

NEW DEVELOPMENT PACKET

April 2021

First Utility District of Knox County (FUD) welcomes the opportunity to work with you to provide service to new projects. We understand the importance of timely effort in helping meet your project deadlines. To that end, we have prepared this New Development Packet to provide clarity of the plan approval, construction, and closeout processes when working in our service area. FUD requires that all Water or Sewer projects serving more than a single metered customer must be reviewed and approved prior to construction activities. FUD requires review and approval of a project meeting any one of the following criteria:

- Line extensions for new development;
- Fire hydrants or fire sprinkler systems;
- Individual water service connection with 2” meter or larger;
- Water or Sewer relocations in connection with a project.
- Commercial projects requiring cross connection and/or fat, oil, and grease (FOG) control equipment based on FUD’s Cross Connection and FOG Policies, respectively.

This packet provides an outline of pertinent contact information, work flow, design criteria, Standard Specifications, FUD Policies, and administrative requirements associated with utility construction for New Development. We are pleased to be a partner and welcome you to contact us for assistance.

FUD Contact Info			
Edwin Deyton	Project Engineer	865-218-3690	edeyton@fudknox.org
Doyle Noe	FOG Equipment & Sewer Service Inspector	865-661-8613	dnoe@fudknox.org
Steve Mathis	Public Line & Fire Line Inspector	865-740-7812	smathis@fudknox.org
Eric Van Norstram	Public Line & Fire Line Inspector	865-257-6772	evnorstram@fudknox.org
Jeremy Bailey	Cross Connection Supervisor	865-777-2523	ibailey@fudknox.org

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Service Availability Request

- The Applicant shall notify FUD of their development within the District by submitting a Service Availability Request form. The form is available on and submitted through FUD's website. Based on the information submitted, FUD Engineering will verify sufficient Water and Sewer capacities are available to meet the requested demands. Please allow up to two (2) weeks for capacity verification.
 - If service is available, FUD will issue an affirmative response and project tracking number to be used in future correspondence and submittals. The Applicant is thereby clear to move to the Plan Submittal phase. A "will serve" letter can be furnished upon request.
 - If service is not available (Water and/or Sewer), the Applicant may request FUD conduct a feasibility study to identify the scope and cost of necessary improvements to serve the project. Please allow 2-4 weeks for the study to be conducted.
 - FUD Staff shall advise Applicant of Sewer Capacity Reservation Fees, where applicable.
- System mapping requests can be made through FUD's GIS Department. Contact Dustin Baker at dbaker@fudknox.org.

Plan Submittal & Review Process

- New Development projects shall be executed per FUD's Agreement for Proposed Development and the Development Process Flow Chart. A preliminary review meeting with FUD Staff is recommended to streamline the design process.
- Utility design packages shall be prepared per FUD's Standard Specifications, Design Criteria, and applicable Policies. Complete submittals shall be made through FUD's [Plan Submittal Portal](#). Incomplete submittals will not be reviewed and will be returned to the Applicant. A complete submittal shall be comprised of:
 - Signed Agreement for Proposed Development
 - Review Fee
 - *FUD reserves the right to re-assess review fees for projects requiring more than two (2) plan revisions*
 - PE-sealed design plans;
 - PE-sealed hydraulic calculations;
 - PE-sealed technical specifications (as applicable)

(FUD does not require a Developer Agreement for private fire lines or commercial projects not requiring a line extension.)

- Sewer Capacity Reservation Fees are effective in most sewer basins for projects submitted after June 15, 2021, and approved after July 1, 2021. For applicable projects, fifty percent (50%) down payment of fees are required as a condition for plan approval. The remaining fifty percent is due at the sooner of 24 months after plan approval or FUD assuming ownership of the system. The URL's for the Sewer Capacity Reservation Fee and applicable basin maps are provided in the links section at the end of this packet.
- If system capacity improvements were identified in the feasibility study, then additional efforts are required with the Engineering Department. Sewer capacity improvements shall be administered under the requirements set forth in FUD's Sewer Capacity Reservation Fee Policy in FUD's Rate Resolution. Water system improvements are the sole responsibility of the Developer and subject to FUD's concurrence based on acceptable operation of the distribution system.

- FUD Staff will typically review complete packages within ten (10) business days of complete submittal. Plans will be reviewed for adherence with FUD’s Standard Specifications, Design Criteria, and applicable Policies. Plan approval or identified deficiencies will be delivered electronically to the Applicant.
- Plan revisions shall also be submitted through FUD’s [Plan Submittal Portal](#). Please select “yes” when asked "Are you resubmitting plans?" Including your tracking number is mandatory.
- Note: FUD has TDEC Plan Review Authority per TCA 68-221-706, therefore no separate plan review submittal to TDEC is required.
- Utility ROW Permits shall be required for work in existing Public Rights of Way. The Applicant shall be responsible for any professional services required to obtain Utility ROW Permits.
- Environmental Permits may be required by jurisdictional authorities (TDEC, USACE, TVA, etc.). The Applicant shall be responsible for identifying and securing permits for the project.
- Offsite easements, if required, shall be recorded prior to start of construction activity. Easement compensation shall be negotiated and paid by the Developer. Refer to Easement Criteria in Support Documentation.

Construction Process

- Receipt of approved Plans, required environmental permits, and required offsite easements shall allow the Applicant to move to the Construction Process.
- The Developer shall identify the TN-licensed Municipal Utility (MU) Contractor to FUD. The Contractor shall furnish their current MU license and Small Diameter HDPE Butt Fusion certification (for projects with HDPE). Documentation shall be submitted electronically to newdevelopment@fudknox.org.
- The Contractor shall provide material submittals for all items to be incorporated into the Water and Sewer infrastructure. Materials shall be approved by FUD before starting utility construction. Transmit submittals electronically to newdevelopment@fudknox.org.
- The Contractor shall notify FUD’s Public Line Inspector three (3) working days prior to starting utility or fire line construction.
- The Contractor or plumbing subcontractor shall notify FUD’s service line inspector three (3) working days prior to starting sewer service line or grinder pump installation.
- The Contractor, plumbing subcontractor, or sprinkler subcontractor shall notify FUD’s Cross Connection Supervisor three (3) working days prior to installing backflow prevention equipment on domestic or fire lines.
- All Water mains, Sewer mains, Fire lines, sewer service lines, grease control equipment, and backflow prevention devices shall be installed, inspected, and tested in accordance with FUD’s Standard Specifications and governing Policies. FUD Staff will perform bacteriological testing, and all other testing shall be by the Contractor and witnessed by FUD.
- Once pressure and bacteriological testing are complete on water mains, the Contractor may rent a hydrant meter assembly for water during construction.
- FUD will perform a final inspection once all lines are installed and curbs are backfilled. Final inspection shall include:
 - Tracer wire continuity for Water and Low Pressure Sewer;
 - CCTV of gravity sewer mains and services;
 - Manhole integrity;
 - Valve access & operability;
 - Access at finish grade for valves, service boxes, meters, hydrants, manholes, ARV’s, etc.

- FUD will issue a punchlist identifying necessary corrections.
- FUD will furnish the Contract a “Notice of Completion,” upon request, following satisfactory resolution of the punchlist.

Closeout Process

- Contractor has completed construction and addressed punchlist items.
- Developer shall furnish Record Drawings per criteria specified in Agreement for Proposed Development.
- Developer shall provide utility easements for Water and Sewer installed outside of public right-of-way. Easements must be recorded to complete closeout.
 - Easements provided by plat shall provide reference to Instrument #200908100011396 on file at the Knox County Register of Deeds Office.
 - Easements provided by Utility Easement document shall be prepared by FUD’s Attorney with Developer-furnished Exhibit Map and Legal Description.
- Fees shall be paid in full for basins with Sewer Capacity Reservation Fees; see Rate Resolution.
- Developer shall furnish a signed Affidavit of Cost confirming work is complete, all parties have been paid, utilities and easements are not encumbered, and utility ownership is transferred to FUD.
- FUD will assume ownership and operation of Water and Sewer infrastructure following completion of this process.
- Begin One Year Warranty Period for Water and Sewer infrastructure.
- After completion of all of the above items, FUD will accept application and payment for water and sewer service.

Support Documentation

Support Documentation
Service Availability Request Form
Agreement for Proposed Development
Development Process Flow Chart
Plan Review Fee Worksheet
Design Criteria
Easement Requirements
Standard Specifications
Sewer Use Policy
FOG Policy
Cross Connection Control Policy
FUD Rate Resolution & Sewer Capacity Fees

Service Availability Request Form

Agreement for Proposed Development

Development Process Flow Chart

Plan Review Fee Worksheet

FUD's Plan Review Fee is prescribed in the Agreement for Proposed Development. Plan Review Fees are calculated as a function of the number of lots, length of water line, and length of sewer line.

To find more details about your review fee, access [FUD's Plan Review Fee calculator](#).

Design Criteria

Water, Gravity Sewer, Low Pressure Sewer

Sewer Pump Station and Water Booster Station design requirements are maintained internally and made available on an as-needed basis.

Easement Requirements

FUD's Agreement for Proposed Development requires the developer to record a utility easement for a water and/or sewer line installed outside of public right of way. Easement(s) may be recorded by:

1. Subdivision plat with a mandatory note to prescribe easement rights established by a document on file with the Knox County Register of Deeds Office.

OR

2. Separate Utility Easement document for each property / parcel. The document shall be prepared by the District's Attorney based on FUD's standard template. The document shall be supported by an Exhibit Map and Legal Description prepared by a TN-licensed Registered Land Surveyor at the Developer's expense.

The easements shall be recorded at the Knox County Register of Deeds Office prior to FUD assuming ownership of the line(s).

For brevity sake, the following document sets are made available by URL links:

Standard Specifications & Details for Water Distribution

https://fudknox.org/site/wp-content/uploads/2019/06/2019-0606_FUD-Water_Update.pdf

Standard Specifications & Details for Wastewater Collection

https://fudknox.org/site/wp-content/uploads/2019/06/2019-0606_FUD-Wastewater_Update.pdf

Sewer Use Policy

https://fudknox.org/site/wp-content/uploads/2020/01/SUO_2019-11_BoardApproved.pdf

Fats Oils and Grease Management Policy

<https://fudknox.org/site/wp-content/uploads/2020/07/FirstUD-FOG-Mgt-Policy.pdf>

Cross Connection Control Policy

http://fudknox.org/site/wp-content/uploads/2015/10/2012-0806_CCOrdinance.pdf

FUD Rate Resolution & Sewer Capacity Fees

Policy: <https://fudknox.org/site/wp-content/uploads/2021/03/2021-Water-Sewer-Rates6610.pdf>

Maps: <https://fudknox.org/sewer-capacity-reservation-fee/>

(END OF DOCUMENT)