**North Carolina Department of Environmental Quality**

**Division of Water Infrastructure**

**Bid and Design Document submittal CHECKLIST**

**(Form PS-SUBMITTAL-07/22)**

***Section 1: Instructions and INFORMATION***

1. The Division of Water Infrastructure will accept a submittal package for review only if all of the items are provided and the submittal is complete. Failure to submit all of the required items may result in an inability to meet funding deadlines and subsequent loss of funding assurance.
2. The submittal shall include a completed copy of this submittal checklist, one (1) hard copy and one (1) digital copy (flash drive) of plans and specifications, and all supporting documentation and attachments. For the hard copy, all supporting information is to be submitted bound or placed in a 3-ring binder.
3. Check the boxes below to indicate the information is provided and the requirements are met.
4. Plans and specifications must be prepared in accordance with [North Carolina General Statute 133-1 through 3](https://www.ncleg.net/EnactedLegislation/Statutes/PDF/ByArticle/Chapter_133/Article_1.pdf) and [North Carolina General Statute 143-215.1](http://www.ncleg.net/EnactedLegislation/Statutes/PDF/BySection/Chapter_143/GS_143-215.1.pdf).
5. This submittal checklist must be signed by a [North Carolina Licensed Professional Engineer](http://www.ncbels.org/index.html).
6. The plans and specifications submitted must represent a completed final design that is ready to advertise for bid.

***SECTION 2: CONTACT INFORMATION***

1. **Owner Information**

|  |  |
| --- | --- |
| Owner |  |
| Name of Owner’s Authorized Representative |  |
| Title |  |
| Complete mailing address |  |
| Telephone number |  |
| Email address |  |

1. **Professional Engineer Information**

|  |  |
| --- | --- |
| Professional Engineer’s name |  |
| North Carolina Professional Engineer’s License No. |  |
| Firm name |  |
| Firm License number |  |
| Complete mailing address |  |
| Telephone number |  |
| Email address |  |

***SECTION 3: PROJECT INFORMATION***

1. **Project Number:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

**Project Title:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

1. **Project Description**

Please provide a full description of the project. This description should be similar or identical to what is imbedded in the Summary of Work section of the specifications. Include all changes to the existing system (demolition, rehabilitation, additions, etc.):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_ \_ \_ \_

Does the Project design match the Engineering Report/Environmental Information Document (ER/EID) Approval Letter, Categorical Exclusion (CE), Finding of No Significant Impact (FONSI), or issued Record of Decision (ROD)?  Yes  No.

If no, clearly describe any portions of the design that vary from the approved documents and the reasons for the differences.   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_ \_ \_ \_

**Note: based upon the scope of differences, an** [**Amendment**](http://portal.ncdenr.org/c/document_library/get_file?uuid=94ddb8cb-446d-439c-bfd9-31e84cf69eb3&groupId=38364) **to the ER/EID or CE, FONSI, or ROD may be required.**

***SECTION 4: INFORMATION REQUIRED FOR ALL PROJECT TYPES***

1. **For Wastewater Treatment Plant projects:**

Complete Attachment A, filling out specific information regarding this project

1. **For Sewer Infrastructure projects:**

Complete Attachment B, filling out specific information regarding this project

1. **For Drinking Water projects:**

Complete Attachment C, filling out specific information regarding this project

1. **Permits**

Provide copies of all permits and/or certifications that are required for this project as identified below.

| Permit/Certification | **Not Applicable** | **Date Submitted** | **Date Approved** | **If Not Issued Provide Status and Expected Issuance Date** | **Does this Permit match the Design Documents for this Project as Submitted for Review?** |
| --- | --- | --- | --- | --- | --- |
| Authorization to Construct\* |  |  |  |  | Yes  No |
| [CAMA](http://www.nccoastalmanagement.net/) |  |  |  |  | Yes  No |
| [Dam Safety](http://portal.ncdenr.org/web/lr/dams) |  |  |  |  | Yes  No |
| NCDOT Encroachment Agreement |  |  |  |  | Yes  No |
| NPDES |  |  |  |  | Yes  No |
| Railroad Encroachment Agreement |  |  |  |  | Yes  No |
| Sewer Extension\* |  |  |  |  | Yes  No |
| [Soil Erosion and Sediment Control](http://portal.ncdenr.org/web/lr/erosion) |  |  |  |  | Yes  No |
| [Stormwater Management Plan](http://portal.ncdenr.org/web/lr/stormwater) |  |  |  |  | Yes  No |
| [USCOE/Section 10](http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram.aspx) |  |  |  |  | Yes  No |
| [USCOE/Section 404 Permit](http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram.aspx) |  |  |  |  | Yes  No |
| [Water Quality Certification (401)](http://portal.ncdenr.org/web/wq/swp/ws/401) |  |  |  |  | Yes  No |
| Other: |  |  |  |  | Yes  No |

\*Provide application if not issued as of date of submittal of this package.

If no, clearly describe any portions of the design that vary from the Permit and the reasons for the differences.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_ \_ \_ \_

**Note: Based upon the scope of differences, a permit revision may be required.**

1. **Easements**

All necessary easements have been acquired.  Easements are not necessary.

All necessary easements are anticipated to be acquired by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Cost Estimate**

For all project components provide a project line-item cost estimate that has been prepared or updated not more than 60 days prior to submittal of this package. This estimate should be at least as detailed as the bid form in the specifications.

Does the project design include any bid alternates?  Yes  No.

If yes, provide a separate project line-item cost estimate for each bid alternate.

1. **Compliance with North Carolina General Statutes Chapter 133: Public Works**

Project complies with [NC § 133‑1 through 4](https://www.ncleg.net/EnactedLegislation/Statutes/PDF/ByArticle/Chapter_133/Article_1.pdf): Public Works, Article 1 - General Provisions.

1. **Engineering Plans**

Submit one set of detailed plans that have been signed, sealed and dated by a [North Carolina Licensed Professional Engineer](http://www.ncbels.org/index.html) on each sheet of the engineering drawings.

# Per [21 NCAC 56 .1103(a)(6)](http://reports.oah.state.nc.us/ncac/title%2021%20-%20occupational%20licensing%20boards%20and%20commissions/chapter%2056%20-%20engineers%20and%20surveyors/chapter%2056%20rules.pdf), the name, address and License number of the Licensee’s firm shall be included on each sheet of the engineering drawings.

Plans must be labeled as follows: FINAL DRAWING – FOR REVIEW PURPOSES ONLY – NOT RELEASED FOR CONSTRUCTION.

The cover sheet of the plans must contain the Division provided Project Number.

Plans shall include all applicable disciplines needed for bidding and construction of the proposed project.

1. **Engineering Specifications**

Submit one set of specifications that have been signed, sealed and dated by a [North Carolina Licensed Professional Engineer](http://www.ncbels.org/index.html).

Specifications must be labeled as follows: FINAL SPECIFICATIONS – FOR REVIEW PURPOSES ONLY – NOT RELEASED FOR CONSTRUCTION.

The cover sheet of the specifications must contain the SRF, SRL, SEL, and/or State Grant Project Number.

A reasonable subsurface investigation must be made available to the contractor. If it is not included in the specifications, the specifications must advise where a copy of the report can be observed.

Specifications shall include all applicable disciplines needed for bidding and construction of the proposed project.

Contract duration

Applicable encroachment agreements (NCDOT, railroad, utilities, etc.)

Advertisement for Bids

Information for Bidders

Bid Form

* Are portions of the project ineligible for CDBG, SRF, SRL, SEL, and/or State Grant funds?  Yes or  No. If yes, the bid form must clearly identify and break out separately the eligible and ineligible items.

Bid Bond

Agreement

Payment Bond

Performance Bond

Notice of Award with lines for signatures of the Owner and the Contractor (cannot substitute signature by Engineer)

Notice to Proceed with lines for signature of the Owner and the Contractor (cannot substitute signature by Engineer)

Change Order Form

General Conditions

Special Conditions

**For SRF, State, and ARPA funded projects only:**

[MBE/WBE (DBE) Compliance Supplement](http://portal.ncdenr.org/c/document_library/get_file?uuid=c8e3818b-a219-4179-a843-31fe5d21c662&groupId=14655572)

Additional for all SRF funded projects, and additional for ARPA (over $10M) funded projects:

[Davis-Bacon Specifications](http://portal.ncdenr.org/c/document_library/get_file?uuid=ea9b2927-c8bf-4907-b3ba-f24355c17b92&groupId=14655572) (All SRF projects) & (ARPA projects over $10M)

[Wage Determination Schedule](http://www.wdol.gov/dba.aspx) (All SRF projects) & (ARPA projects over $10M)

Additional for all SRF funded projects:

[American Iron and Steel Provisions](http://portal.ncdenr.org/c/document_library/get_file?uuid=41f15b61-46e8-44ba-9d80-f34217ef136b&groupId=14655572)

For CDBG funded projects only:

[MBE/WBE Compliance Instruction and Forms](http://portal.ncdenr.org/c/document_library/get_file?uuid=9adc7d00-5d55-44db-87e5-c9d37476fb07&groupId=14655572)

[Contractor Table CDBG-I MBE/WBE](http://portal.ncdenr.org/c/document_library/get_file?uuid=8989e2d8-d0dd-4ef4-9d8f-5d1ae8b59a28&groupId=14655572)

[Advertisement for Bids](http://portal.ncdenr.org/c/document_library/get_file?uuid=256c18ff-78c9-4743-8a48-9dfef63377ef&groupId=14655572)

[Statement encouraging Historically Underutilized Businesses (HUB)](http://portal.ncdenr.org/c/document_library/get_file?uuid=e92d0ff2-e579-4bc1-baec-845aa5688c23&groupId=14655572) to submit bids/proposals

[Statement encouraging Minority/Women Owner Businesses](http://portal.ncdenr.org/c/document_library/get_file?uuid=d7e55640-6953-4d6f-9bbd-9e14090e63c9&groupId=14655572) to submit bids/proposals

[Section 3 Clause](http://portal.ncdenr.org/web/wi/cdbg-i-compliance1)

[Contractor’s Section 3 Plan Template](http://portal.ncdenr.org/c/document_library/get_file?p_l_id=1169848&folderId=24212304&name=DLFE-129000.doc)

[Labor Standard provisions](http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_12586.pdf)

[Davis-Bacon Wage Determination](https://www.wdol.gov/dba.aspx)

[Contract Provisions](http://portal.ncdenr.org/c/document_library/get_file?uuid=ebd10007-6321-4a53-9fbc-d0e15f629490&groupId=14655572)

[Certificate of Eligibility](http://portal.ncdenr.org/c/document_library/get_file?uuid=e3a1c8bc-9605-4add-9fb8-d75b9e634ce7&groupId=14655572)

[Employment and Contracting Opportunities Commitment](http://portal.ncdenr.org/c/document_library/get_file?uuid=666b665c-7fe8-45ee-9fa8-09bb3a4e1208&groupId=14655572)

Copy of all applicable State and Federal permits included in the specifications

***SECTION 6: SUBMITTAL SIGNATURE***

I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   \_\_\_\_\_\_\_\_\_\_   , as a duly registered Professional Engineer,

(Print Name)

attest that this submittal package for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Project Number)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

(Project Name)

is to the best of my knowledge accurate, complete and consistent with the information supplied in the engineering plans, specifications, calculations, and all other supporting documentation for this project including the Engineering Report/Environmental Information Document (ER/EID) Approval Letter, Categorical Exclusion (CE), Finding of No Significant Impact (FONSI), or issued Record of Decision (ROD).

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Registration No.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***SECTION 7: SUBMITTAL MAILING ADDRESSES***

**THE COMPLETED SUBMITTAL CHECKLIST, PLANS AND SPECIFICATIONS, AND SUPPORTING INFORMATION SHALL BE SUBMITTED TO:**

###### Division of Water INFRASTRUCTURE

|  |  |
| --- | --- |
| **By U.S. Postal Service**  **1633 Mail Service Center**  **RALEIGH, NORTH CAROLINA 27699-1633** | By Courier/Special Delivery:  **512 n. sALISBURY sTREET, 8TH FLOOR**  **RALEIGH, NORTH CAROLINA 27604** |

**TELEPHONE NUMBER: (919) 707-9160**

***ATTACHMENT A***

***INFORMATION REQUIRED FOR WASTEWATER TREATMENT PLANT INFRASTRUCTURE PROJECTS***

***(New, Expanding, Replacement, and Rehabilitation)***

**Submit a copy of either the Authorization-to-Construct or the application, if required for the project.**

1. **Engineering Plans**

Plan and profile views and associated details of all modified treatment units including piping, valves, and equipment (pumps, blowers, mixers, diffusers, electrical, etc.)

Are any modifications proposed that impact the hydraulic profile of the treatment facility?  Yes  No. If yes, provide a hydraulic profile drawing on one sheet that includes all impacted upstream and downstream units. The profile shall include the top of wall elevations of each impacted treatment unit and the water surface elevations within each impacted treatment unit for two flow conditions: (1) the NPDES permitted flow with all trains in service and (2) the peak hourly flow with one treatment train removed from service.

Are any modifications proposed that impact the process flow diagram or process flow schematic of the treatment facility?  Yes  No. If yes, provide the process flow diagram or process flow schematic showing all modified flow paths including aeration, recycle/return, wasting, and chemical feed, with the location of all monitoring and control instruments noted.

1. **Engineering Specifications**

Detailed specifications for all treatment units and processes including piping, valves, equipment (pumps, blowers, mixers, diffusers, electrical, etc.), and instrumentation.

Means of ensuring quality and integrity of the finished product including leakage testing requirements for structures and pipelines, and performance testing requirements for equipment.

1. **Construction Sequence Plan**

Construction Sequence Plan such that construction activities will not result in overflows or bypasses to waters of the State. The Plan must not imply that the Contractor is responsible for operation of treatment facilities. List the location of the Construction Sequence Plan as in the Engineering Plans or in the Engineering Specifications or in both:   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_ \_\_\_\_ \_\_\_\_

1. **Engineering Calculations**

Submit one set of engineering calculations that have been signed, sealed and dated by a [North Carolina Licensed Professional Engineer](http://www.ncbels.org/index.html).

**The calculations shall include at a minimum:**

Demonstration of how peak hour design flow was determined with a justification of the selected peaking factor.

Influent pollutant loading demonstrating how the design influent characteristics were determined.

Pollutant loading for each treatment unit demonstrating how the design effluent concentrations were determined.

Hydraulic loading for each treatment unit.

Sizing criteria for each treatment unit and associated equipment (blowers, mixers, pumps, etc.)

Total dynamic head (TDH) calculations and system curve analysis for each pump specified.

Buoyancy calculations for all below grade structures.

Supporting documentation that the specified auxiliary power source is capable of powering all essential treatment units.

***ATTACHMENT B***

***ADDITIONAL INFORMATION REQUIRED FOR SEWER INFRASTRUCTURE PROJECTS***

***(New, Expanding, Replacement, and Rehabilitation)***

**Submit a copy of either the Sewer permit or the application, if required for the project.**

1. **Engineering Plans**

Plan and profile views and associated details of all proposed infrastructure including piping, valves, pump stations, pumping equipment, and electrical equipment.

1. **Engineering Specifications**

Detailed specifications for all proposed infrastructure including piping, valves, pump stations, pumping equipment, electrical equipment, and instrumentation.

Means of ensuring quality and integrity of the finished product including leakage and pressure testing requirements for structures and pipelines, and performance testing requirements for equipment.

Gravity sewer work must be broken out in the bid form by unit price for various ranges of depth.

Construction Sequence Plan such that construction activities will not result in overflows or bypasses to waters of the State. The Plan must not imply that the Contractor is responsible for operation of treatment facilities. List the location of the Construction Sequence Plan as in the Engineering Plans or in the Engineering Specifications or in both:   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_ \_\_\_\_ \_\_\_\_

1. **Engineering Calculations**

Submit one set of engineering calculations that have been signed, sealed and dated by a [North Carolina Licensed Professional Engineer](http://www.ncbels.org/index.html).

**The calculations shall include at a minimum:**

Demonstration of how peak flow was determined with a justification of the selected peaking factor.

Total dynamic head (TDH) calculations and system curve analysis for each pump specified.

Pump station cycle times and pump run times.

Minimum velocities in the sewer pipelines.

Buoyancy calculations for all below grade structures.

Downstream Sewer Evaluations demonstrating that the pump station discharge will not overload the receiving sewer line:

For connection to a gravity sewer, submit an evaluation of the gravity sewer based on peak flow from the proposed project and peak flows already tributary to the existing gravity sewer. Include calculations and details demonstrating how existing peak flows were determined.

For connection to a pump station, submit an evaluation of the existing pump station to pump peak flow from the proposed project and peak flows already tributary to the existing pump station. Include calculations and details demonstrating how existing peak flows were determined.

For connection to a force main, provide an evaluation of the existing force main based on peak flows from the proposed project and peak flows already tributary to the existing force main. In addition, evaluate the ability of each pump station tributary to the existing force main to pump against additional head created by greater flows through the force main. Evaluation may include alternate designs such as telemetry to coordinate pumping between pump stations (provided sufficient storage is available). Also, include an evaluation of the discharge point of the existing force main as described in the above two situations.

Supporting documentation that the standby power source is capable of powering the specified pumps.

***ATTACHMENT C***

***ADDITIONAL INFORMATION REQUIRED FOR Drinking Water PROJECTS***

***(New, Expanding, Replacement, and Rehabilitation)***

**Submit a copy of either the Engineering Plans and Specifications for Water Supply Systems approval and ATC or the application, if required for the project.**

1. **Engineering Plans**

Plan and profile views and associated details of all proposed infrastructure including piping, valves, pump stations and pumping equipment. If the project requires an Authorization to Construct under [T15A NCAC 18C .0306](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2018%20-%20environmental%20health/subchapter%20c/15a%20ncac%2018c%20.0306.pdf), submit the same plans submitted to the Public Water Supply Section, Division of Water Resources.

The approval of Plans and Specifications letter by the Public Water Supply Section of the Division of Water Resources, or the *Application for Approval of Engineering Plans and Specifications* submitted to by the PWS Section of the DWR.

1. **Engineering Specifications**

Detailed specifications of all proposed infrastructure including piping, valves, pump stations and pumping equipment. If the project requires an Authorization to Construct under [T15A NCAC 18C .0306](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2018%20-%20environmental%20health/subchapter%20c/15a%20ncac%2018c%20.0306.pdf), submit the same specifications submitted to the Public Water Supply Section, Division of Water Resources.

Means of ensuring quality and integrity of the finished product including disinfection, leakage and pressure testing requirements for structures and pipelines, and performance testing requirements for equipment.

1. **Engineering Calculations**

Submit one set of engineering calculations that have been signed, sealed and dated by a [North Carolina Licensed Professional Engineer](http://www.ncbels.org/index.html).

**The calculations shall include at a minimum:**

Demonstration of how peak flow was determined with a justification of the selected peaking factor.

Total dynamic head (TDH) calculations and system curve analysis for each pump specified.

Pump station cycle times and pump run times.

Buoyancy calculations for all below grade structures.

Supporting documentation that the standby power source is capable of powering the specified pumps.

Hydraulic loading for each treatment unit.

Sizing criteria for each treatment unit and associated equipment (chemical dosing, etc.)