

WJCUD Developer's Manual

Adopted May 8, 2021

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Our Mission

Our vision is accessible, clean water for the citizens, visitors, and businesses in our community and to provide quality, affordable water, wastewater resource management and utility service for the Western Jackson County area known as St. Martin and Latimer.

I. INTRODUCTION

The purpose of this manual is to provide, in concise form, a guidance document for individuals or businesses considering residential and commercial development within the West Jackson County Utility District jurisdictional areas. For service area information, please visit our web site, www.wjcud.com, and click "West Jackson County Service Area" on the home page.

All water and sewer design must be completed by an engineer licensed or permitted to practice engineering in the state of Mississippi. All water and sewer construction must be completed by utility contractors licensed or permitted to work in Mississippi and approved by West Jackson County Utility District.

Upon completion and final acceptance by West Jackson County Utility District of all facilities constructed under the following policies and guidelines, said facilities shall become the property of West Jackson County Utility District **excluding personal water and sewer lines** and West Jackson County Utility District shall be responsible for operation and maintenance. However, for a period of one year from the date of final acceptance of the facility, the Developer shall be responsible for any repairs needed that are a result of improper or inadequate construction practices.

For questions or submittals please use the addresses and phone numbers below:

West Jackson County Utility District physical address:

7200 McCann Road Biloxi, MS 39532

West Jackson County Utility District mailing address:

P. O. Box 1230 Ocean Springs, MS 39566

Phone Number: (228) 872-3898 Ext. 295

Fax Number: (228) 872-3861

II. WEST JACKSON COUNTY UTILITY DISTRICT WATER/SEWER EXTENSION POLICIES

A. Purpose

The purpose of the following policies is to establish the methods to be used in the extensions of the water and sewer systems. This policy applies to both residential and commercial development.

B. Sewer Main Extension Policies and Procedures

- The Developer/Owner is responsible for 100% of the cost to install the sewer distribution system <u>within</u> the development. The District's master plan requires all new sewer infrastructure to be gravity sewer mains. <u>Deviation from the master plan requires Board approval.</u>
- 2. If the property to be developed does not abut an existing District sewer main, or where the existing sewer main is inadequately sized (typically smaller than 6-inch), Developer may submit a written petition to the District to share in the costs to extend the sewer main along the existing road ("off-site sewer construction"). The Developer will bear the full cost to extend the sewer main to the development unless a written Memorandum of Agreement (MOA) with WJCUD is entered. The District is under no obligation to cost-share in such instances, but may do so upon Board approval, and in its sole discretion.
- 3. If the District approves a Memorandum of Agreement with the Developer/Owner, the below process will be followed.
- **a.** The District shall prepare an estimate of the construction cost of the proposed sewer main to be extended along the existing road to the entrance of the subdivision.
- **b.** The extension is defined as that portion of the project that is from WJCUD's existing sewer line to the boundary of the development site. WJCUD will not share in the cost of the sewer line construction within the development.
- c. If a sewer line needs to be oversized for <u>anticipated future system</u> <u>needs</u> (not within the development), costs associated with the oversized portion shall be incurred by WJCUD based on the WJCUD's estimate.
- **d.** Project Design, Review, and Submittal occurs as outlined in detail herein.
- **e.** Developer/Owner will obtain all required easements and provide proof of same to the District.
- **f.** Conditional Will Serve letter is issued.
- **g.** Construction shall proceed as outlined herein.

- h. Upon completion of the off-site construction, Sewer System Conveyance Documents, an Indemnity Agreement, a Warranty, and Related Documents shall be executed by the Owner/Developer, to transfer interest.
- i. Reimbursement (if applicable) shall be paid upon project completion and the release of the project for private service connections as detailed herein. To receive the reimbursement, the Developer must submit a letter requesting the reimbursement and provide documentation of the actual costs incurred by the Developer for the sewer main installation to reach the development.

C. Water Line Extensions

- 1. The Developer/Owner is responsible for 100% of the cost to install the water distribution system within the development.
- 2. If the property to be developed does not abut an existing District water main, or where the existing water main is inadequately sized (typically smaller than 6-inch), Developer may submit a written petition to the District to share in the costs to extend the water main along the existing road ("off-site water construction"). The Developer will bear the full cost to extend the water main to the development unless a written Memorandum of Agreement (MOA) with WJCUD is entered. The District is under no obligation to cost-share in such instances, but may do so upon Board approval, and in its sole discretion.
- 3. If the District approves a Memorandum of Agreement with the Developer/Owner, the below process will be followed.
- **a.** The District shall prepare an estimate of the construction cost of the proposed water main to be extended along the existing road to the entrance of the subdivision.
- b. The extension is defined as that portion of the project that is from the WJCUD's existing water line to the boundary of the development site. WJCUD will not share in the cost of the water line construction within the development.
- c. If a water line needs to be oversized for <u>anticipated future system</u> <u>needs</u> (not within the development), costs associated with the oversized portion shall be incurred by the WJCUD based on the WJCUD's estimate.
- **d.** Project Design, Review, and Submittal occurs as outlined in detail herein.
- **e.** Developer/Owner will obtain all required easements and provide proof of same to the District.
- f. Conditional Will Serve Letter is issued.

- **g.** Construction shall proceed as outlined herein.
- h. Upon completion of the off-site construction, Water System Conveyance Documents, an Indemnity Agreement, a Warranty, and Related Documents shall be Executed by the Owner/Developer, to transfer interest.
- i. Reimbursement (if applicable) shall be paid upon project completion and the release of the project for private service connections as detailed herein. To receive the reimbursement, the Developer must submit a letter requesting the reimbursement and provide documentation of the actual costs incurred by the Developer for the water main installation to reach the development.

III. SEWER PROJECT DESIGN AND PERMITTING

Developer/Owner will be responsible for responding to the District's engineering review comments in a timely manner to ensure their project moves forward.

The design of any sewer facility that is to be owned and maintained by WJCUD, shall be completed by an engineer licensed or permitted to practice engineering in the state of Mississippi. Upon receipt of the preliminary review package, one of the staff engineers will be assigned to manage the project until its completion and the release of private service connections.

A. Project Submittal

i. Preliminary Project Review

WJCUD has found that most submittals usually require some minor revision. Therefore, WJCUD requires that developers/owners have their engineers submit a preliminary project package in order to avoid unnecessary waste of materials. Developer shall secure from WJCUD the latest specifications and standards for construction to utilize with their plans. Copies are available on request.

The following are the items that should be included in a preliminary project package:

- 1. 2 sets of construction plans on plan/profile paper
- 2. 1 copy of the location map on 8½" x 11" paper
- 3. 1 copy of the design notes and calculations
- 1 electronic copy of the overall plan view of the project (dwg format in State Plane Coordinate System)

WJCUD shall review the package and return any requested revisions to the Developer/Owner or their Engineer. After the revisions are finalized, the project submittal package can be prepared and returned to WJCUD. The District reserves the right to require reimbursement of plan review costs for repetitive resubmittals.

ii. Project Review and Submittal

WJCUD shall review the package and return it to the Developer/Owner's Engineer should any revisions be required. After the Developer has completed the revision(s), the project submittal package can be prepared and forwarded to WJCUD New Construction Manager. The project submittal package should include the following items:

- **a.** 2 sets of construction plans at minimum scale and stamped by registered professional engineer
- **b.** 2 copies of each off-site right-of-way plat, if applicable
- **c.** 2 copies of the fully executed construction permit application (1 original and 1 copy)
- d. 1 copy of the location map
- **e.** 2 copies of the design notes and calculations and hydraulic model, stamped and signed by the design engineer
- f. 1 copy of each approved county road and/or state highway encroachment permit issued for the project or a copy of the submitted application.

Upon approval, WJCUD will issue a "Conditional Will-Serve". The Developer or his designated representative shall then contact the WJCUD New Construction Manager to schedule a pre-construction conference not less than 72 hours prior to construction.

iii. Minimum Sewer Plan Requirements

The following standards shall be required for sewer line construction drawings that are submitted to WJCUD:

SITE PLAN

- □ Plan view of the entire site at not greater than 1" = 200' scale, showing the entire sewer system
- □ 24" x 36" sheet size
- Show tie-in to the existing system; upstream and downstream rim and invert elevations. Contact WJCUD for availability of record drawing information on the tie-in point.
- Label all manholes, air release valves on force mains and pump stations
- Show project phasing
- North arrow
- Jackson County GIS PIDN where the project is located
- □ Location map, max scale 1" = 1000', north arrow

Index of sheets □ Title block o Names, mailing addresses and telephone numbers of the owner of the property, the land developer, the engineer or consultant and the applicant Name of the development Tax map number of the property Scale Date (also include revision dates) Legend for all symbols Engineer's stamp **PLAN AND PROFILE SHEETS** □ 24" x 36" sheet size □ North arrow, scale (max. 1" = 50' horizontal and 1" = 10' vertical) □ Date (also include revision dates) Provide plan and profile of the entire system complete to tiein to the existing system including all gravity and force main sewer □ The plan and profile shall be on the same sheet for the section of the line shown with the horizontal view at the same scale Engineer's stamp The **plan** view shall at a minimum show: Street names with R/W limits Lot lines and number Easements labeled and dimensioned Manholes and/or force main air release valves with stationing for specifying location Pipe layout Bearings on all lines (acute flow angles are not acceptable) except at drop manholes on a case-by-case basis) Flow angle or bearings shall also be provided at the tie-in of the

The **profile** view shall at a minimum show:

proposed system to the existing system

Sewer service locations for all lots and buildings

 Fittings, air release valves, thrust blocking and all other necessary information for force mains

□ All utilities including storm drainage

Pipe anchorage locations identified

Stream crossings identifiedAerial crossings identified

- Existing grade
- Proposed grade
- Stationing to match with the plan view

- Manholes with the following information:
 - Stations
 - Types of manholes (i.e. drop manhole)
 - Rim elevations (for manholes in unpaved areas, the rim elevation shall be at least 12" higher that the proposed ground and in floodplains above the hundred (100) year flood elevation or else specify watertight manhole covers)
 - Watertight manholes require fiberglass monuments designated as sewer for cross country routes
 - Invert elevations
- Pipes with the following data:
 - Length (max 400' between manholes 15" lines or less)
 - o Diameter
 - Type of pipe
 - o Slope of pipe in %
 - All sewers shall have at least 3' of cover. Cover less than 3' shall be Polyethylene-lined DIP (Ductile Iron Pipe)
- □ All utilities and storm drains crossing the sewers
- Stream crossings identified
- Aerial crossings identified
- □ Fittings, air release valves, thrust blocking and all other necessary information for force mains
- Project notes consistent with WJCUD standard specifications
- Utilize WJCUD standard sewer details

IV. WATER PROJECT DESIGN AND PERMITTING

WJCUD has a delegated review program for water permitting. Developer/Owner will be responsible for responding to the District's engineering review comments in a timely manner to ensure their project moves forward.

The design of any water facility that is to be owned and maintained by WJCUD, shall be completed by an engineer licensed or permitted to practice engineering in the state of Mississippi. Upon receipt of the preliminary review package, one of the staff engineers will be assigned to manage the project until its completion and the release of private service connections.

A. Project Submittal

i. Preliminary Project Review

WJCUD has found that most submittals usually require some minor revision. Therefore, WJCUD requires that developers/owners have their engineers submit a preliminary project package in order to avoid unnecessary waste of materials. Developer shall secure from WJCUD the latest specifications and standards for construction to utilize with their plans. Copies are available on request.

The following are the items that should be included in a preliminary project package:

- 1. 2 sets of construction plans (minimum scale allowed is1" = 100')
- 2. 1 copy of the location map on 8 ½" x 11" paper
- 3. 1 copy of the design notes, calculations and hydraulic model
- 4. 1 electronic copy of overall plan view of the project (dwg format in State Plane Coordinate System)

WJCUD shall review the package and return any requested revisions to the Developer/Owner or their Engineer. After the revisions are finalized, the project submittal package can be prepared and returned to WJCUD. The District reserves the right to require reimbursement of plan review costs for repetitive resubmittals.

ii. Project Review and Submittal

WJCUD shall review the package and return it to the Developer/Owner's Engineer should any revisions be required. After the Developer has completed the revision(s), the project submittal package can be prepared and forwarded to WJCUD New Construction Manager. The project submittal package should include the following items:

- **a**. 2 sets of construction plans at minimum scale and stamped by registered professional engineer
- **b**. 2 copies of each off-site right-of-way plat, if applicable
- **c**. 2 copies of the fully executed construction permit application (1 original and 1 copy)
- **d**. 1 copy of the location map
- **e**. 2 copies of the design notes and calculations and hydraulic model, stamped and signed by the design engineer
- **f.** 1 copy of each approved county road and/or state highway encroachment permit issued for the project or a copy of the submitted application.

Upon approval, WJCUD will issue a "Conditional Will-Serve". The Developer or his designated representative shall then contact the WJCUD New Construction Manager to schedule a pre-construction conference not less than 72 hours prior to construction.

iii. Minimum Water Plan Requirements

The following standard shall be required for water line construction drawings that are submitted to WJCUD:

- Plan not greater than 1" = 100' scale, showing the entire water system
- Show match lines as appropriate
- Show project phasing
- North arrow and scale
- Stationing of tees, hydrants, valves, plugs and size or material changes and reducers
- Index of sheets
- □ Title block
 - Names, mailing addresses and telephone numbers of the owner of the property, the land developer, the engineer or consultant and the applicant
 - Name of the development
 - o Scale
 - Date (also include revision dates)
- Street names with R/W limits

- □ Lot lines and number
- Easements labeled and dimensioned
- □ Pipe layout, material and size (diameter)
- Water mains 12" and larger shall be shown on profile at the horizontal scale of the plan view
- □ Show sewer and storm drainage layout, if applicable
- Stream crossings identified and detailed if needed
- Aerial crossings identified
- □ Fittings, thrust blocking, blow-off taps and all other necessary information relating to water lines
- □ Show tie-in to the existing system with details
- □ Show limits of wetlands, flood plains and steep slopes
- □ Project notes consistent with WJCUD standard specifications
- Utilize WJCUD standard water details

V. WATER AND SEWER ADMINISTRATIVE REQUIREMENTS

A. Right of Way and Easement Agreements

Prior to any off-site construction taking place, the applicable right of way and easement agreement must be prepared, properly executed and recorded at Jackson County. NO CONNECTIONS TO WJCUD MAINS ARE AUTHORIZED prior to any outstanding right of way issue being resolved.

In order to prepare the standard right of way and easement agreement, surveyed plat(s) and the title opinion of the property on which the right of way traverses must be in hand.

B. Plats

A formal surveyed plat prepared, signed and crimped by a Mississippi licensed surveyor is required for each off-site and on-site right of way. A copy of the recorded final subdivision plat may be used for the on-site right of way plat.

All right of way plats for <u>sewer</u> lines must contain somewhere on it the following language:

Notice: The area included in the WJCUD easement or right-of-way shall not be filled over, filled in, or cut down in any manner which would cause the raising or lowering of the ground grade level beyond the elevation(s) which exist at the time of the conveyance of the easement and no building(s) or structure(s) of any kind either temporary or permanent, shall at any time be placed or constructed within the area of the WJCUD easement or right-of-way shown.

All right of way plats for <u>water</u> lines must contain somewhere on it the following language:

Notice: The area included in the WJCUD easement or right-of-way shall not be filled over, filled in, or cut down in any manner which would cause the raising or lowering of the ground grade level beyond the elevation(s) which exist at the time of the conveyance of the right-of-way and no building(s) or structure(s) of any kind either temporary or permanent, shall at any time be placed or constructed within the area of the WJCUD easement or right-of-way shown.

C. Ownership Transfer Documents

In the event the District has approved water or sewer off-site construction which will become owned and maintained by the District pursuant to this policy, the following documents will be executed:

Water/Sewer System Conveyance Documents
Indemnity Agreement
Warranty, and
Other Related Ownership Transfer Documents as may be required by the District

These documents will be provided to the Developer/Owner by the District.

D. Title Search Information

The developer should have his/her attorney conduct a title search on any right-of-way plats in accordance with the following procedure:

- **a.** Mortgages: (List mortgagor, mortgagee, amount secured, date of execution, date of recording, place of recording, any assignments and the mailing address of the holder of the mortgage. If none, so state)
- **b.** Lis Pendens: (List parties and the date and place of filing. If none, so state)
- **c.** Judgments: (List judgment holder, amount and date and place of filing. If none, so state)
- **d.** Federal and/or State tax liens: (List taxing entity, taxpayer, amount, date and place of filing. If none, so state)
- e. Mechanics liens: (List)
- f. Other Exceptions: (List any other exceptions from your certification that affect the property over, under and through which the right-of-way and easement runs such as other easements, restrictions, encroachments, adverse conveyances, assessments or charges, violation of any restrictions or governmental requirements, etc.)
- **g.** Jackson County property taxes have been paid through the year (list year). Taxes for (list year) in the amount of (insert amount) are now due and owing. (If none, so state)
- h. The real property over, under and through which the right-of- way and easement runs is described as follows: (Insert complete legal descriptions, making reference to any current plats that describe the property and giving derivation clause for title transfer to present owner)

VI. WATER AND SEWER CONSTRUCTION AND INSPECTION, ACCEPTANCE AND RELEASE FOR PRIVATE SERVICE CONNECTIONS

A. Pre-construction Conference

When the Conditional Will-Serve and all other applicable permits have been issued, and any off-site right of ways and easements have been executed and delivered to the District, the Developer/Owner or his designated representative shall then contact the District to schedule a preconstruction conference not less than 72 hours in advance of the start of construction.

The following personnel are required to attend the conference:

- **a.** WJCUD New Construction Manager or his designated representative.
- **b.** Developer's Engineer
- **c.** Contractor and any Sub-contractors.

For water and sewer projects, the Developer's Engineer shall provide two stamped red and blue sets of plans prior to the conference. These plans shall not deviate from the plans approved by WJCUD, JCUA, state or federal regulating agencies. The Developer's Engineer shall provide the project cut sheets and any applicable shop drawings prior to starting construction.

At the Pre-Construction Conference, general construction requirements and WJCUD standards and specifications will be reviewed. All applicable permits will be reviewed and distributed if necessary. Any right of way issues will be discussed.

B. General Construction Requirements

The following are general construction requirements.

- 1. Following the pre-construction conference, the Contractor shall provide 24-hour advance notice to the "New Connection Manager" prior to pipe laying, setting fire hydrants or installation of any other assets.
- 2. The Contractor shall notify the "New Connection Manager" by 7:30 a.m. each day if work will not be done due to inclement weather or any other reason.
- **3.** Working hours are from 7:00 a.m. to 4:00 p.m., for any infrastructure to be accepted by WJCUD for ownership.
- **4.** The Contractor shall notify the "New Connection Manager" of the delivery date & time of materials to the job site for inspection.
- 5. All work on State and County Highways shall conform to the MDOT

and County encroachment permits and the latest issue of the MDOT Traffic Control Manual.

- **6.** The Contractor shall have the following on the job site before work commences:
 - a. necessary permits (i.e., highway, railroad, etc.)
 - **b.** rights-of-way plats
 - c. approved plans and shop drawings
 - d. necessary equipment, in working order, and materials for job
- 7. The Contractor shall have a foreman or designated replacement fluent in the English language on the job site at all times. Work shall be suspended in the absence of the foreman or his replacement.

C. Construction Procedures

WJCUD standard specifications shall be followed for all construction, in addition:

- 1. All applicable safety precautions shall comply with OSHA standards with particular emphasis to ditch safety. Trench jacks, boxes, hard hats, etc. shall be required. Safety precautions shall remain in effect throughout pipeline laying and backfilling.
- 2. The Contractor shall have all conflicting utilities located before pipelaying begins.
- 3. Centerline stakes, right-of-way stakes and easement or property lines must be placed by surveyor before the work is started. This staking work is at the expense of the Developer or Contractor. The Contractor shall have offset hubs placed and cut sheets prepared before sewer pipe laying begins. The WJCUD shall be provided with copies of all cut sheets for approval before pipe laying begins. The Contractor shall maintain all offset hubs in serviceable condition until the project is complete and submits the final punch list for WJCUD inspection.
- 4. Rights-of-way shall be cleared in accordance with rights-of-way plats. Complete width of permanent rights-of-way shall be cleared; only those trees whose entire trunk is within the rights- of-way shall be cut. All clearing and grubbing shall be completed prior to pipe laying. All vehicular access to rights-of-way that cross private property shall be by written permission of the property owner with copy of same provided to WJCUD.
- 5. For water distribution systems, all roads, rights-of-way or easements must be graded within 0.2 of final grade. Where curbs and gutters are to be used, either the curb and gutter on at least one side of the road must be installed prior to beginning any work concerning the water main construction or the roadway must be at final sub-grade elevation with centerline station clearly marked. In this case, Developer agrees,

that if the sub-grade elevation is changed after installation of water line or if the road location itself is changed, the line may have to be removed and re-laid at the Developer's sole expense.

- **6.** All materials and appurtenances shall be in accordance with the latest edition of the WJCUD Standard Specifications and Details.
- **7.** The Contractor shall record sewer service connection locations with the following measurements:
 - a. distance from downstream manhole
 - b. distance from "wye" / main to end of service line
 - c. depth of end of service

All service lines shall be backfilled and plugged prior to air testing. Ends of services shall be marked with a pipe marker which shall extend above ground level and should remain intact until the plumber makes the connection.

D. Inspection and Acceptance

Prior to accepting the project into WJCUD's system, the following minimum requirements must be completed to WJCUD's satisfaction.

- All sewer and water lines must pass the required tests as outlined in the WJCUD standard specifications. WJCUD <u>must be present</u> for all testing.
- **2.** All lines shall have passed all applicable air, deflection, hydrostatic, vacuum, draw-down and bacteriological tests.
- **3.** Ring and covers must be reset if disturbed or elevation adjustments are needed when required by WJCUD.
- **4.** All testing taps must be plugged at the corporation stop and all open holes properly backfilled and compacted.
- **5.** All hydrants plumb and properly operating.
- **6.** All valve boxes set to grade and centered over valve operating unit.

E. Release for Private Service Connections

Upon successful completion of the items listed below, WJCUD will draft a letter of project acceptance to Developer. When the final construction approval is issued, WJCUD will release the project for private service connections and concurrently notify the Jackson County Planning Department.

1. Developer's Engineer provides WJCUD a copy of project construction certification letter to WJCUD and requests final inspection. If an

- inspection is conducted, WJCUD, Contractor and Developer's Engineer shall attend.
- **2.** Executed System Conveyance Documents, Indemnity Agreement, Warranty, and Related Documents
- **3.** Executed Rights-of-Way and Easement documents received by WJCUD.
- **4.** Record Drawings, marked as such, are submitted and approved and electronic copy of record drawings is received (dwg format in State Plane Coordinate System) including WJCUD's as-built checklist is attached. (Appendix A & B)
- **5.** Electronic copy of the recorded Final Plat is received.

VII SERVICE CONNECTION APPLICATION AND FEES

A. General

Any customer desiring water or sewer service is required to make application for service and pay all applicable fees and/or charges at the time application is made.

B. Sewer Service Connections

Once the appropriate fees have been paid, all sewer service connections shall be made by the applicant's licensed plumber. All sewer service connections must be made in accordance with WJCUD's technical specifications, copies of which can be made available upon request. No service connection shall be made prior to payment of the appropriate fees.

Connection to an installed sewer service connection or "stub out" will require an inspection; however, the applicant is responsible for notifying WJCUD when the connection is made. It is the plumber's responsibility to make certain that the service line has sufficient slope to flow into the sewer line at the time the connection is made. New service connections on existing active sewer lines and manholes must be inspected prior to backfilling. In this situation, no discharge shall be allowed through the service connection until inspection has been conducted and subsequently, the service connection has been approved.

1. Sewer Service Fees/Charges

Customers applying for a new sewer service connection are subject to one or more of the following fees:

- a. Application Processing/Inspection Fee: This cost is associated with WJCUD's processing the application and making an inspection of the service connection.
- b. Capacity Fee: Sewer capacity fees exist for basically the same reason as water capacity fees; except, that instead of partially financing water treatment plants and transmission mains, sewer capacity fees partially finance wastewater treatment facilities and sewer system extensions in areas of substantial growth. Capacity fees are based on the anticipated discharge volume.
- **c. Questions**: Call WJCUD at (228) 872-3898 Ext. 295 for applicable fees, pricing and rates. Current sewer discharge rates also are posted on our web site, www.wjcud.com.

C. Water Service Connections

Once the appropriate fees have been paid, water service connections can be connected for service.

Backflow prevention devices must be installed for all connections. Commercial properties may require a certified Cross Connection Control device in accordance with WJCUD Water Cross Connection Control policy. This policy is available in our water use ordinance. No service connections will be made by WJCUD prior to payment of the appropriate fees.

1. Water Service Fees/Charges

Customers applying for a new water service connection are subject to one or more of the following fees:

- **a. Connection fee**: This is the cost associated with the materials and labor required to actually make the service connection.
- b. Capacity Fee: These fees are a method of partially financing new facilities required to maintain adequate treatment and storage facilities as well as transmission mains to the distribution system. As the present capacity of the system is "bought up", revenues in the form of capacity fees must be generated to offset the cost of future capital improvements. Therefore, capacity fees are directly related to water usage.
- **c. Questions**: Call WJCUD at (228) 872-3898 Ext. 295 for applicable fees, pricing and rates. Current water usage rates are also posted on our website at, www.wjcud.com.

VIII. CHECKLISTS

A. Developer Checklist for Submittal of Sewer Main Extensions

The purpose of this checklist is to assist developers planning to extend sewer to projects within the WJCUD service area. A detailed presentation of the entire WJCUD Sewer process, as conducted by WJCUD, can be found in Section III of the Developer's Manual. The information below is provided with the goal of ensuring a smooth and successful project.

The requirements of this checklist apply only to WJCUD's Sewer process. It is the responsibility of the customer or his agent to receive any necessary permits and approvals from the Jackson County Planning Commission or other entity with authority over other aspects of the project.

 1.	Contact Brian Bennett, New Construction & Compliance Manager with WJCUD at 228-872-3898 Ext. 295.
 2.	The Developer's Engineer submits the Preliminary Project Package for review to include: • 2 sets of construction plans • 1 copy of the location map on 8 ½" x 11" paper • 1 copy of the design notes and calculations • 1 electronic copy of overall plan view of the project
 3.	Receive comments from WJCUD and make revisions, as needed.
4.	 The Developer's Engineer submits Final Project Package to include: 2 sets of construction plans (signed and stamped by a Registered Professional Engineer) 2 copies of the executed construction permit application (1 original, 1 copy) 2 copies of the location map on 8 ½" x 11" paper 2 copies of the design notes and calculations and hydraulic model (signed and stamped by a Registered Professional Engineer) 2 copies of each off-site right-of-way plat (if applicable) 1 copy of encroachment permits or encroachment permit application (if applicable)
 5.	Receive, execute and return any and all documents required by the District
 6.	Schedule a pre-construction conference with WJCUD. This conference should be scheduled after above steps have been accomplished, but at least 72 hours before the anticipated initiation of construction.
 7.	 The following must attend the Pre-Construction Conference: The Engineer responsible for the design The Contractor and Sub-Contractor (if any) who will be installing the sewer system
 8.	Copies of all necessary encroachment permits shall be provided to WJCUD prior to scheduling pre-construction conference
 9.	WJCUD inspects construction. Testing must be completed and all "punch list" items must be addressed to the satisfaction of WJCUD
 10.	The Developer's Engineer submits the following closeout

documentation:

- Final Plat
- As-built Drawings
- Engineer's Certification
- On-site Right-of-Way Plat and Executed Agreement (if applicable)

11.	The Developer prepares on-site Right-of-Way documents and forwards
	to owner for execution
 12.	On-site Right-of-Way Plat and Executed Ownership Agreement (if applicable)
 13.	WJCUD reviews the closeout documentation and requests revisions if necessary
 14.	The Developer submits the closeout package to WJCUD
 15.	WJCUD issues the Final construction Approval
 16.	WJCUD releases the project for private service connections

B. Developer Checklist for Submittal of Water Main Extensions

The purpose of this checklist is to assist developers planning to extend water to projects within the WJCUD service area in compliance with Section IV of the Developer's Manual. The information below is provided with the goal of ensuring a smooth and

successful project.

It is the responsibility of the customer or his agent to receive any necessary permits and approvals from the Jackson County Planning Department, or other entity with authority over other aspects of the project.

 1.	Contact Brian Bennett, New Construction Manager with WJCUD at 228 872-3898 Ext. 295.
 2.	The Developer's Engineer submits the Preliminary Project Package for review to include: • 2 sets of construction plans • 1 copy of the location map on 8 ½" x 11" paper • 1 copy of the design notes and calculations • 1 electronic copy of overall plan view of the project
 3.	Receive comments from WJCUD and make revisions, as needed.
4.	 The Developer's Engineer submits Final Project Package to include: 2 sets of construction plans (signed and stamped by a Registered Professional Engineer) 2 copies of the executed construction permit application (1 original, 1 copy) 2 copies of the location map on 8 ½" x 11"paper 2 copies of the design notes and calculations and hydraulic model (signed and stamped by a Registered Professional Engineer) 2 copies of each off-site right-of-way plat (if applicable) 1 copy of encroachment permits or encroachment permit application (if applicable)
 5.	Receive, execute and return any and all documents required by the District
 6.	Schedule a pre-construction conference with WJCUD. This conference should be scheduled after above steps have been accomplished, but at least 72 hours before the anticipated initiation of construction.
 7.	 The following must attend the Pre-Construction Conference: The Developer Engineer responsible for the design The Contractor and Sub-Contractor (if any) who will be installing the water system
 8.	Copies of all necessary encroachment permits shall be provided to WJCUD prior to scheduling pre-construction conference
 9.	WJCUD inspects construction. Testing must be completed and all "punch list" items must be addressed to the satisfaction of WJCUD.
 10.	The Developer's Engineer submits the following closeout documentation: • As-built Drawings • Engineer's Certification • Executed Ownership Agreement (if applicable)
 11.	On-site Right-of-Way Plat and Executed Ownership Agreement

	(if applicable)
 12.	WJCUD reviews the closeout documentation and requests revisions if necessary
 13.	The Developer submits the closeout package to WJCUD
 14.	WJCUD issues the Final construction Approval
 15.	WJCUD releases the project for private service connections

IX. APPENDICES

Appendix A

Sewer As-built Checklist

WEST JACKSON COUNTY UTILITY DISTRICT SEWER AS-BUILT CHECKLIST

AS-BUILT DRAWING REQUIREMENTS

SITE PLAN

	Plan view of the entire site at not greater than 1"=200' scale, showing the entire sewer system
	24" x 36" sheet size
_	Show tie-in to the existing system; include name of existing lines and upstream
_	and downstream rim and invertelevations
	Show labeling of all manholes, air release valves on force mains and pump
_	station numbers
	Show limits of wetlands, floodplains and steep slopes
_	Show project phasing
_	North arrow
_	Jackson County GIS grid number where the project is located
_	Location map, max scale 1"=1000', northarrow
_	Index of sheets
_	Title block
_	Names, mailing addresses and telephone numbers of the owner of the
	property, the land developer, the engineer or consultant and the applicant
	Name of the development
	o Scale
	Date (also include revision dates)
	Legend for all symbols
	- 3
PLAN	AND PROFILE SHEETS
	24" x 36" sheet size
	North arrow, scale (max. 1"=100' horizontal and 1"=10' vertical)
	Date (also include revision dates)
	Provide plan and profile of the entire system complete to tie-in to the existing system.
	The plan and profile shall be on the same sheet for the section of the line shown with
	the horizontal view at the same scale
	the horizontal view at the same scale
Th	e plan view shall at a minimum show:
	Street names with R/W limits
	Lot lines and number
	Easements labeled and dimensioned
	Manholes and/or force main air release valves with stationing for specifying location
	Pipe layout
	Bearings on all lines. Flow angle or bearings shall also be provided at the tie-in of
_	the proposed system to the existing system
	Any known conflicting utilities
	Storm drainage location
	Sewer service locations for all lots and buildings (see attached service location form
_	for field use). Contact WJCUD for an AutoCAD block to be used on the plan view.
	Stream crossings identified
	Aerial crossings identified
	/ NOTICE OF COOKING INCIDITION

	Pipe anchorage locations identified		
	Fittings, air release valves, thrust blocking and all other necessary information		
	for force mains		
Th	e profile view shall at a minimum show:		
	<u> </u>		
	Manholes with the following information:		
	o Stations		
	 Types of manholes (i.e. drop manhole) 		
	o Rim elevations (as-built)		
	o Invert elevations (as-built)		
	Pipes with the following data:		
	o Length		
	o Diameter		
	 Type of pipe 		
	Slope of pipe in %		
	Any know conflicting utilities		
	Storm drainage crossing the sewer lines		
	Stream crossings identified		
	Aerial crossings identified		
	Fittings, air release valves, thrust blocking and all other necessary information		
	for force mains		

Appendix B

Water As-built Checklist

WEST JACKSON COUNTY UTILITY DISTRICT WATER AS-BUILT CHECKLIST

AS-BUILT DRAWING REQUIREMENTS

SITE PLAN

- □ Plan not greater than 1"=100' scale, showing the entire water system
- Show match lines as appropriate
- Show project phasing
- North arrow and scale
- Stationing of tees, hydrants, valves, plugs and size or material changes and reducers
- Index of sheets
- □ Title block
 - Names, mailing addresses and telephone numbers of the owner of the property, the land developer, the engineer or consultant and the applicant
 - Name of the development
 - o Scale
 - Date (also include revision dates)
- Street names with R/W limits
- Lot lines and number
- Easements labeled and dimensioned
- □ Pipe layout, material and size (diameter)
- Water mains 12" and larger shall be shown on profile at the horizontal scale of the plan view
- □ Show sewer and storm drainage layout, if applicable
- Stream crossings identified and detailed if needed
- Aerial crossings identified
- □ Fittings, thrust blocking, blow-off taps and all other necessary information relating to water lines
- Show tie-in to the existing system with details
- Show limits of wetlands, floodplains and steep slopes
- Project notes consistent with WJCUD standard specifications
- Utilize WJCUD standard water details