

## **Introduction**

This reference guide is intended to act as a brief outline of the development process of new sanitary wastewater collection systems within the James Island Public Service District (District/JIPSD). For our complete Sanitary Wastewater System Design and Construction Standards, visit District.org and click on the link found under “Vendors/Contractors” on our homepage.

## **Initial Coordination**

It is recommended that the Developers, Designers, Planners, Engineers, and others associated with the development of proposed private sector residential or commercial projects request a meeting with the District’s Director of Wastewater Services to review District requirements for plans and specifications and processing procedures for proposed projects within the District’s wastewater service area. **A mandatory Initial Coordination meeting shall be required for all proposed commercial and multi-family residential projects to be constructed on redevelopment sites.**

## **Preliminary Review Submittal**

The Developer’s Design Engineer shall submit a preliminary review package to the District. The package shall include the following:

A. Two (2) sets of plans to include:

- Complete project site design drawings.
- Indicate the location and width of all the District’s easements
- Indicate all roadway rights-of-way as either public or private
- Ownership of existing roadways (Town, City, County, or State)
- Indicate the agency to operate and maintain proposed roadways
- Indicate predevelopment site conditions, including topography, all existing and proposed utilities, and utility easements, and identify the owners of all public rights-of-way and easements (Dominion Energy, AT&T, CWS, etc.)
- Confirmation with the District of available unallocated wastewater capacity within the existing receiving facilities

B. Two (2) sets of typed and bound or stapled Specifications signed, sealed, and dated by the Design Engineer. Specifications shall be consistent with the District’s published specifications and material requirements.

C. Two (2) copies of all design computations signed, sealed, and dated by the Design Engineer to include proposed pump station and gravity wastewater design calculations, Equivalent Residential Unit (ERU) calculations, and projected project build-out wastewater ADF loading.

D. A detailed Engineer's preliminary material quantitative take-off and construction cost estimate of proposed wastewater facilities.

E. Copy of Council of Governments 208 Plan Conformance Certification

### **Preliminary Design Review**

The DISTRICT will review the Preliminary Submittal documents and send a letter to the Developer's Design Engineer with comments on the drawings, specifications, and pump station calculations (if any).

The Design Engineer shall address all Preliminary Design Review comments, and revised plans/specifications are resubmitted. The Preliminary Design Review process will continue until the proposed project design documents conform to applicable District standards.

### **Final Design Review**

Once the Design Engineer has submitted (2) complete sets of Plans and Specifications satisfying all comments made by the District, the Design Engineer will be sent a Final Design approval letter stating conformance with District standards.

The District's Final Design approval letter will also include a list of required District fees associated with proposed wastewater facilities to serve the development, including impact, connection, and administrative fees.

NOTE: Impact and Administrative fees are due and payable before obtaining a DHEC Construction Permit. Connection Fees may be paid when connecting to wastewater for each new dwelling or commercial unit.

### **Regulatory Agency-Approvals**

Following receipt of the District's Final Design Review approval letter, the Developer's Design Engineer shall submit the following documents to the District:

A. Two (2) complete sets of Final Drawings and Specifications, signed and sealed by the Design Engineer, including all revisions and additions required by the District. The District will recheck these documents before willing, and able letters or permits will be provided and/or signed by the District.

B. Two (2) additional copies of the Site Layout Drawing for District reference during construction.

C. Final approved copies of all applicable regulatory agency permits and certifications required for construction shall be provided to the DISTRICT before final construction approval from the DISTRICT.

D. Proposed construction schedule and notification in writing of commencement of work seven (7) days before starting construction. Construction shall be coordinated in advance with the District's Director of Wastewater Services.

E. The developer's proposed utility contractor shall be on the District's list of approved utility contractors.

F. At the District's option, a pre-construction conference may be required with the District's Wastewater Department, depending upon the size and complexity of the proposed project. Attendees shall include, at a minimum, the Design Engineer, the utility contractor's Project Manager, and Site Superintendent. The District shall require copies of the Contractor's safety training certifications and insurance certificates before commencing construction.

NOTE: The District shall be provided one (1) set of complete material submittals and shop drawings for review and comment in compliance with the District's approved plans and specifications and the DISTRICT's Design and Construction Guidelines. The District may require substitute materials to comply with DISTRICT material standards.

### **Construction**

Construction may begin after obtaining final approval from the District and all other applicable regulatory agencies having jurisdiction over the project. The District's System Inspector and/or other District personnel make periodic project site inspections to observe the construction and confirm that approved materials and procedures are being followed.

Suppose a meeting with the District, the Developer, and/or the Developer's Design Engineer is required during construction. In that case, an appointment will be coordinated with the District's Director of Wastewater Services at (843) 762-5258.

### **Project Completion and Acceptance Requirements**

The DISTRICT shall require the following items documents submitted by the Developer's Design Engineer as one complete package before a final inspection will be scheduled with the Developer, the Design Engineer, and District personnel.

- A. The Design Engineer shall provide a letter certifying that the project's wastewater system has been constructed by SCDHEC and District's approved Project Drawings, Specifications, all applicable regulatory agency permits, and required construction methods.
- B. Two (2) sets of prints and one (1) emailed PDF copy of "**As-Built Record Drawings**" (As-Builts). These Record Drawings shall include accurate As-Built locations and material descriptions of all gravity sewers, manholes, service lines, clean-outs, sewer laterals, and ancillary fittings. The location and material descriptions of all force mains, bends, valves, ARVs and fittings, and detailed pump station construction shall also be required on the As-Built Drawings. Each sheet of As-Built Record Drawings shall be signed and sealed by the Design Engineer in the format that follows:
  - a. Show station marks at all valves, manholes, bends, wastewater services, and air release valves.
  - b. Line lengths and termination points.
  - c. Valves are to be located by distance to two permanent reference points.
  - d. Indicate top elevation of manholes and invert elevation of manholes.
  - e. Indicate a reference benchmark on each Plan and Profile Sheet. All required elevations shall be referenced to the National Geodetic Vertical Datum of 1929 (NGVD29).

- f. Show all recorded plat and easement reference information by ROD book and page number for all new easements and pump station properties (if applicable) required for the project.
- g. As-Built Record Drawings must be clearly legible and of good quality.

The District will review the "As-Built Record Drawings"; **however, the District shall not be responsible for the accuracy of Record Drawings.** If the drawings indicate inaccuracies, they will be returned to the Developer's Design Engineer for revisions. The system acceptance letter will not be issued until the District approves the Record Drawings.

- C. Two (2) copies of CCTV video recordings of all-new gravity sewers on CD or flash drive for District review before accepting any gravity sewers. If the Developer and/or Design Engineer requests that the District provide the CCTV inspections and CCTV recordings, contact the District's Wastewater Department for current rates and availability to perform the video inspection.
- D. One (1) AutoCAD/State Plane disk. NOTE: Contact the DISTRICT for the latest standards for digital data submission.
- E. All original closeout documents with proper signatures and notarization, including:
  - a. Affidavit of Title
  - b. Affidavit of Property Transfer Fee (if applicable)
  - c. Contractor Guaranty and Warranty
  - d. Contractor's Affidavit and Final Waiver of Lien
  - e. Grant of Perpetual and Construction Easements
  - f. DISTRICT Project Completion Engineer Questionnaire
  - g. Maintenance of Agreement Wastewater
  - h. Title to Real Estate- recorded with Charleston County (if applicable)
- F. Two (2) prints of each required easement plats in the format that follows:
  - a. Each must have an original signature and seal (no larger than 22"x34") as prepared by the requirement set by the DISTRICT and the RMC office.
  - b. Each separate easement plat shall be accompanied by an appropriate Grant of Easement conveyance document.
  - c. The Developer shall be responsible for recording all easement documents and plats after final District approval.
  - d. The District will not accept compiled maps as land surveys.
  - e. The width of the easements for wastewater gravity sewers and force mains shall be a minimum of twenty (20) feet unless approved or required otherwise by the District.
  - f. All wastewater mains within the easement shall be platted to provide equal distance on each side of the as-construction location of the main.
  - g. The District shall not accept plats and Grants of Easement documents unless all of the above requirements are met.
- G. The developer shall provide the District a cash bond in the amount of 10% of the Design Engineer's certified, actual final construction cost of the wastewater facilities to be deeded to the District.

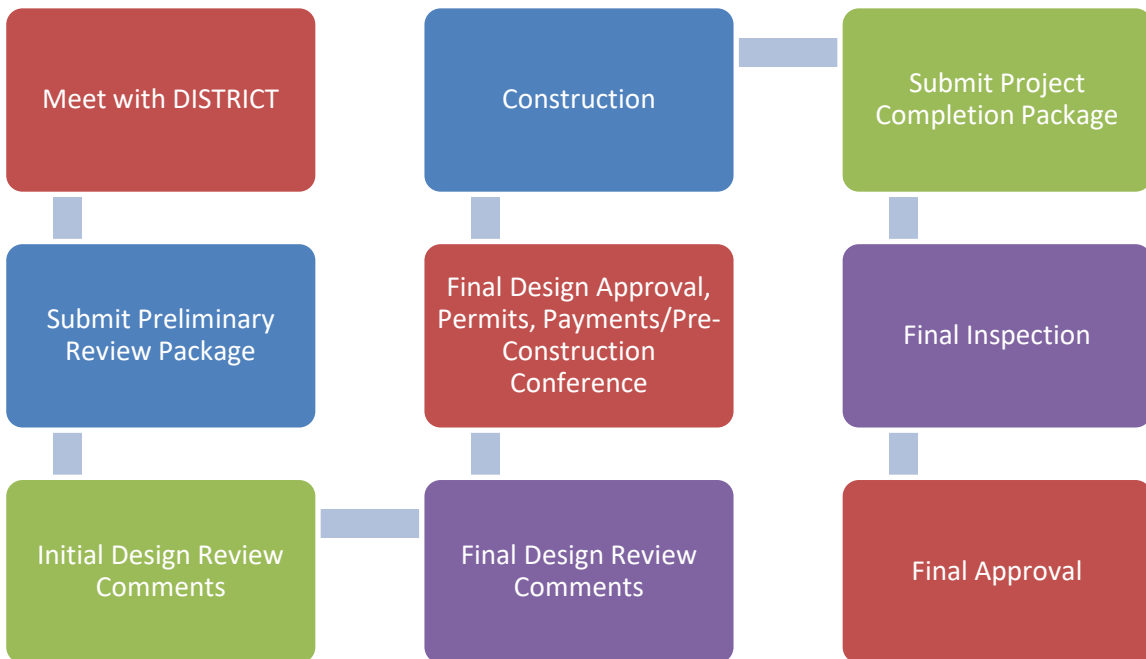
**Final Inspection**

After the project acceptance documents have been submitted and approved by the District, contact the District’s Director of Wastewater Services to schedule a final on-site inspection. For a complete list of what is included in the final inspection, please review the Sanitary Wastewater System Design and Construction Standards, or visit District.org and click on the link found under “Vendors/Contractors” on the District’s homepage.

After the final inspection, the District’s System Inspector shall provide their written comments, as applicable, to the Developer’s Design Engineer listing items requiring corrective action as observed during the inspection. All items requiring corrective action shall be corrected before contacting the District to conduct another follow-up final inspection.

**Final Acceptance**

The DISTRICT will issue an acceptance letter to SCDHEC with copies to all involved parties. Until the District’s final acceptance letter is provided **and** SCDHEC issues a Permit-to-Operate allowing the new wastewater facilities to be placed into active service, **NO CONNECTIONS TO THE SYSTEMS SHALL BE PERMITTED.**



**Figure: Developer’s Process**

**APPLICATION FOR PERMIT TO CONSTRUCT  
WASTEWATER COLLECTION AND TRANSMISSION FACILITIES  
JAMES ISLAND PUBLIC SERVICE DISTRICT  
1739 SIGNAL POINT ROAD                      PHONE: (843) 762-5258  
CHARLESTON, SC 29412                      FAX: (843) 762-5252**

1. Project Name: \_\_\_\_\_  
\_\_\_\_\_
2. Location (street address and TMS Number): \_\_\_\_\_  
\_\_\_\_\_
3. Parent Tract Plat/Deed Ref. (RMC Book/Page): \_\_\_\_\_
4. Application is hereby made, on behalf of the Developer whose name appears below, for a Permit to Construct (describe): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Developer's name, address, telephone, and FAX numbers: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. Name, address, telephone, and FAX numbers of Project Engineer/Authorized Agent: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. Total ADF Wastewater Loading generated by this Project shall not exceed: \_\_\_\_\_ GPD  
Maximum Peak Discharge Flow Rate \_\_\_\_\_ GPM
8. Is this part of a phased project? No \_\_\_\_\_ Yes \_\_\_\_\_ Phase \_\_\_\_\_ of \_\_\_\_\_
9. Is this project a revision to a previously permitted project? No \_\_\_ Yes \_\_\_\_\_  
Project name (if different from this project): \_\_\_\_\_  
DISTRICT Permit Number: \_\_\_\_\_ Date: \_\_\_\_\_  
SCDHEC Permit Number: \_\_\_\_\_ Date: \_\_\_\_\_
10. Type of wastewater generated by project (Check one):  
Domestic \_\_\_\_\_ Process (Industrial) \_\_\_\_\_
11. A Complete Permit Application Package shall include the following items, as applicable:
  - A. \_\_\_\_\_ Application Fee; Ref. current DISTRICT Fee Schedule.
  - B. \_\_\_\_\_ Transmittal letter detailing the submittal package.
  - C. \_\_\_\_\_ Copy of SCDHEC Application for Permit to Construct.
  - D. \_\_\_\_\_ Two (2) copies of the plans and Specifications were signed, sealed, and dated by the Project Engineer.
  - E. \_\_\_\_\_ Two (2) copies of the Project Engineering Report, including hydraulic loading, pump station design calculations, pump curves, etc. The hydraulic loading shall be based upon SCDHEC "Guidelines for Unit Contributory Loadings to Wastewater Treatment Facilities" dated 1990.

- F. \_\_\_\_\_ One (1) original and seven (7) copies of all applicable wastewater/force main easement plats and (if applicable) fee simple pump station plats plus one (1) original developer executed deed for each.
- G. \_\_\_\_\_ One (1) copy of each permit/certification is required from each agency having Project jurisdiction.
- H. \_\_\_\_\_ One (1) original and seven (7) copies of each Roadway Encroachment Permit Application required indicating the District as Applicant; the District will process submittals.
- I. \_\_\_\_\_ I hereby agree to invite District to the preconstruction conference for the project.
- J. \_\_\_\_\_ I hereby agree that the District may issue a "stop-work order" on the project if excessive complaints are received or for non-compliance with these guidelines.
- K. \_\_\_\_\_ I hereby certify my acceptance of responsibility for the design of these wastewater facilities.

Engineer's Name (Printed): \_\_\_\_\_

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

S.C. Registration No.: \_\_\_\_\_

- L. \_\_\_\_\_ Before final District approval, I shall certify construction is complete in accordance with approved plans and specifications, to the best of my knowledge, information, and belief as based upon periodic observations and final inspection for design compliance.

Engineer's Name (Printed): \_\_\_\_\_

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

S.C. Registration No.: \_\_\_\_\_

- M. \_\_\_\_\_ I have read this application and agree to the requirements and conditions stated herein. I hereby agree to allow project site access to District personnel for the purpose of periodic construction observation. I also hereby designate the Project Engineer as my Authorized Agent in all matters pertaining to the design and construction of the Project wastewater facilities. I understand that before the project can be finalized and ownership transferred to the District, a cash bond must be paid in the amount of 10% of the project's cost. Further, I acknowledge that no connection to the public wastewater shall be made until the Equivalent Residential Unit (ERU) fees have been paid.

Owner's Name (printed): \_\_\_\_\_

Owner's Title: \_\_\_\_\_

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

**JAMES ISLAND PUBLIC SERVICE DISTRICT  
PROJECT REVIEW CHECKLIST FOR NEW DEVELOPMENT**

JAMES ISLAND PUBLIC SERVICE DISTRICT PROJECT NUMBER: \_\_\_\_\_

LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

TMS#: \_\_\_\_\_

Project Engineer: \_\_\_\_\_

Developer: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone #: \_\_\_\_\_

Phone #: \_\_\_\_\_

Fax #: \_\_\_\_\_

Fax #: \_\_\_\_\_

PRELIMINARY APPROVAL (IF REQUIRED):

APPROVED

DATE

A. 2 sets of Plans, Specifications and Engineering Reports

\_\_\_\_\_

\_\_\_\_\_

B. Transmittal Letter

\_\_\_\_\_

\_\_\_\_\_

C. District Permit Application

\_\_\_\_\_

\_\_\_\_\_

APPROVAL TO CONSTRUCT

A. Plans and Specification approved by The District

\_\_\_\_\_

\_\_\_\_\_

B. DHEC and other required agency Approvals submitted to the DISTRICT

\_\_\_\_\_

\_\_\_\_\_

C. Construction Schedule (If required)

\_\_\_\_\_

\_\_\_\_\_

D. Notification of Date construction Will commence.

Date actually started: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

E. Roadway Encroachment Permits Approved

\_\_\_\_\_

\_\_\_\_\_

F. Wastewater Contract prepared and Submitted for execution

\_\_\_\_\_

\_\_\_\_\_

G. Payment of all applicable District Fees; Amount \$ \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

H. Preconstruction Conference; Date Scheduled: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I. Identity of Resident Inspector \_\_\_\_\_

Phone #: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

J. Identity of Job Site Superintendent \_\_\_\_\_

Phone #: \_\_\_\_\_



**JAMES ISLAND PUBLIC SERVICE DISTRICT  
O&M ACCEPTANCE CHECKLIST FOR NEW DEVELOPMENT**

		<u>APPROVED</u>	<u>DATE</u>
A.	Project Engineer's Request for District and DHEC for Final Inspection. Actual date: _____	_____	_____
B.	Project Engineer's Certification of Completion and Acceptance.	_____	_____
C.	"As-Built" Drawings furnished and accepted.	_____	_____
D.	Instrument(s) of Conveyance furnished To the DISTRICT which applicable		
	i. Title	_____	_____
	ii. Bill of Sale	_____	_____
	iii. Plats	_____	_____
E.	Pump Station Site and/or Wastewater Easements Plats and Grants of Easement applicable	_____	_____
F.	Maintenance Bond valid through warranty Period		
	i. Maintenance Agreement	_____	_____
G.	Payment of all Outstanding District Fees; Amount \$ _____	_____	_____
H.	Contractor's Affidavit and Final Waiver of Liens	_____	_____
I.	Project Completion Questionnaire	_____	_____
J.	All Special Conditions of District and/or S.C. DHEC satisfied	_____	_____
K.	DISTRICT Final Inspection & Approval Date: _____	_____	_____
L.	S.C. DHEC Permit to Operate Submitted; Date: _____	_____	_____
M.	S.C. DOT/TOWN/COUNTY Encroachment Permit Conditions Satisfied; Date: _____	_____	_____
N.	Date District Assumed O&M Responsibility: _____	_____	_____

**JAMES ISLAND PUBLIC SERVICE DISTRICT  
AS-BUILT DRAWING CHECKLIST**

James Island Public Service District Project Number: \_\_\_\_\_

Checked by: \_\_\_\_\_

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

	<u>APPROVED</u>	<u>DATE</u>
1. Lot Number (s) Ref S/D Plat	_____	_____
2. TMS Designations for each lot	_____	_____
3. Street Name (s) & R/W widths	_____	_____
4. Manholes Identified & Locations As-Built	_____	_____
5. Line invert and Top Elevations of Manholes	_____	_____
6. Manhole Stations As-Built	_____	_____
7. Service Fittings Stations on wastewater mains	_____	_____
8. Depth at R/W of Service Line Fittings	_____	_____
9. Main Station at R/W of Service Line Fittings	_____	_____
10. Service Line Distances	_____	_____
11. Reach Distances As-Built	_____	_____
12. Profile Grades As-Built	_____	_____
13. Contractor's I.D., Date Project Accepted for O&M	_____	_____
14. "As-Built Record Drawings"	_____	_____
15. Project Engineer's Signature, Seals, & Certification	_____	_____
16. Equipment Operating Manuals (if applicable)	_____	_____
17. Pump Station Spare Parts (if applicable)	_____	_____