

Introduction

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

Getting Started

It is recommended that the Developers, Designers, Planners, Engineers and others associated with implementing the project meet with the JIPSD's Director of Wastewater Services to review plans and specifications and coordinate proposed projects with the JIPSD.

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

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

- Complete system design
- Location and width of all the JIPSD'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
- Show all existing and proposed utility easements and rights-of-way and their ownership (SCE&G, Bell South, CWS, etc.)
- Evaluation of available unallocated wastewater capacity within existing receiving facilities

B. Two (2) sets of typed and bound or stapled Specifications signed, sealed and dated by the Design Engineer

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 loading

D. Engineer's estimate of wastewater facilities construction cost

E. Copy of Council of Governments 208 Plan Conformance Certification

Initial Design Review

The JIPSD will review the materials submitted and will return a letter to the Developer's Design Engineer with comments on the drawings, specifications, and pump station calculations (if any).

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All comments must be addressed by the Design Engineer and revised plans/specifications should be submitted. The design review process will continue until the plans are to JIPSD standards.

Final Design Review- Preliminary Approval

Once the Design Engineer has submitted (2) complete sets of Plans and Specifications satisfying all comments made by the JIPSD, the Design Engineer will be sent a final design letter noting conformance with JIPSD standards.

The letter will also include a list of fees associated with the development including impact, connection and administrative fees. NOTE: Impact and Administrative fees are due prior to obtaining a DHEC construction permit; connection fees may be paid at the time of connection to wastewater for each home.

Obtaining Final Approval

Once Preliminary approval is received, the Developer's Design Engineer is to submit the following:

- A. Two (2) complete sets of Plans and Specifications reflecting corrections requested by the JIPSD. These will be checked by the JIPSD <u>before</u> any approval letters, willing and able letters or any permits are signed by the JIPSD.
- B. Two (2) additional copies of the Site Layout Plan to be used by the JIPSD.
- C. Final, approved copies of all applicable regulatory agency permits and certifications required for construction shall be provided to the JIPSD prior to obtaining final approval from the JIPSD.
- *D.* Proposed construction schedule and notification in writing of commencement of work <u>seven</u> (7) days prior to starting construction. Construction should be coordinated in advance with the JIPSD's Director of Wastewater Services.
- E. The developer's proposed utility contractor shall be on the JIPSD's list of approved utility contractors.
- F. At the JIPSD's option, a pre-construction conference may be required by the JIPSD 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 JIPSD shall require copies of the Contractor's safety training certifications and insurance certificates prior to commencing construction.

NOTE: The JIPSD shall be provided one (1) set of complete material submittals and shop drawings for review and comment in compliance with the JIPSD's approved plans and specifications and the JIPSD's Design and Construction Guidelines. At the JIPSD's request, additional materials may be requested.

Construction

Construction may begin after obtaining final approval from the JIPSD. From time-to-time, the JIPSD's Customer Liaison/System Inspector may visit the site along with other JIPSD personnel.

If at any time, a meeting with the JIPSD and the Developer and/or the Developer's Design Engineer is required, an appointment will be coordinated with the JIPSD's Director of Wastewater Services at (843) 762-5258.

<u>Project Completion and Takeover (Prior to Final Inspection)</u>

The JIPSD requires the following items to be submitted by the Developer's Design Engineer as one package before a final inspection can be performed:

- A. Engineer's written certification that the sanitary wastewater system has been constructed in accordance with the JIPSD's approved Plans, Specifications, applicable permits and good engineer practice.
- B. Two (2) sets of prints and one (1) emailed PDF copy of "As Constructed Record Drawings" (As-Builts). These drawings shall reflect <u>all</u> "as constructed" conditions for mains and wastewater lateral placement stamped by the 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. Reference benchmarks on drawings and tie to National Geodetic Vertical Datum of 1929 (NGVD29).
 - f. Show all recorded plat and easement information.
 - g. Drawings must be clearly legible and of good quality.

NOTE: The JIPSD will review the "As Constructed Record Drawings" but the JIPSD is not responsible for the accuracy of record drawings. If the drawings indicate inaccuracies, they will be returned to the Developer's Design Engineer for revisions and the system acceptance letter will not be issued until the drawings are acceptable.

- C. Two (2) copies of video of all new gravity lines on CD. Contact the JIPSD for current rates and availability to perform the video inspection.
- D. One (1) AutoCAD/State Plane disk. NOTE: Contact the JIPSD 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 Easement
 - f. JIPSD 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 the easement plats in the format that follows:
 - a. Each must have original signature and seal (no larger than 22"x34") as prepared in accordance with requirement set by the JIPSD and the RMC office.
 - b. Each is to be accompanied by a right-of-way easement instrument of conveyance.

- c. The Developer shall be responsible for the recording of all easement documents and plats after final JIPSD approval.
- d. The JIPSD will not accept compiled maps as land surveys.
- e. The width of the easements for wastewater mains shall be a minimum of twenty (20) feet.
- f. All wastewater mains within the easement shall be platted so as to provide equal distance on each side of the as-construction location of the main.
- g. Plats cannot be accepted unless these requirements are met.
- G. The Developer pays the JIPSD the cash bond in the amount of 10% of the Design Engineer's certified final construction cost of the wastewater facilities to be deeded to the JIPSD.

Final Inspection

Once the project closeout package has been submitted, contact the JIPSD's Director of Wastewater Services to schedule an on-site final 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 jipsd.org and click on the link found under "Vendors/Contractors" on our homepage.

After the final inspection, the JIPSD's Customer Liaison/System Inspector shall provide his/her 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 JIPSD to conduct another inspection.

Final Approval

The JIPSD will issue an acceptance letter to the SCDHEC with copies to all involved parties. Until such time as this letter is provided and SCDHEC issues a permit-to-operate allowing the systems to be placed in service, **NO CONNECTIONS TO THE SYSTEMS WILL BE PERMITTED**.

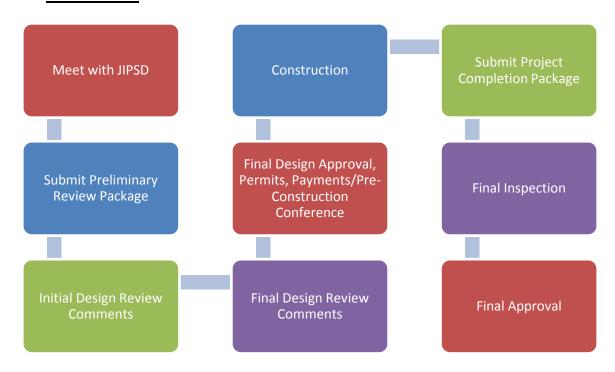


Figure: Developer's Process

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

Location (street address and TMS Number):
Parent Tra	act Plat/Deed Ref. (RMC Book/Page):
	n is hereby made, on behalf of the Developer whose name appears below, for a Permit to (describe):
Develope	r's name, address, telephone and FAX numbers:
Name, ad	dress, telephone and FAX numbers of Project Engineer/Authorized Agent:
Total ADF	Wastewater Loading generated by this Project shall not exceed: GPD Maximum Peak Discharge Flow Rate GPM
ls this par	t of a phased project? No Yes Phase of
Project na	ject a revision to a previously permitted project? No Yes me (if different from this project): rmit Number: Date:
SCDHEC	Permit Number: Date:
	astewater generated by project (Check one): Process (Industrial)
	te Permit Application Package shall include the following items, as applicable:
A B	Application Fee; Ref. current JIPSD Fee Schedule. Transmittal letter detailing the submittal package.
C	Copy of SCDHEC Application for Permit to Construct.
D	Two (2) copies of the plans and Specifications signed, sealed and dated by the Projec 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/forcemain easemen
	plats and (if applicable) fee simple pump station plats plus one (1) original develope executed deed for each.
G	One (1) copy of each permit/certification required from each agency having Projec
H	jurisdiction. One (1) original and seven (7) copies of each Roadway Encroachment Permit Application
	required indicating the JIPSD as Applicant; submittals will be processed by the JIPSD.

l J K	I hereby agree to invite JIPSD to the preconstruction conference for the project. I hereby agree that the JIPSD may issue a "stop work order" on the project if excessive complaints are received or for non-compliance of these guidelines. I hereby certify my acceptance of responsibility for the design of these wastewater facilities.
	Engineer's Name (Printed):
L	Prior to final JIPSD 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 JIPSD 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 JIPSD, a cash bond must be paid in the amount of 10% of the cost of project. 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 Nan	ne (printed):e:
Signature:	Date:

JAMES ISLAND PUBLIC SERVICE DISTRICT PROJECT REVIEW CHECKLIST FOR NEW DEVELOPMENT

		BLIC SERVICE DISTRICT P		
TMS#	·-			
Proje			Developer:	
•			· <u> </u>	
			_	
Phon			Phone #:	
Fax #	<u> </u>		Fax #:	
PREL	IMINARY APPE	ROVAL (IF REQUIRED):	APPROVED	DATE
A.		s, Specifications and		
	Engineering R	eports		
B.	Transmittal Le	tter		
C.	JIPSD Permit	Application		
<u>APPF</u>	OVAL TO CON	<u>ISTRUCT</u>		
A.	•	cification approved by		
	The JIPSD			
B.	DHEC and oth	er required agency		
		mitted to the JIPSD		
C.	Construction S	Schedule (If required)		
D.		Date construction		
	Will commence			
	Date actually s	started:		
E.	Roadway Encr	oachment Permits Approve	d	
F.	Wastewater Co	ontract prepared and		
	Submitted for e	• •		
_	Daymant of all	applicable UDCD		
G.		applicable JIPSD		
	rees, Amount	\$		
H.	Preconstructio	n Conference;		
	Date Schedule	ed:		
I.	Identity of Res	ident Inspector		
	Phone #:			
J.	Identity of Joh	Site Superintendent		
		-	hone #:	

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

		<u>APPROVED</u>	DATE
A.	Project Engineer's Request for JIPSD 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 JIPSD which applicable i. Title ii. Bill of Sale iii. Plats		
E.	Pump Station Site and/or Wastewater Easeme Plat as applicable	ents	
F.	Maintenance Bond valid through warranty Period i. Maintenance Agreement		
G.	Payment of all Outstanding JIPSD Fees; Amount \$		
H.	Contractor's Affidavit and Final Waiver of Liens	S	
l.	Project Completion Questionnaire		
J.	All Special Conditions of JIPSD and/or S.C. DHEC satisfied		
K.	JIPSD 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 JIPSD Assumed O&M Responsibility:		

JAMES ISLAND PUBLIC SERVICE DISTRICT AS-BUILT DRAWING CHECK LIST

Jame	s Island Public Service District Project Number:	,			
Check	ked by:				
Date:					
		APPROVED		DATE_	
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.	"Record Drawings" or "As-Built"				
15.	Project Engineer Seal & Certification				
16.	Equipment Operating Manuals (if applicable)				
17.	Pump Station Spare Parts (if applicable)				