

Single Family Residential Development Guide

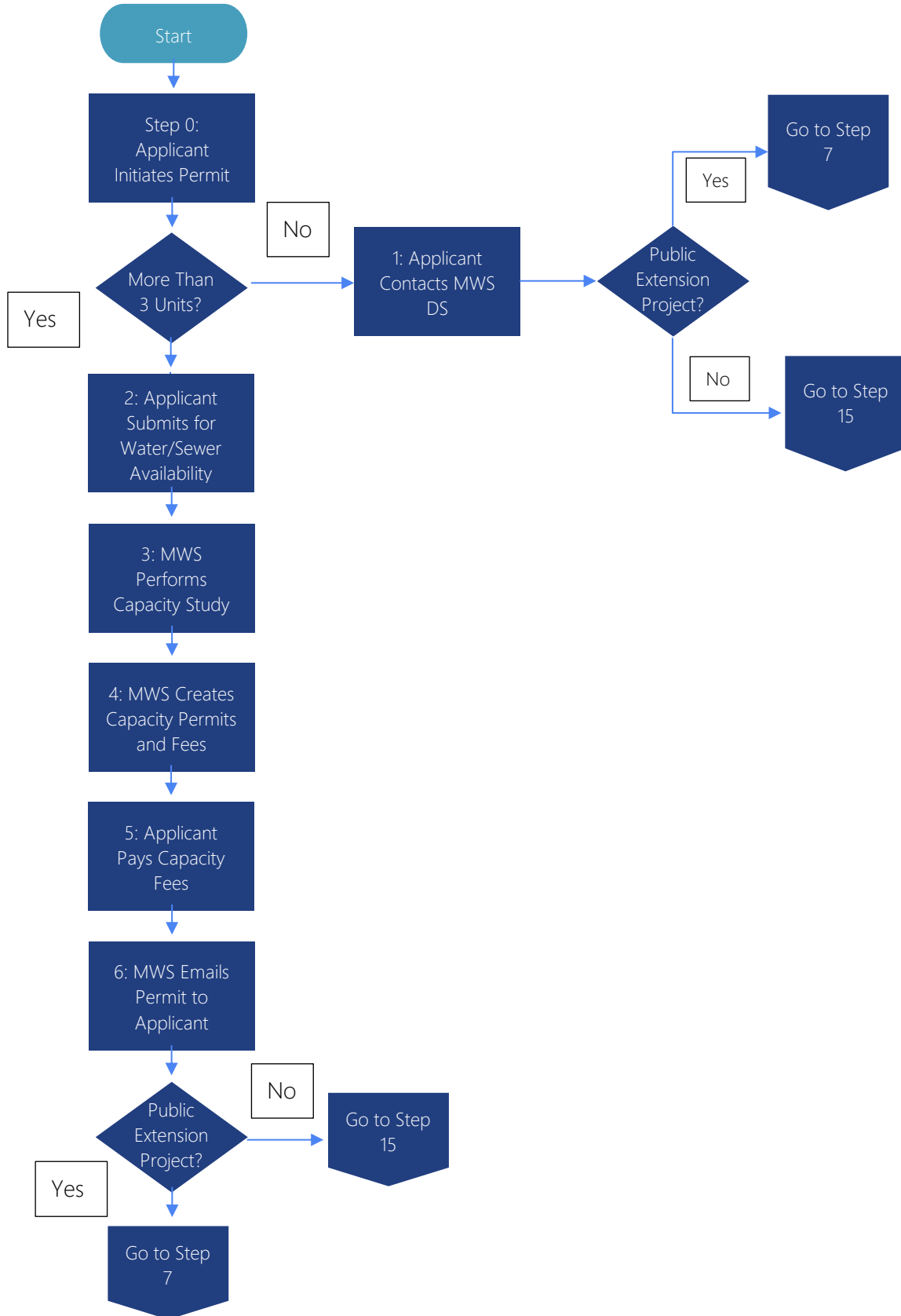
Metro Water Services



Process Flow Diagrams

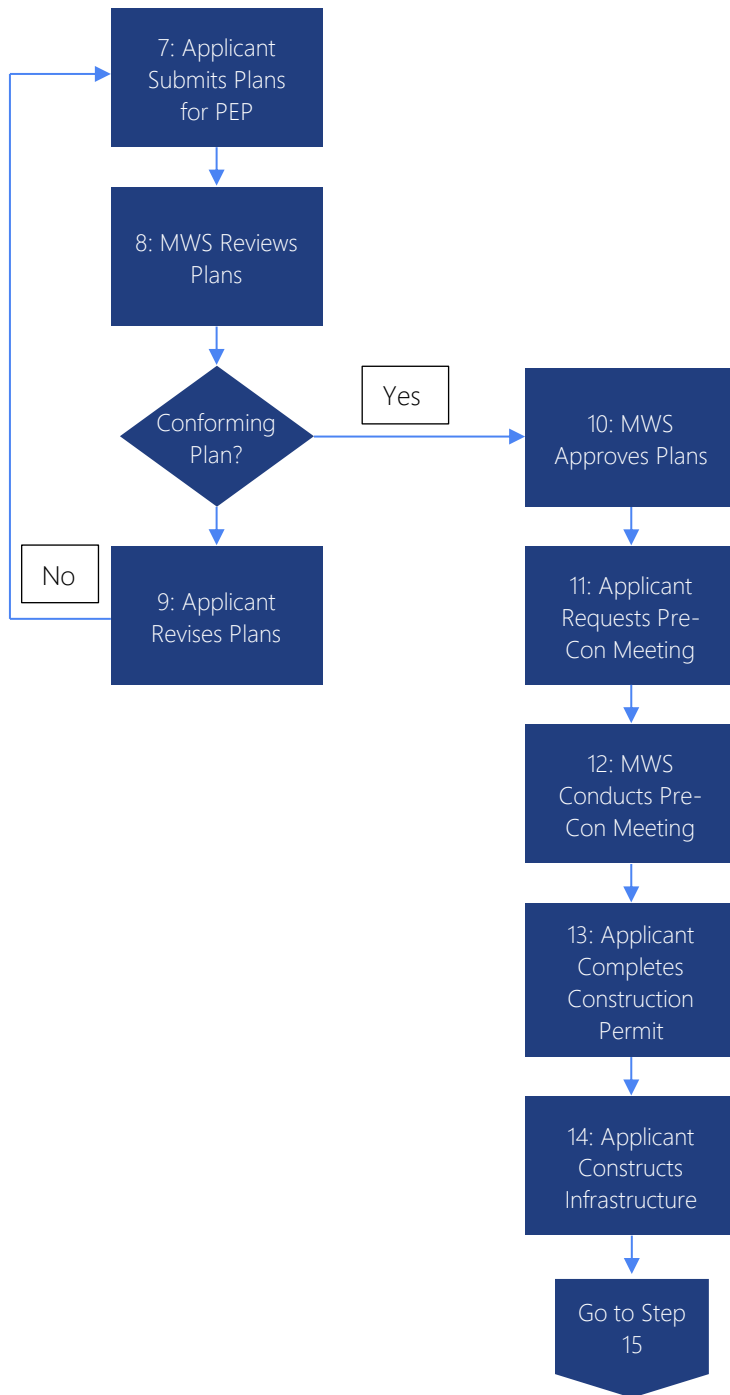


Initiation and Availability Study



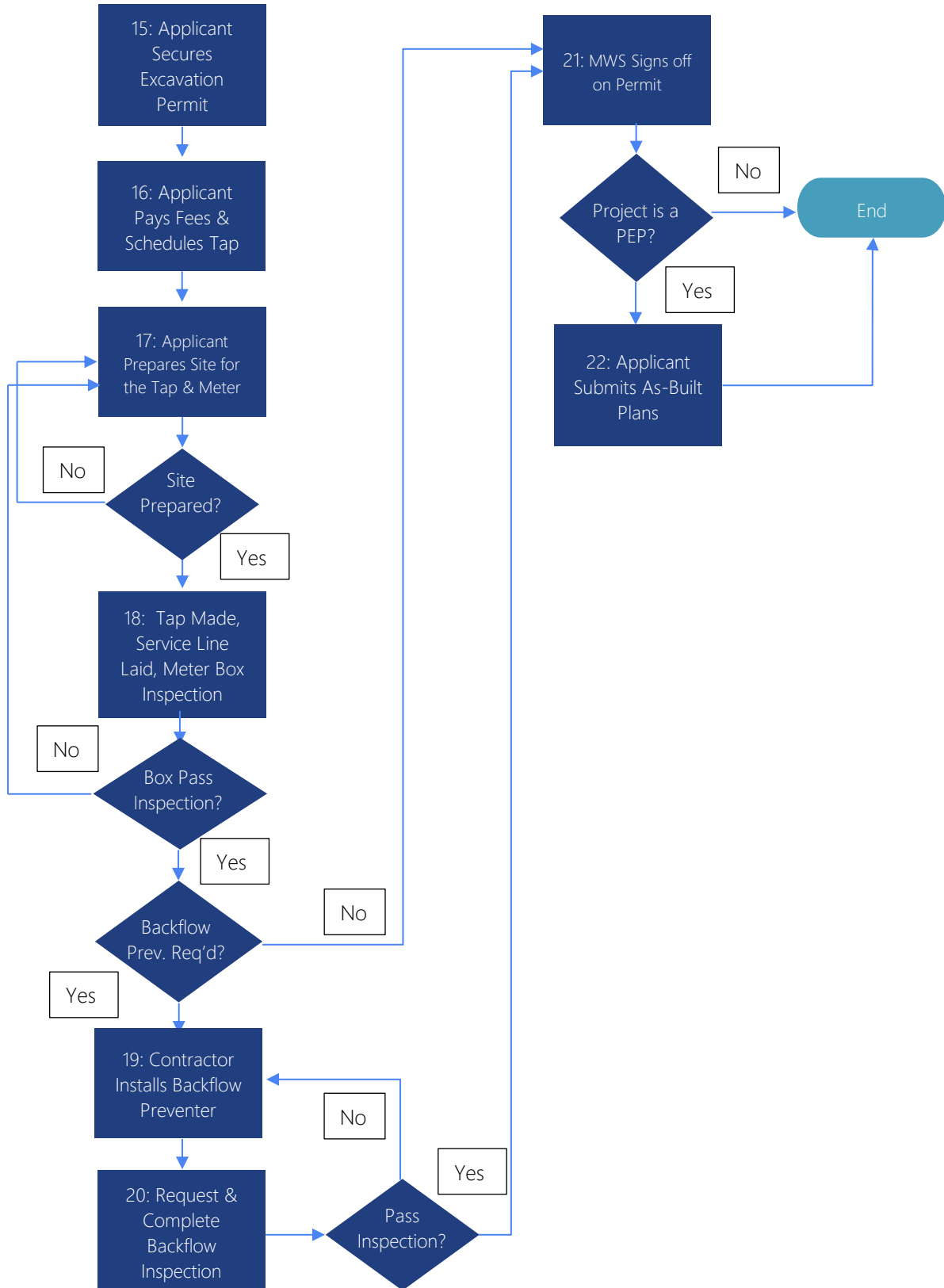


Public Extension Project (PEP) Plan Review





Construction and Inspection





Process Descriptions



Step 0: Applicant initiates the process of a securing a Building Permit

Step Detail

The process for securing a Building Permit for a residence begins with the Metro Department of Codes and Building Safety (Metro Codes). To start the process of securing a Building Permit, contact the Codes Help Desk:

- Address: 800 President Ronald Reagan Way, Nashville, TN 37210
- Hours: Monday-Friday, 7:30 a.m.-4:00 p.m.
- Email: zoninghelpdesk@nashville.gov
- Phone Number: 615-862-6510

A Codes Zoning Examiner will work with the Applicant to identify the Metro Departments that must be involved for the Building Permit to be completed. Applicants should keep these factors in mind:

- It is the Applicant's responsibility to follow the requirements of the checklist on the building permit application and to make sure all necessary signoffs are achieved.
Currently, Metro Nashville does not have the technology to route the application through each step in the required process; that is the Applicant's responsibility.
- For new construction projects, water and sewer capacity fees must be 100% paid for an initial sign-off on a building permit application. Water and sewer tap fees can be paid at the same time as the capacity fees, but they must be paid before any taps can be scheduled. Before the final Use and Occupancy (U&O) permit sign-off can be completed, all final inspections must be passed.
- It is also the Applicant's responsibility to schedule the necessary inspections with Metro Nashville at the proper time in the building process.
- Do not seek to determine what reviews and permits are required on your own. That is the Codes Zoning Examiner's job. If an Applicant fails to complete the steps identified in the permit application, the Building Permit process will be delayed.
- Allow plenty of time. The Metro agencies involved in the review process are dealing with an unprecedented number of permit applications.

If a single-family residential development includes only one (1) or two (2) units, continue to [Step 1](#).



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If a single-family residential development is three (3) or more units, skip to [Steps 2-6](#) marked as (CS) for “Capacity Study.”

Associated Links & Forms

[Residential Building Permit](#)

[Fee Schedule](#)

Step 1: Applicant contacts Metro Water Services, Development Services to Receive Sign-off on the Building Permit Application

The Applicant for a single-family residential project with one or two units must reach out to the MWS DS group to receive sign-off on Section E of the Building Permit Application. The best way to contact this group is via email: mws.ds@nashville.gov.

A staff member from the MWS DS group must determine if there is adequate water and sewer capacity for the proposed project. From this analysis, three common courses of action may be determined:

- **Scenario 1** – A residential permit is requested for a new residence or residences on a vacant property. The public water line from which the proposed residence(s) will receive service is 6” or greater. The public sewer line is adequate to serve the residence(s). The MWS DS staff member creates water and sewer capacity fees, as well as water and sewer tap fees. This information is requested by the Applicant by completing a request form and emailing to mws.ds@nashville.gov. Once the MWS Staff creates the fee permits, they will send the Applicant a ‘pay code’ so that the Applicant can pay the fees online by clicking on [ePermits](#); and by entering the permit number and their pay code. The MWS DS staff member can then sign off on the Applicant’s Building Permit Application. The Applicant is done with the process until the time at which the tap is to be scheduled and/or the Applicant seeks a meter permit. See [Step 15](#).



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- **Scenario 2** – A residential permit is requested for a new residence or residences on a vacant property. The public water line from which the proposed residence(s) will receive service is 4" or 2". MWS DS must send the information to the MWS Engineering modeling group to determine capacity and approval. If sufficient water and sewer capacity is determined, the process continues as with Scenario 1 above. If water and/or sewer capacity is determined to be insufficient, then a public water and/or sewer extension is required. See [Step 7](#) to begin that process.
- **Scenario 3** – In many circumstances, the Applicant seeks to tear down one residence and to construct two in its place. This scenario is subject to rules associated with Metro's Horizontal Property Regime (HPR). The Applicant generally has two Building Permit Applications that they must contact MWS DS about. In most cases, the Applicant will have already filed for a demo permit for the existing structure. The MWS DS staff member reviews the project. If the water line serving the property is 4" or 2", then the **Scenario 2** process applies that leads to a public water and/or sewer extension project. As it relates to the tap fee, the Applicant does not need to pay a tap fee for the unit that is associated with the demo permit. The Applicant receives credit for the existing connection. However, the Applicant must pay the capacity and tap fees associated with the second unit. Once those fees are paid, the MWS DS staff member signs off on the Applicant's Building Permit Application. The Applicant is done with the process until the time at which the tap is to be scheduled and/or the Applicant seeks a meter permit. See [Step 15](#).

Associated Links & Forms

[Fee Schedule](#)



(Capacity Study¹) Step 2: Applicant Submits Request for Water and Sewer Availability to MWS Development Services.

Step Detail

Developments with three (3) or more units constructed within the Department's water and/or sewer service areas require a determination of the availability of water and/or sewer services (a capacity study).

Applicants such as Developers and Owners, or their representatives, should contact MWS Development Services to determine water and sewer availability. This is done by using the Request for Water and Sewer Availability form located here: [Request for Water and Sewer Availability](#).

The following information must be included (if applicable):

- Location of the property with tax map, parcel number, and Council District
- Total acreage of the site
- Intended type of development or use of the property, along with total square footage of proposed buildings
- Projected wastewater flow in gallons per day (GPD)
- Subdivision development plan with finished floor elevations
- Fire flow (this information must first be requested from the Fire Marshal – fmoplans@nashville.gov)

To begin the process, the Applicant submit the [Request for Water & Sewer Availability Form](#) and subdivision development plan via email to: MWS.DSCapacity@nashville.gov. For assistance or additional information, contact MWS Development Services at (615) 862-7225.

Associated Links & Forms

[Request for Water and Sewer Availability Form](#)
[Fee Schedule](#)

¹ Capacity Study Required



(CS) Step 3: MWS Development Services Performs Capacity Study

Step Detail

Upon receipt of a request for availability, MWS Development Services performs a capacity study to determine availability based on the projected flows for the proposed development in gallons per day (GPD). Calculations are based on projected flow examples for various types of developments. This study takes approximately 15 working days.

(CS) Step 4: MWS Development Services Creates Water and Sewer Capacity Permits and Capacity Fees and Sends to Applicant

Step Detail

After the capacity study is complete, MWS DS creates the resulting capacity permit and communicates the fees due by the Applicant. The capacity fees will be emailed to the Applicant. Availability Study and Capacity fees paid are non-refundable, except for projects that are not approved by other Metro agencies. Refunds may be requested following the current Metro Government Code. [Email](#) Development Services for more information.

Associated Forms

[Fee Schedule](#)

[Email for Refund Information](#)

(CS) Step 5: Applicant Pays Fees to Metro Water Services, Development Services

Step Detail

Capacity fees must be paid in accordance with MWS guidelines to reserve capacity. All fees can be paid on-line by emailing a request to pay to mws.ds@nashville.gov. The Applicant will receive an email with instructions on how to pay online with a code number. Fees may also be paid in person by check/cashier's check, or credit card in person with Metro Water Services in



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Development Services. MWS DS is located on the first floor of the Metro Office Building, 800 President Ronald Reagan Way, 37210.

Note: The statement of sewer and water availability is effective for one year from the date of the availability letter. If, after approval of sewer and water availability, construction has not begun within the established period, a renewal of the availability statement is required and all applicable department regulations and fees in force at that time are imposed.

The [request](#) for a new capacity study must be sent to MWS.DSCapacity@nashville.gov. Capacity for the entirety of the development must be requested and purchased to reserve full capacity.

Associated Forms

[Fee Schedule](#)

[Request for Water and Sewer Availability](#)

(CS) Step 6: MWS Development Services emails permit to Applicant

Step Detail

After capacity fee payment is made, MWS DS staff confirm the following information from the capacity study:

- Water service elevations
- Existing water main size
- Capacity purchased

The permit containing this information is sent to the Applicant via email from MWS DS. During the capacity study process, MWS determines whether a public water or sewer Public Extension project (PEP) is required. That is likewise communicated to the Applicant.

If a water and/or sewer service extension is NOT needed, skip to [Step 15](#)

If a water and/or sewer service extension IS needed, continue with [Steps 7-14](#) (marked as Public Extension Project, "PEP")



(PEP) Step 7: Applicant Develops and Submits for Review Construction Plans for Public Water Main and/or Sewer Line Extensions

Step Detail

The Owner or Developer must retain the services of a State of Tennessee Professional Engineer (PE) to prepare water and/or sewer line extension construction plans. **Plans must be developed with reference to and in conformance with the requirements of the Tennessee Department of Environment and Conservation (TDEC).** MWS has been delegated authority by TDEC to review and approve plans consistent with the governing standards found at the following sites.

- Water: [Plans Review and Approval for Public Water Systems \(tn.gov\)](#)
- Sewer: [Plans Review and Approval for Sewage Works Construction Projects \(tn.gov\)](#)

Applicants should also reference the information from the **Approved Construction Specifications and Details** section of the [Water and Sewer Information for Developers | Nashville.gov](#).

Electronic plans must be submitted via Metro's FTP site ([WS FTP Server Web Transfer Client \(nashville.gov\)](#)). Applicants must email MWS.EPlanRev@nashville.gov to register and acquire a username and password to use the FTP site. Uploaded files must be named using the Site Naming Convention outlined in the Site Naming Convention document – [FTP Site File Naming Convention](#).

Applicants must also pay the appropriate fee for plan review either on-line (send an email request to pay to mws.ds@nashville.gov) or in-person at the MWS Development Services office (Fee Schedule), located on the first floor of the Metro Office Building, 800 President Ronald Reagan Way, 37210. Payments can be made by check, cashiers' check, or credit card.

Documents required for construction plans submittal include, as applicable:

- A completed [Development Services Review Transmittal Form](#)
- [One Water Application](#)
- Completed [Technical Review Requirements](#) (TRR) form
- Fee Worksheet (see "Infill [Fee Worksheet](#)" and "[Fee Worksheet Instructions](#)" on the following webpage: [Water and Sewer Information for Developers | Nashville.gov](#))



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- Stamped Plans as a PDF document
- Stamped Calculations
- Capacity Permit
- Revision Letter (if applicable)

For a complete submittal of construction plans, the Applicant must provide all applicable items included on the Plans Submittal Form and Checklist.



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If the Applicant's upload of construction plans to the [FTP site](#) is successful, the Applicant receives an email confirming such.

Associated Links & Forms

[Plans Review and Approval for Public Water Systems \(tn.gov\)](#)

[Plans Review and Approval for Sewage Works Construction Projects \(tn.gov\)](#)

[Water and Sewer Information for Developers | Nashville.gov](#)

[Water and Sewer Technical Review Requirements](#)

[WS FTP Server Web Transfer Client \(nashville.gov\)](#)

[Fee Schedule](#)

[One Water Application](#)

[Development Services Review Transmittal Form](#)

[FTP Site File Naming Convention](#)

(PEP) Step 8: MWS DS Reviews the Construction Plans for Public Water Main and/or Sewer Line Extensions

Step Detail

MWS DS personnel review the public water main and/or sewer line construction plans, and related materials submitted in the following manner:

- An initial **sufficiency review** is conducted to determine if the package submitted has all necessary documents. If the submission is not complete, the resulting email will include a list of missing items and instructions on how to resubmit. Once a submission passes the sufficiency review, the Applicant can track the review and approval process through [ePermits](#).
- Submitted plans and the accompanying documents that meet the basic sufficiency requirements (that is, the submission package is complete) are assigned to a MWS DS Plan Reviewer. Using the [Technical Review Requirements](#) (TRR) form, the MWS DS Plan Reviewer checks the construction plan and associated documents for approximately 30 design elements that are required for an efficient and detailed review. This **TRR process** counts as the first review. A submitted construction plan that fails the TRR will be marked as "Incomplete", and the Design Engineer can log into [ePermits](#) to see the TRR with



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comments. The Design Engineer must address any issues identified in the TRR process and re-submit (see [Step 7](#)) the construction plan and associated documents, **including the updated TRR.**

- If the construction plan and associated documents pass the sufficiency review and the TRR, then they are subject to **full review** by the Plan Reviewer. The Plan Reviewer digitally reviews the plans and adds comments and/or markups to the construction plans. The Plan Reviewer notes issues that must be addressed to bring the submitted construction plans into conformance with applicable regulations. Depending on the Plan Reviewer, a separate comment letter may be drafted. Upon completion of the review by the Plan Reviewer, the Design Engineer receives an email that their plan review status has been changed and is directed to check [ePermits](#) for further details. The Design Engineer can log in to [ePermits](#) to see the site plan with comments.

During the plan review process, a determination is made whether any easement is required to enable the construction of the water and/or sewer line. Any required easements (on-site and off-site) must be secured **before** the plan is approved if not recorded by plat.

Associated Links and Forms

[ePermits](#)

[Water and Sewer Technical Review Requirements \(TRR\)](#)

[Water and Sewer Information for Developers | Nashville.gov](#)

(PEP) Step 9: Applicant Revises Construction Plans for Public Water Main and/or Sewer Line

Step Detail

The Applicant addresses issues with the water and/or sewer line extension plans that are raised by the Plan Reviewer and brings the construction plans into conformity with all governing regulations and Plan Reviewer comments. The Applicant re-submits the construction plan and all required documents (see [Step 7](#)).



(PEP) Step 10: MWS DS Approves Construction Plans for Public Water Main and/or Sewer Line

Step Detail

Once the construction plans conform to all governing regulations, the MWS DS Plan Reviewer approves them. For the construction plans to be approved, the Applicant must have a current (non-expired) capacity letter with at least the minimum capacity fee payment, applied.

See the accompanying "[Lay and Deed Overview](#)" development guide for information on the processes by which all relevant Developer commitments related to the provision of the approved water and/or sewer lines are documented by Metro's Deeds and Bonds (D&B) team.

(PEP) Step 11: Applicant Contacts MWS to Request Scheduling of the Pre-construction Meeting

Step Detail

Following the Plan Reviewer's approval of the construction plans for a public extension (water or sewer), the Applicant's properly licensed Utility Contractor may contact MWS D&B (penny.gilbert@nashville.gov), to arrange to meet with MWS prior to beginning construction. A preconstruction meeting **will not** be scheduled until the following items are submitted to the MWS DS Plan Reviewer as indicated below:

- A signed application and applicable fees via check made payable to Metro Water Services
- Four (4) hardcopy sets of the Approved Plan, to be delivered at the preconstruction conference with material submittal and/or cut sheets
- A complete set of the Approved Plan in .DWG and .PDF format on a flash-drive or disk
- Recorded and executed easement documentation, if this easement is to be recorded by plat, provide case number
- Additional items stated on the Approval Letter
- Other permits that are needed (i.e., TDEC, TDOT, USACE, MPW ROW excavation, etc.)

This pre-construction meeting is required.



(PEP) Step 12: MWS DS Schedules and Conducts Pre-construction Meeting with Applicant

Step Detail

Prior to the pre-construction meeting for the water and/or sewer line project being held, Metro's D&B team verifies that all required approvals and easements are obtained, inspection fees paid, contractor licenses verified, and that the application for public utility extension has been secured. A D&B member prepares the construction permit for the pre-construction meeting. MWS DS D&B creates the Construction Permit, Notice to TDEC, and notifies the MWS Engineering Inspector that the projects are ready for a pre-construction meeting.

The Design Engineer, Contractor, and other specified Applicant representatives must attend the pre-construction meeting, which is hosted and conducted by the MWS Engineering Inspector. Required attendees generally include:

- Contractor
- Sub – Contractor (if any)
- Design Engineer
- Developer or Developer's representative

At the meeting, the Contractor must provide sewer construction cut sheets in format acceptable to MWS and a subgrade letter for water, where applicable. The agenda for the meeting includes:

- Project details including start date, work hours, materials, scope of work, testing and disinfection
- Construction requirements
- Questions on materials
- Any other specific concerns relating to the project

After the meeting, MWS DS D&B sends the signed/dated Notice to TDEC and notifies internal and external customers.

New public water and sewer infrastructure must be installed according to MWS Standards ([Water and Sewer Information for Developers | Nashville.gov](#)). All water- and sewer-related construction shall be inspected by MWS. The Builder or Developer must reimburse MWS for the cost of inspection (See [Fee Schedule](#)).



Associated Links & Forms Fee Schedule

[Water and Sewer Information for Developers | Nashville.gov](#)
[Fee Schedule](#)

(PEP) Step 13: Applicant Completes Construction Permit

Step Detail

If there are no major unresolved issues from the pre-construction meeting, the Construction Permit for the project is signed by the licensed municipal utility Contractor or licensed master Plumber involved in the project at MWS Development Services at the Metro Office Building, 800 President Ronald Reagan Way, 37210.

Construction may **not** begin until after the permit is signed by the Contractor and/or Plumber and received by MWS DS.

If water service is required for construction of the new mains, a temporary meter may be issued for use on a public fire hydrant. Un-metered use of Metro fire hydrants and service lines is prohibited. For a hydrant, Applicants can contact the MWS Customer Service Center by email: mwsfirehydrantgroup@nashville.gov, or 615-862-4770, ext. 78031, and follow instructions for a list of options to request a temporary meter for use on a fire hydrant.

(PEP) Step 14: Applicant Constructs and Conveys to MWS All Planned Public Infrastructure

Step Detail

After the pre-construction meeting occurs and the construction permit is signed, the MWS sewer or water tap process is scheduled. All project-related activity must be coordinated through MWS Engineering Inspections.

The Contractor must provide 48-hour notice to the assigned MWS Inspector (identified at the pre-construction meeting) before commencing work. A licensed municipal utility Contractor (for sewer or water) or licensed master Plumber (for water and service lines) is required to perform all proposed public utility extension work. New public water and sewer infrastructure must be installed according to MWS standards found on the MWS Developers webpage ([Water and](#)



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[Sewer Information for Developers](#)) and in conformity with the construction plan that has been approved by the MWS DS Plan Reviewer.

All water- and sewer-related construction must be inspected and accepted by an Inspector from MWS's Engineering Group. Testing is done by the MWS Inspector once all new water and sewer infrastructure is correctly installed.

Sewer Line Testing Includes:

- Air testing of all lines
- Mandrel testing of all lines
- Vacuum testing of all manholes
- CCTV of all lines

Water Line Testing Includes:

- Disinfection of all lines
- Pressure testing of all lines.
- Connecting new water mains to the existing system (Tie-in's)

Project Release Requires:

- Record drawings submitted to the assigned MWS Inspector and approved (see [Step 22](#) or explanation of this process)
- Binder placed in roadway
- Punch list items addressed

Project Closeout Requires:

- Final pavement placed
- Valve op performed on any new water valve / blow-offs installed
- Final punch items are addressed

The specific details of how the newly constructed infrastructure is conveyed to Metro depend on the specifics of the project. A [Letter of Equity Transfer](#) is generally used. For example, for a traditional (25+ lot) subdivision, the early connection agreement allows for private connections to be made prior to the conveyance to Metro of the newly constructed infrastructure ([Nashville.gov - Metro Water - Early Connection Agreement Form](#)).

See the accompanying "**Lay and Deed Overview**" development guide for additional information on the processes by which approved water and sewer lines are conveyed to Metro ownership.



Associated Links & Forms

[Letter of Equity Transfer](#)

[Nashville.gov - Metro Water - Early Connection Agreement Form](#)

Step 15: Applicant Secures Excavation Permit from NDOT

Step Detail

If a water or sewer connection (tap) is to be made inside of a public right-of-way, the Applicant must secure an Excavation Permit prior to the work being done. Excavation Permits are obtained from the Nashville Department of Transportation (NDOT). The Contractor performing the excavation must be licensed and bonded. The Contractor must also call 811 for a TN One Call number before any taps can be scheduled.

For more information and a copy of the Excavation Permit application, contact the NDOT at (615) 862-8782 or NDOT's website: [Nashville Department of Transportation Permits | Nashville.gov](#)

Associated Links & Forms

[Nashville Department of Transportation Permits | Nashville.gov](#)

Step 16: Applicant Contacts MWS DS to Pay Service Connection Fees and to Schedule Tap(s)

Step Detail

If a new water meter is required, the Applicant must submit a request for such using this form: [Service Permit Application](#).

Applicants can pay any service connection (tap) fees due either on-line (send an email request to pay to mws.ds@nashville.gov or in-person at the MWS Development Services office (Fee Schedule), on the first floor of the Metro Office Building, 800 President Ronald Reagan Way, 37210. Payments can be made by check, cashiers' check, or credit card.



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Applicants should note that simply paying the tap fee does **not** schedule the tap. The Applicant must request that the tap be scheduled. See this document for details on scheduling a tap: [Tap Scheduling Guidelines](#). Taps are scheduled on a first come, first serve basis.

Policy for Residential Existing Service Lines

If a tap and a new service line have been completed within the last 15 years, (Since January 1, 2009), the existing service line can be used.

-For existing water services lines that meet the 15-year standard, the meter box will need to be brought up to current MWS specifications.

-For existing sewer service lines that meet the 15-year standard, a clean-out in the right of way (ROW) will need to be added. A work order will be generated for an inspection of the clean-out.

When a tap and service line are both required to be replaced, the applicant must schedule the inspection of a completed cut and cap of the existing service lines, at the main, with an MWS inspector by emailing a completed request form to mws.ds@nashville.gov. The completed cut and cap will be inspected by an MWS Inspector at the time the new tap scheduled is to be completed. The cut and cap of the old service line must be completed **before** MWS Inspector arrives on site for inspection.

Tap Fees for Public Water and/or Sewer Mains Built by Privately Funded Extensions

The Metropolitan Code defines developer's equity as the cost of construction of the public main extension. This amount of equity may be used to offset any required tap fees up to the cost of the public extension. The cost of each water and/or sewer tap is deducted from the amount of the developer's equity existing for the public main extension (water and/or sewer, respectively) or reimbursed to the developer, if applicable. Developer's equity for water lines may only be used for credit against water tap fees and sewer lines for sewer taps.

No connection permit can be issued to an Applicant prior to the deeding of a water/sewer main extension to MWS (if one was required by the project). The Developer must provide a signed [Transfer of Equity Letter](#) for all lots and a plat that shows the general arrangement of subdivision, lot numbers, water main sizes and locations. The letter of equity transfer accounts for the cost of each tap fee debited against the amount of the developer's equity or reimbursed to the developer if applicable.



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If appropriate for the development, an [Early Release Form](#) can be signed, notarized, and presented to MWS DS. Construction permit completion as well as 100% of the required availability and tap fee payment must be verified before a tap can be scheduled.

Requests for a water and sewer service line connection (tap) should be requested by the Applicant's Plumber via the email: mws.ds@nashville.gov. At the time the tap is scheduled, the MWS DS employee provides the time and date for the tap, a map of the local infrastructure, the water/sewer main size and type, and the tap guidelines, [Tap Scheduling Guidelines | Nashville.gov](#).

Applicants are encouraged to submit a request for a meter permit at the time that the tap is requested. The meter permit should be requested by way of the following form: [Service Permit Application](#). This form must be completed and returned by a licensed Plumber. MWS DS reviews to ensure the Service Permit Application is correct and that the excavation permit has been secured (if required).

For Out of County Sewer Permit Applicants

From the Applicant's perspective, the major difference on OOC (Out of County) projects is that the Applicant will not have a Metro building permit. The Applicant is responsible for notifying MWS Development Services via email at mws.ds@nashville.gov to apply for a Metro Water Services sewer connection permit (WSST) to move forward with connections.

Once the Applicant receives a WSST number from MWS Permits, the Applicant must fill out this [request form](#) to send back to schedule a sewer inspection.

Projects in Williamson County involving a reconnect from a demo must be submitted with a demo permit from Williamson County.

Any additional information - such as a copy of the Williamson County building permit numbers or the main project numbers for connection - helps MWS Development Services issue the proper type of WSST connection permit.

Associated Links & Forms

[Early Release Forms](#)

[Tap Scheduling Guidelines \(nashville.gov\)](#)

[Service Permit Application](#)

[Equity Transfer Letter](#)

[Fee Schedule](#)



Step 17: Applicant Prepares Site for the Tap(s) and Water Meter

Step Detail

Only MWS personnel may tap a public water or sewer main. The Applicant's Contractor must prepare the site in accordance with MWS current guidelines. These guidelines can be found at: [Tap Scheduling Guidelines \(nashville.gov\)](#).

In advance of the tap, the Contractor secures and has **at the site** all material necessary to complete the tap. All materials - including tap, sleeve, valves, and miscellaneous fittings required to make the tap - must be provided by the Contractor. Service lines are installed to the boundary of the property if not previously installed as a run to curb. If above-mentioned has not been completed before the MWS Inspector arrives on site, the tap will be canceled and will need to go through the scheduling process again.

Meter boxes are to be installed by the Applicant's contractor consistent with MWS specifications, which can be found here: [Guidelines on Installing and Inspecting Meter Boxes \(nashville.gov\)](#). For helpful information on what the MWS Inspectors look for, see the meter inspection checklists and common reasons for meter box failure documents under the "Policies, Procedures, and Guidelines" section at the same site.

If installation cannot meet current specifications, a Plumber can request a variance by emailing MWS.DSVariiances@nashville.gov the completed [Variance Request Form](#).

The initial meter box inspection date is set for 30 days after the permit is issued. The meter box inspection should be scheduled while the tap is to be completed.

Associated Links & Forms

[Service Request Form](#)

[Water and Sewer Information for Developers | Nashville.gov](#)

[Meter Box Specifications](#)

[Meter in Box Specifications](#)

[Variance Request Form](#)

[Tap Scheduling Guidelines \(nashville.gov\)](#)



Step 18: MWS and Applicant Complete Tap(s), Install Service Line and Meter Box Inspection

Step Detail

New Policy for Residential Meters, Effective January 1, 2024

If the site is properly prepared with all required equipment and materials, MWS System Services completes the tap of the public water and/or sewer main. MWS Development Services Inspector inspects the water tap.

- For taps 2" or larger, the MWS Inspector takes a sample to determine if bacteria are present. This must be sent to the MWS lab and generally takes 2-3 business days to perform.
- For taps smaller than 2", only a chlorine sample is taken and reviewed on-site.

The meter box and service line should be set prior to tap. Inspector will witness the tap and approve connection. Our goal is to work with the plumber on site to be able to approve the meter box. Customer Care will follow up by installing and setting the meter.

After a new water tap is made, a meter box inspection must be completed, preferably at the same time as the tap.

The MWS Inspector will look for the following for a water meter box inspection:

- Is the service line and shut off in the box?
- Is there a brick available to place under meter?
- Is the pad in good condition (not broken)?
- Is the frame and lid present?
- Is the rough grade around the meter box even and complete?

After a meter box has been inspected, Metro Water Development Service's work is completed with the meter box, and a work order is created for the MWS Customer Care Center (CCC) to set the meter. The CCC will set the meter and perform any follow up site visits required.

After the CCC approves meter, a report will be generated for MWS DS to sign off on the building permit. The Applicant should continue to monitor ePermits for signoffs.



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Run to Curb Connection

In the instance that a meter needs to be set for an existing run to curb property where no tap is required, the Applicant is responsible for emailing MWS.DS@Nashville.gov, a completed [Meter Permit Application](#), to schedule a meter to be set. At that time, MWS Development Services will contact Customer Care Center to install the meter. A run to curb property has a tap that has been previously run to the curb of the property. An example of such is a new subdivision where a new water main has been installed, and taps are made during that main installation and brought over to the property line.

If the meter is an existing meter approved by the guidelines above, the process is similar. A meter box inspection is required, looking for the same criteria as listed above. If the meter and meter box are both up to current specifications, MWS DS will approve and sign off.

Customer Care Center Meter Exchange Procedure

If the MWS Inspector arrives on site and finds that the existing meter needs to be exchanged for a new one, the Inspector will notify the MWS Customer Care Center to set a new meter in the box. After the CCC sets the new water meter, a report will be generated for MWS DS to sign off on the building permit.

For Out of County Applicants

For Out of County (OCC) Applicants, MWS is the Metro agency that completes inspections of all sewer infrastructure from the structure to the public main.

For an OOC project, the required sewer infrastructure will be installed under one of two scenarios:

- An OOC location may have an existing tap ("stub") to which the private line can be connected. The entire sewer infrastructure still must be inspected and in compliance before the WSST permit can be approved. All sewer connections – public or private – require a WSST permit.
- An OOC location may require a new tap. In this case, the WSST permit MUST be issued before a Plumber acting on behalf of the Applicant can begin any work on the site, such as opening the trench. In this case, the standard tap process is followed, see [Step 16](#) above.



Single Family Residential

Requirements for OOC sewer infrastructure inspections can be found here: [Step 18](#) . All plumbing work should be done to pass these requirements.

After the WSST has been issued and the Plumber has completed all work according to the requirements, the Plumber or Applicant can request an OOC sewer inspection by emailing this [request form](#) to mws.ds@nashville.gov. OOC sewer inspections occur only on Monday, Wednesday, and Friday.

The MWS Inspector will indicate if a site has passed either by marking the site with blue spray paint or by way of a tag. The following day, an MWS DS representative will send a pass-fail notification to the WSST permit Applicant.

Out of County water meters follow the same process as Davidson County meters.

Associated Links & Forms

[ePermits](#)

[Out of County Sewer Inspection Request Form](#)

Step 19: Contractor Installs Backflow Prevention Device (if required)

Step Detail

For residences, backflow preventers are required to be installed for swimming pools, irrigation, and fire suppression systems. Installation of the correct backflow prevention device is the responsibility of the Plumber. They are responsible for acquiring and preparing the materials and equipment needed, as well as installing the backflow prevention device. Current MWS specifications for backflow prevention devices can be found at [Water and Sewer Information for Developers | Nashville.gov](#).

If installation cannot meet current specifications, a Plumber can request a variance (form on website) by completing the [Variance Request Form](#) and emailing it to mws.dsvariances@nashville.gov.

Associated Links & Forms

[Water and Sewer Information for Developers | Nashville.gov](#)

[Variance Request Form](#)

[Variance Requirements](#)

[Backflow Preventer Specifications](#)



Step 20: Applicant Requests and MWS DS Completes Inspection of Backflow Prevention Device (if required)

Step Detail

Once installed, the Applicant is responsible for completing the [Backflow Preventer Inspection Request Form](#) and notifying MWS DS Inspections team at (DSInspections@nashville.gov) to schedule inspection and testing of the backflow prevention device. Costs for the testing of new devices are billed as a direct cost to the Applicant. The Applicant must have a representative present at the time of the inspection. The testing form used by MWS requires the signature of the representative to ensure knowledge of the device's performance and any potential corrective action needed.

If the backflow prevention device **passes**, MWS DS signs off on the cross-connection portion of the Applicant's U&O Permit. If the initial inspection **fails**, a re-inspection must be scheduled with MWS Development Services until it passes by emailing a [backflow inspection request](#) for a re-inspection back in to DSInspections@Nashville.gov

Associated Links & Forms

[Backflow Preventer Inspection Request Form](#)

[Development Fee Schedule](#)

Step 21: MWS DS Signs-off on Water Availability, Sewer Availability, and Cross-Connectivity Elements of the Building Permit

Step Detail

After all meters and backflow prevention devices (if any) have passed and applicable permits are issued, MWS DS provides final sign off on the Building Permit. The Applicant receives email confirmation when the Building Permit is signed off. Information can be accessed in [ePermits](#).



Associated Links & Forms

[ePermits](#)

(PEP) Step 22: Applicant Submits As-Built Construction Plans for All Water and/or Sewer Line Extensions

Step Detail

Upon completion of construction of water and/or sewer, the Design Engineer shall provide MWS with a complete set of As-Built Plans in digital (DWG and PDF) format. All drawings must be completed and submitted prior to acceptance of the sewers or water mains into the public system and any connections being made.

Sewer plans shall be sealed by a licensed PE and/or a registered land surveyor and shall include actual field angles between lines, all actual service lines and tee locations, the distance of the end of the service line to property corners and lines and/or station and offset from sewer centerline to end of service line, the depth to the top of the end of the service line and shall reflect all alignment and grade changes.

Water line plans shall be sealed by a licensed PE and/or a registered land surveyor and shall include offset distance from the roadway centerline, or property line right of way, line depth, locations of hydrants, valves, reducers, tees, and pressure reducing devices where applicable.

As-Built Plans should be submitted via the process outlined in [Step 7](#).