State Construction Manual, and the definitions section of this manual
    b. The Designer shall:
        i. Provide general administration of the performance of construction contracts, including inspection and continuous liaison of the work to ensure compliance with plans and specifications
        ii. Inspections shall be by qualified and mutually agreed upon ***representatives of the Designer's firm full-time*** while work is in progress to ensure compliance with plans and specifications
            1. "…representatives of the Designer's firm full-time…" is defined as a full-time employee of the Designer. Construction inspection services cannot be subcontracted by the Designer.
        iii. The Designer is the agent of the owner only for the purpose of constructing this work and to the extent stipulated in the contract documents
        iv. The Designer, in consultation with Owner, shall direct the contractor to perform duties specified in the construction contract
        v. Provide timely responses and/or processing of Contractor submittals
        vi. The designer has authority to stop work or to order work removed, or to order corrections of faulty work where such action may be necessary to assure successful completion of the work."

2. **Role of Contractor**
    a. The Contractor's status and responsibilities are described in the Construction Contract General Conditions (Form OC-15), the State Construction Manual, and the definitions section of this manual
    b. The Contractor shall:
        i. Construct the project per the Construction Documents
        ii. Provide efficient supervision of contracted work
        iii. Report errors and discrepancies
        iv. Submit Requests for Information (RFI) as necessary to maintain schedule
        v. Submit timely reports and payments

vi. Attend weekly and monthly meetings

c. Per the Notice to Bidders and Supplementary Condition Article 16(d), the Contractor shall perform and shall not subcontract earthwork activities related to channel excavation and in-stream structure placement with own workforce
    i. The Contractor may subcontract tasks related to S&EC measures, seeding and planting, survey of construction stakeout, as-built survey, and other work not related to grading
d. A subcontractor cannot act on behalf of the contractor during progress meetings and similar events where the contractor's presence is required
e. The Contractor shall read the construction documents thoroughly
f. The Contractor shall refer to the construction documents throughout project construction and when addressing problems during construction

3. Role of Owner

a. EEP is the Owner of the project
b. During construction, the Owner's representative is the EEP Project Manager (PM)
c. During construction, the EEP project manager shall:
    i. Attend the Pre-bid meeting
    ii. Attend the Pre-construction conference
    iii. Attend Weekly progress meetings on an as-needed basis
    iv. Attend Monthly progress meetings
    v. Attend the Preliminary Final Inspection
    vi. Attend the Final Inspection
    vii. Attend other project meetings as necessary
    viii. Represent EEP and ensure the integrity and value of the project
    ix. Review all Field Orders and Change Orders
        1. Make a recommendation to the EEP Capital Projects Coordinator for approval or denial
        2. If there is disagreement, consult with designer to determine equitable solutions that are in compliance with the construction documents
    x. Review all invoices
        1. Make a recommendation to the EEP Contract Administrator for approval or denial
    xi. Coordinate with the land owner throughout project construction
    xii. Evaluate performance of the Designer and Contractor and file such documentation with EEP Capital Projects Coordinator
    xiii. Consult with the EEP project team, on an as needed basis, for the purposes of:
        1. The evaluation of project construction and compliance with construction documents
        2. The evaluation of Designer and Contractor performance

4. Role of SCO

a. Monitor the construction contract
b. Monitor construction progress by attending:
    i. Pre-construction conference
    ii. Monthly progress meeting (as requested by Designer, Contractor, or Owner)
    iii. Final inspection
    iv. Other meetings as deemed necessary
c. Review and approve all Field Orders and Change Orders
d. If necessary, act as mediator between the Owner, Designer, and/or Contractor
e. Conduct a Final Inspection of the project
f. Issue Project Acceptance Letter at the completion of project construction

Bid Administration and Construction Contract Award

1. **Bid Authorization**
   - **a.** A project is ready for advertisement when the following is completed:
     - i. Construction Documents are approved and the project is authorized to be bid for construction as documented by the issuance of the SCO Construction Document (CD) letter
     - ii. EEP has completed the pre-qualification of contractors for the project and the results of the pre-qualification have been made public
     - iii. All environmental compliance requirements have been met and environmental permits obtained
     - iv. Permits are included in the Construction Documents
       - a. FHWA Categorical Exclusion
       - b. NWP 27
       - c. LQ Permit
       - d. LQ Trout Waiver (if applicable)
       - e. CAMA (if applicable)
       - f. Floodplain Development Permit (if applicable)
       - g. NCDOT Driveway Permit (if applicable)
     - v. All property necessary to construct the project has been obtained, including but not limited to:
       - a. Conservation easement
       - b. Construction access
       - c. Construction Staging Areas

2. **Bid Advertisement**
   - a. The Designer coordinates with the Owner to establish the Bid Advertisement and Bid Opening
   - b. The following is required:
     - i A minimum of twenty-one (21) days between Project Advertisement date and Bid Opening date
     - ii A minimum of three (3) days between Pre-bid Meeting date and Addenda Issue date
     - iii A minimum of seven (7) days between Addenda Issue date and Bid Opening date
   - c. EEP publishes a newspaper advertisement for the project in a major newspaper and a minority newspaper
   - d. Designer distributes copies of Construction Documents to the following:
     - i Plan rooms specified on the Notice to Bidders
     - ii Pre-qualified bidders
     - iii Additional Construction Documents beyond thirty (30) are subject to supplemental funding by the EEP

3. **Pre-bid Meeting**
   - a. The Designer leads the pre-bid meeting. It is the Designer's responsibility to ensure they have staff to cover this meeting
   - b. The following is a typical pre-bid meeting
     - i. Attendees sign-in
     - ii. Distribute Construction Documents
     - iii. EEP Project Manager makes opening statement about the project and addresses land owner concerns and conditions
     - iv. Designer provides an overview of plan and bid specifications
       - a. The overview shall be of sufficient detail to ensure unique aspects of the particular project are addressed
     - v. The Designer conducts a walkthrough of the project with attendees
     - vi. Contractors ask questions about the project, sequence, schedule, and other issues

vii. Designer records all questions and may provide responses at the project
viii. Designer responds to questions regarding SCO and EEP construction management and contracts
    a. EEP assists designer in addressing administrative questions related to EEP project management, contracts, and any landowner or stakeholder concerns (parking, staging and other aspects)
ix. Designer reminds attendees of addenda deadline and bid opening time and place
x. Attendees sign-out

c. SCO attendance is optional at the pre-bid meeting
d. Contractor attendance at the Pre-bid meeting is mandatory
    i. EEP will not accept bids from contractors not in attendance at the Pre-bid meeting
e. Addenda are issued as necessary
    i. The Designer publishes the Pre-bid meeting attendance list in an Addendum (Addendum No. 1) to the Notice to Bidders
    ii. Responses to all questions are published in an Addendum to the Notice to Bidders
    iii. All project addenda are posted on the IPS website
    iv. The Designer provides copies of addenda to Pre-bid Meeting attendees via email or fax

4. **Bid Opening**
    a. The Designer administers the bid opening per State Construction Manual Chapter 400 and EEP guidelines
        i. Bid openings are typically scheduled for 3:00pm on Friday afternoons
            1. Any deviation from this date and/or time must be pre-approved by the EEP Capital Projects Coordinator
        ii. The Designer shall arrive at bid opening location fifteen (15) minutes prior to bid opening
        iii. Bid opening will begin promptly at the time designated in the Notice to Bidders or as revised in the addenda
    b. It is the Designer's responsibility to :
        i. Follow SCO procedures for Bid Openings
        ii. Open bid submittals
        iii. Verify completeness of bid submittal
        iv. Record bid information on EEP Bid Opening Record
    c. EEP hosts and attends the Bid Opening
    d. SCO attendance is optional
    e. Contractor attendance is optional

5. **Recommendation to Award**
    a. The Designer reviews bid submittals for accuracy and completeness
        i. The Designer completes the Recommendation to Award Checklist
        ii. The Designer verifies contractor responsibility and responsiveness
        iii. The Designer submits a Recommendation to Award to the Owner within 2 working days of Bid Opening
            1. EEP bid openings are typically conducted on Friday afternoons
            2. The Designer shall submit the Recommendation to Award by close of business the following Tuesday
        iv. The Recommendation to Award includes:
            1. Recommendation to Award Checklist
            2. Certified Bid Tabulation
                a. One hardcopy
                b. One electronic (PDF format) for posting to EEP website
            3. Recommendation to Award letter
            4. Recommended bidder's Form of Proposal
    b. EEP reviews the Designer's Recommendation to Award
        i. Approve designer's recommendation and forward for inter-agency processing
        ii. Post the Certified Bid Tabulation on EEP website
    c. SCO reviews EEP and designer Recommendation to Award

i. Approve award of contracts
ii. Issues Letter of Award to Designer

6. Construction Contracts

a. Designer processes construction contracts
   i. Prepares and distributes six (6) copies of the contract to the Contractor for execution. Designer uses the EEP template cover letters when corresponding with the Contractor during the contract execution phase.
   ii. Contractor executes and returns to Designer
   iii. Designer reviews contract documents for accuracy and completeness
      1. The Designer completes the Construction Contract Document Checklist
      2. Contracts must meet requirements as stipulated in the Construction Documents and the State Construction Manual
      3. Designer addresses and resolves any inconsistencies, errors, or omissions with Contractor prior to submitting to EEP
      4. The Designer submits the completed checklist and contract documents to EEP
   iv. EEP Capital Projects Coordinator reviews contract documents and forwards to SCO for execution
   v. SCO reviews contract documents and processes for contract execution
   vi. Upon execution of contract documents by the State, the SCO will issue a letter to the designer stating that contacts are executed
      1. The SCO letter also designates the name of the SCO Project Monitor
      2. One original is retained by SCO
      3. The remaining executed contracts are returned to the designer
   vii. The Designer distributes executed contracts to the following:
      1. One original to the Contractor
      2. One original to the Surety company
      3. Two originals to EEP
      4. One original retained by the Designer

Construction Inspection and Liaison

1. **Pre-construction conference**
    a. The Designer schedules the Pre-construction conference
        i. The Pre-construction Conference is scheduled after the construction contracts are executed.
        ii. The Designer consults with Owner to determine date, time, and location
            1. The location shall be the project site
        iii. The Designer notifies the SCO Project Monitor of Pre-construction conference date, time, and location
    b. The Designer conducts the Pre-construction conference
        i. All attendees sign-in
        ii. The Designer reviews all items in the SCO Pre-construction Conference Meeting Requirements and Agenda
        iii. The Designer addresses all items in the EEP (Owner) Requirements
        iv. The Designer addresses all questions, concerns, etc.
        v. The Owner and SCO assist the Designer in addressing the following:
            1. Landowner's concerns
            2. General project and EEP related questions
            3. SCO policy, process, and procedures
    c. The Designer issues the Notice to Proceed letter
        i. Four (4) originals of the Notice to Proceed (NTP) are signed by the designer and contractor
        ii. The NTP establishes construction start date, end date, and construction duration
        iii. The contractor cannot mobilize or begin any other construction activities on the project until the NTP has been signed and dated
    d. At the conclusion of the Pre-construction conference the Designer shall conduct other project-related business with the Owner
        i. Landowner coordination, Monitoring firm coordination, etc.
    e. The Designer retains a copy and distributes copies of the SCO Pre-construction Conference Form, EEP Requirements, and Notice to Proceed to:
        i. Contractor
        ii. EEP Project Manager
        iii. EEP Capital Projects Coordinator
        iv. SCO Project Monitor

2. **Weekly Progress Meeting**
    a. Weekly Progress Meeting shall take place once per week on the day and time established at the Pre-construction Conference
    b. The Designer shall issue a meeting agenda
        i. The agenda shall be distributed one (1) business day prior to the meeting
        ii. The agenda shall be issued to the Contractor and the Owner
        iii. The meeting agenda shall include a discussion of S&EC Inspections, Construction Inspections, schedule, and other project related issues
    c. The Designer shall lead the meeting
        i. The Designer shall follow the agenda
        ii. Attendance must be recorded
    d. Immediately preceding the meeting the Designer shall conduct a Sediment and Erosion Control Inspection of the project
    e. Immediately following the conclusion of the Weekly Progress Meeting the Designer shall conduct a Construction Inspection of the project
    f. The Designer shall publish a Weekly Progress Report
        i. The report shall be issued to the Contractor and Owner
        ii. The report shall be issued within two (2) business days of the conclusion of the Weekly Progress Meeting

iii. The report shall identify concerns identified during the S&EC and Construction Inspections and shall itemize all corrective actions required of the contractor

3. Sedimentation and Erosion Control Inspection

a. Per Article 12, "Sedimentation Pollution Control Act of 1972", the contractor is responsible for violations resulting from not following the S&EC requirements as stated in the construction documents as well as the requirements stipulated in statute and rule
   i. The Contractor shall inspect all S&EC measures daily and immediately after a rain event.
   ii. The Contractor shall document the results of the daily inspection in the Construction Log
   iii. The Contractor shall maintain NPDES forms and rain gauge

b. The Designer shall inspect all erosion and sedimentation control facilities and storm water discharge outfalls
   i. All S&EC measures shall be inspected at least once per seven calendar days and within 24 hours of a rainfall of 0.5 inches per 24 hours
      1. Measures shall be inspected twice if on 303(d) listed stream for construction related parameters per seven calendar days and within 24 hours of a rainfall of 0.5 inches per 24 hours
   ii. The Designer shall review the Construction Log to ensure the Contractor is
      1. Maintaining a functional rain gauge
      2. Has inspected all S&EC measures daily and immediately after a rain event
      3. Recording data on the NPDES forms as required by permit
   iii. The Designer shall direct the Contractor to follow the construction documents in order to maintain compliance with the law and permit
      1. The Designer shall inspect all S&EC measures to ensure measures are installed per specifications and performing as designed
      2. The Designer shall verify all materials used by the Contractor are in agreement with specification
      3. The Designer shall address all problems of non-compliance immediately after the inspection
      4. S&EC measures to be inspected include, but are not limited to:
         a. Construction entrance
         b. Stream crossings
         c. Silt fence
         d. Berm
         e. Check dam
         f. Impervious dike
         g. Sediment basin
         h. Pit basin
         i. Pump around equipment (pumps, hoses, silt bags, etc.)
         j. Temporary seeding and mulch
         k. Matting and staking
      5. The Designer shall ensure that any and all changes to the construction sequence, location of crossings, access, stockpiling area, hauling road, and Limits of Disturbance (LOD) are approved by EEP and NCDLR Land Quality Section through proper notification
   v. The inspection results shall be published in the Weekly Progress Report

4. **Construction Inspection**

a. The Construction Inspection shall be conducted by a qualified employee of the Designer
b. The Designer shall verify the project is being constructed per the construction documents and within the tolerances specified. At a minimum the designer shall inspect:
   i. Products and materials
   ii. Project grading elevation(s), alignment, and tolerance(s)
   iii. Structure(s) elevation(s), alignment, and tolerance(s)
   iv. Vegetation quality, health, and vigor
c. The Designer shall utilize data maintained in the Construction Log during the inspection.

d. The Designer shall determine and utilize means and data necessary to conduct the Construction Inspection.
e. The Designer shall identify problem areas and concerns with project construction.
f. The Designer shall notify the Contractor, verbally and in writing, of said concerns and identify corrective actions required.
g. All correspondence related to the Construction Inspection shall be included in the Weekly Progress Report.

5. **Monthly Progress Meeting**
    a. Monthly meetings shall take place once per month on the day and time established at the Pre-construction Conference.
    b. The Designer shall issue a meeting agenda one (1) business day prior to the meeting
    c. The agenda shall be issued to the Contractor, Owner, and SCO
    d. The Designer shall lead the meeting
    e. The Designer shall publish a Monthly Progress Report
        i. The report will be issued to the Contractor, Owner, and SCO
        ii. The report will be issued within two (2) business days of conclusion of the Monthly Progress Meeting.

6. **Field Orders**
    a. Design changes shall be handled using the Electronic Change Order process.
    b. Field orders shall be used on an extremely limited basis where immediate actions are necessary to stabilize and secure the project. Examples where field orders may be required include:
        1. Extreme weather events (tropical storm, hurricane) threaten to destroy recently completed site construction
        2. Life-threatening site conditions
    c. Field Orders are used to establish time and costs associated with implementation of engineer–directed field changes
    d. The Designer shall not approve field changes that adversely diminish or adversely affect the project design, including but not limited to hydraulic and hydrologic design
    e. The following process shall be used for Field Order approval
        i. The Designer reviews the proposed field change with the EEP Project Manager prior to preparation of a Field Order
            1. Ensures effective communication between the Designer and the Owner
            2. Minimizes potential for disagreement and rejection of field change by the Owner
        ii. Field Order is prepared by the Designer for Contractor signature
            1. The Designer shall identify the one of the following **Cause of the Field Change** on the Field Order:
                a. Owner Request
                b. Contractor Request
                c. Designer Request
                d. Concealed Condition
                e. Design Error
                f. Design Omission
                g. Schedule Change
            2. The **Cause of the Field Change** shall be provided as the first sentence under the Description of Change
            3. Any Field Order submitted without a **Cause of Field Change** will be rejected
        iii. The Designer forwards the signed Field Order, with appropriate back-up, to EEP Capital Projects Coordinator for approval
        iv. Once approved the EEP Capital Projects Coordinator forwards the Field Order to SCO for signature
        v. Once approved by SCO the signed Field Order is returned to Designer
        vi. The Designer provides copies to the Contractor

d. Once the signed Field Order has been distributed the field changes can be performed by the contractor
e. A copy of the most current version of the SCO Field Order Form can be downloaded from the SCO website

7. Substitutions

a. The Contractor may propose substitutions
b. The Designer shall evaluate all proposed materials and/or product substitutions
    i. Materials must meet material and/or product specifications defined in the construction documents
    ii. Product substitutions must meet material and/or product specifications defined in the construction documents
    iii. The Designer shall not approve substitutions that diminish or adversely affect the project design, including but not limited to hydraulic and hydrologic design
c. All proposed vegetation substitutions shall be approved by EEP prior to allowing the substitution
    i. The Designer shall evaluate the proposed substitution and make a recommendation to EEP
    ii. Vegetation substitutions shall not diminish or jeopardize the establishment of the plant community specified in the construction documents
    iii. The Designer shall not approve substitutions with inferior material, non-native, or invasive species

8. **Electronic Change Orders**

a. Change Orders are processed for quantity over-runs, quantity under-runs, approved field changes (Field Order), weather delays, and additional days
b. The Designer shall process Change Orders through the SCO Interscope system
    i. Designer shall complete the following sections
        1. Designer Summary
        2. Breakdowns (PCO)
    ii. The Designer shall enter separate Breakdowns (PCO) for each bid item adjusted or any new work not included in the original bid. The breakdown shall adequately describe:
        1. the item
        2. the reason for the change
        3. the cost
        4. the additional days required as a result of the change
    iii. The SCO Interscope system automatically calculates adjustments to cost and days based upon data entered into the Breakdowns section. It is imperative that the Designer verify the completeness and accuracy of the information entered into the breakdowns prior to approving any change order. Erroneous or incomplete change orders will be rejected by EEP
    iv. Any supporting documentation shall be attached as pdf files
        1. Quantity calculations
        2. New details or technical specifications

9. Paper Change Orders (used in special circumstances only)

a. Designer shall use this method only when specifically directed to do so by the EEP Capital Projects Coordinator
b. Designer shall use the most current SCO paper change order form
c. Paper change orders shall, at a minimum, include the following back-up documentation
    i. Letter from the designer indicating that it was reviewed and approved by the construction manager
    ii. Breakdown of the cost according to unit prices and individual lump sum items
    iii. Time of completion back-up
        1. Construction start date (per the Notice To Proceed)
        2. Original construction end date
        3. Total contract days

4. Additional days added by the Change Order
5. Revised construction end date

iv. Copies of correspondence, Field Orders, etc. related to the Change Order

10. **Pay Applications/Invoices**
    a. The Contractor shall submit two copies of the invoice on the agreed upon date specified on the SCO Pre-construction Conference form
    b. The Contractor invoice shall include the following
        i. Pay item number as it appears on the bid sheet
        ii. Special Provisions Section reference number
        iii. Description of item
        iv. Unit of measurement
        v. Unit bid price
        vi. Total estimated contract quantity
        vii. Quantity previously billed
        viii. Quantity currently billed
        ix. Total price of previously paid quantities
        x. Total contract price for each bid item
        xi. Total based on quantity billed under the current invoice
        xii. Total based on combination of previously billed and current invoice
        xiii. Percentage of cumulative work paid for under the current invoice
        xiv. Remaining balance
    c. The Designer shall promptly review all pay applications submitted by the Contractor.
        i. The Designer shall approve for payment only the work completed or afforded to the contractor per the construction contract
        ii. The Designer shall provide a Certification attesting to the accuracy of the invoiced work and amount recommended for payment
            1. The Designer shall affix his signature to the payment request and submit the invoice to the Owner (EEP Project Manager).
            2. Per SCO Manual Chapter 500 Construction Administration the Designer's certificate shall show the following
                a. Total amount of contract
                b. Extra work
                c. Credits
                d. Total of contract plus or minus any changes
                e. Value of work performed to date
                f. Retainage Amount previously paid
                g. Amount of present certificates
                h. Balance of contract sum
            3. The Designer is responsible for insuring the following
                a. Retainage, as defined in the Construction Documents, has been withheld
                b. Restrictive items (e.g. miscellaneous boulder items) must be prior approved by the designer
                c. Items are invoiced based on the conditions stated in the Special Provisions
                d. If the quantity requested for payment by the contractor exceeds the quantity specified on the bid sheet (overruns), the difference must be approved through a Change Order, even if the current total contract cost is within the budgeted amount
                e. The Designer shall not approve payments for overruns until the overruns are approved through a Change order. Quantity over-runs can be approved as follows:
                    i. Final adjusting Change Order at project completion
                    ii. A Change Order for the over-runs as they occur
                f. Quantity under-runs are addressed in the final adjusting Change Order at project completion

g. Minority Business Enterprise (MBE) documentation (Appendix E)
h. Relevant tax certificates

iii. The EEP PM verifies invoice is correct and submits the invoice for processing

1. The PM shall not allow the payment process to take more than 30-days from the time the designer submits the payment application. In accordance with Article 30(a), "…if the owner should fail or refuse to make payment on account of a certificate issued by the designer within thirty (30) days after receipt of the same, then the contractor .... may suspend operations on the work or terminate the contract."

iv. Approval for payment of invoice is made by EEP Contract Administrator

11. **Retainage**
    a. Retainage requirement is included in Article 31(a)(3) of the General Conditions
    b. The Designer must ensure withholding of Retainage is consistent with Construction Documents and current NC Public Construction Contract Law (G.S. 143-134.1)
    c. Retainage shall be reimbursed to the Contractor with the final payment
    d. If the five (5%) percent deduction is not included in the invoice, the designer must deduct it before forwarding the invoice to EEP for approval.

12. Corrective Actions
    a. Designer shall address Contractor performance at Weekly and Monthly Progress meetings
    b. Designer shall take all necessary steps to communicate all corrective actions required of the Contractor to ensure conformance with construction documents
        i. Routine interactions
        ii. Weekly and Monthly Progress Meetings
        iii. Email and related correspondence
    c. Designer shall notify Owner of all corrective actions required and status of each
    d. Should contractor fail to take corrective actions necessary to perform work in conformance with Construction Documents the Designer shall provide Contractor with a Corrective Action Letter
        i. Mailed to Contractor by Certified Letter Return Receipt Requested
        ii. Itemize all corrective actions required with timeline associated with each
        iii. Statement of consequences if corrective actions are not taken
        iv. Copies of the Corrective Action Letter shall be provided to the Owner, SCO, and Surety Company

13. **Liquidated damages**
    a. Liquidated damages are addressed in the Supplementary General Conditions and vary according to project location and schedule
    b. Liquidated damages may be assessed to cover additional construction management costs and other costs incurred by the owner because of the unjustified delay
    c. Designer is required to make a recommendation to the owner on the assessment of liquidated damages
    d. The owner determines the appropriate course of action following the designer's recommendation

14. **Disputes**
    a. The SCO Project Monitor is available to settle disputes during construction
    b. It is the responsibility of the Contractor to document construction activities according to the requirements specified in the Construction Documents
    c. It is the responsibility of the Designer to document construction activities according to the requirements specified in the Design contract, Construction Documents, SCO Construction Manual and these guidelines
    d. All project documentation must be provided to settle disputes

Project Acceptance, Close-out, and Warranty Inspection

1. **Preliminary Final Inspection**
    a. Also known as the pre-final walkthrough
    b. The purpose of the Preliminary Final Inspection is to inspect the entire project and to prepare a list of discrepancies (a punch list) for the Contractor
        i. Project planting shall not be allowed as a punch list item
        ii. The Preliminary Final Inspection shall not be scheduled until planting installations stipulated in the construction documents have been completed
    c. The Preliminary Final Inspection is scheduled upon written notification from the Contractor that the project is complete. Project completion includes the following:
        i. Grading completed and in-stream structures in place for all reaches
        ii. Permanent seeding and all contracted plantings are completed
        iii. Stockpiles of excess soil waste removed from project
        iv. Temporary access roads, stockpiling, temporary culverts removed and disturbed areas stabilized
        v. Fencing, gates and other related tasks part of the contract are completed
        vi. Project cleaned
        vii. As-built Survey, as specified in the Construction Documents, has been submitted to the Designer
    d. The discrepancies must be addressed prior to the request for a Final Inspection
    e. The attendees shall include the Contractor, the Designer, and the Owner
    f. The following tasks shall be completed after the Preliminary Final Inspection
        i. Submittal of invoice for final payment and release of retainage
        ii. Submittal of closeout paperwork
        iii. Addressing punch list items

2. **Final Inspection**
    a. Also known as the final walkthrough
    b. The purpose of the Final Inspection is to inspect the entire project and to accept the project as complete
    c. The attendees shall include the Contractor, the Designer, the Owner, and the State Construction Office
    d. The Final Inspection is scheduled upon written notification from the Contractor that the project is complete.
    e. If it is determined the project is not complete a Project Inspection Letter will not be issued.
    f. If it is determined the project is complete the SCO will issue a Project Acceptance Letter. The Project Acceptance Letter establishes the following:
        i. Date of project acceptance
        ii. Establishes the one-year warranty period per Article 42 of the construction documents
            1. The Contractor is required to provide a one-year warranty for material and workmanship
            2. The warranty period covers all contracted work
            3. There may be special warranty requirements for plantings included in the Construction Documents

3. **Record Drawing**
    a. The Record Drawing shall be submitted by the Designer within 60-days of project acceptance
    b. The Record Drawing is the final record of project construction and shall include:
        i. Construction documents
        ii. As-built survey
            1. Prepared by the Contractor per Supplementary General Conditions
            2. Must bear a PLS seal
        iii. Annotation and corrections of the construction documents
            1. Additions

2. Deletions
3. Substitutions
4. Specification and tolerance deviations
    a. Project grading
    b. Channel and structure construction
        i. Alignment
        ii. Dimension
        iii. Profile
    c. Vegetation installation
    d. Products and materials
    e. Other contracted work specified in the construction documents

c. The Record Drawing must bear the Designer's PE seal
d. When applicable the Record Drawing shall include FEMA Letter of Map Revision (LOMR) package

5. Final Report

a. The Final Report shall be submitted by the Designer within 60-days of project acceptance
b. The Final Report shall include the following:
    i. Project Acceptance Letter
    ii. Certificate of Compliance
    iii. Certificate of Completion
    iv. Contractor's closeout documents

6. Contractor's Evaluation

a. Per Article 50, Contractor Evaluation, all Contractors will be evaluated using the form downloaded from SCO website
    i. The evaluation will be completed by the Owner in consultation with the Designer
    ii. The evaluation will be sent to SCO and the Contractor
    iii. The Owner will retain a copy as reference for future bid submittals