

Mount Pleasant Waterworks

Guidelines for Development

www.mountpleasantwaterworks.com



February 2017

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Section 1.0 General Information

The purpose of these guidelines is to provide for the orderly development of water and wastewater systems to meet the growing needs of residents and businesses in the Mount Pleasant Waterworks (MPW) service area. These guidelines were developed with the intent of making them flexible enough to accommodate the individuality of each project while maintaining high standards and an orderly procedure.

Each project is to be handled professionally to ensure that quality system design and construction are guaranteed. These high standards and the professional process are imperative to ensure that the water and wastewater systems installed under these guidelines provide years of low cost maintenance to MPW and service to the customers of MPW and developers of the area.

This document is intended only as a guideline for Developers, Consulting Engineers and Contractors. It is not necessarily applicable to every situation that might arise. If a situation arises for which this manual does not provide specific guidance for decision-making, the Engineering Department interprets these guidelines and applies them accordingly.

These guidelines are updated periodically. As a result, contact should be made with MPW's Engineering Department on a continuing basis to ensure that the most current guidelines are obtained prior to proceeding with planning and designing a project or water and wastewater system extension.

Additional documents to support these guidelines are listed below and available upon request:

- MPW Policy 4.2 – Illegal Use of Water and or Wastewater System
- MPW Policy 5.3.2. – Assessment of Impact Fees
- MPW Policy 5.3.3 – Impact Fee Management
- MPW Policy Section 5.4 – Developmental Impact Fees
- MPW Policy Section 5.5 – Cost Sharing for Water and Wastewater Extensions
- MPW Policy Section 6.2 – Grease Trap (FOG)
- MPW Policy Section 6.3 – Water and Wastewater Extensions
- MPW Policy Section 6.4 – Connection Policy
- MPW Policy Section 7.2 – Grinder Pump
- MPW Design Standards, 2009
- MPW Standard Specifications and Details, October 2013
- TOMP Code of Ordinances, Title V: Chapter 51: Water and Sewers
- SCDHEC Delegated Review Program
- SCDHEC Unit Flow Contributory Guidelines

<End Section>

Section 2.0 Financial Requirements

This section outlines all financial requirements for developer projects. These fees are determined based on the project's impact to MPW's water and wastewater system.

2.1 Impact Fees: (MPW Policy 5.3.2 and 5.3.3)

Impact fees are charges assessed against new development to recover capital costs that are required to expand the water and wastewater infrastructure. This allows recovery of the capital costs for developing the new service directly from the customers who benefit from those expenditures. Impact fees recover major capital costs associated with expanding water and wastewater facilities, including but not limited to treatment plants, storage facilities, pumps and distribution mains, wastewater collection, transmission, pump stations, and other capital equipment.

Impact fees are reviewed during the MPW budget process. When planning your project, you should contact MPW's Engineering Department or visit our website www.mountpleasantwaterworks.com for the current impact fee rates.

2.2 How Impact Fees are Calculated:

MPW calculates impact fees based on the number of Residential Equivalent Units (REUs) assigned to the development. One REU is equal to 300 gallons per day. Calculations of REUs are based on the guidelines shown in Table 2.2.

Table 2.2 - Guidelines for Determining Residential Equivalency
Flows are divided by 300 gallons per day (GPD) to assign REUs (Except as Noted)

Residential Single Family Lot =	300	Schools Daycare/Kindergarten/Elementary /Middle – per person = High School per person=	7 10
Condominiums, Townhomes served by individual meters Per Unit =	300	Laundries self-service Per Machine =	400
Apartments, Condominiums served by master meter Per Bedroom	100	Factories Each Employee (no showers) = Each Employee (w/showers) = Each Employee (w/kitchen facilities/showers) =	25 35 40
Duplexes Per Unit =	300	Hotels Per Bedroom (no restaurant) =	100
Bars: Each Employee = Each Seat (excluding restaurant) =	10 20	Motels Per Unit (no restaurant) =	100
Food Service Operations Per Seat =	25	Nursing Homes Per Bed (no laundry) = Per Bed (with laundry) =	100 150
Camps: Resort (luxury) = Per Travel Trailer Site =	300 120	Shopping Centers Per 1,000 sq. ft. (no restaurant) =	200
Churches: Per Seat = Per Student in School =	3 10	Offices Per 100 sq. ft. =	8

Section 2.2 continued:

1. For projects other than single-family residential subdivisions, impact fees for undeveloped lots are assessed at a minimum of one REU per lot with additional fees due prior to the issuance of building permits.
2. Those categories not covered by these guidelines utilize SCDHEC Unit Flow Contributory Guidelines. If a category is not covered by either, or there is a conflict, then MPW staff assigns flows based upon best judgment.
3. Facilities not falling within the above listed categories may submit actual flow information, which may be accepted by MPW for comparative purposes.

2.3 Schedule of Required Fees

This section outlines fees that are required of developers, contractors and new customers. A copy of the latest rate schedule may be obtained from MPW's website or in person at the MPW Operations Center, 1619 Rifle Range Road, Mount Pleasant, SC.

A. Services Only Project Fees

Schedule of fees due for projects requiring service connections.

Fees due prior to MPW providing service (New Service Fees):

These fees cannot be accepted until the project has complied with all agency permitting and legal requirements.

1. Water Impact Fees.
2. Wastewater Impact Fees.
3. New Account Fees.
4. Security Deposit.
5. Water Meter Installation Fees.
6. Wastewater Tap Installation Fees.
7. Inspection Fees (Wastewater Tap, Backflow, Grease Trap where applicable)

B. System Extension/Acceptance Project Fees

Schedule of fees due for projects requiring SCDHEC Construction and Operating Permits.

Fees due prior to a MPW "Conditional Construction Permit" being issued (Permitting Fees):

1. Project Admin/Construction Inspection Fee.
2. Pump Station Review/Administration Fee (if applicable).
3. Developmental Impact Fees (if applicable, are normally charged on either a per acre or REU basis). (MPW Policy 5.4)
4. Capital Recovery Fees (if applicable). (MPW Policy 5.5)

Fees due prior to MPW accepting a system for operation and maintenance (System Acceptance Fees):

1. Wastewater Impact Fees.
2. Water Impact Fees.
3. Maintenance Bond (equal to 10% of the actual construction cost of the water and wastewater systems) .
4. Reimbursement of expenses incurred by MPW, including legal fees (if applicable).
5. Payment for water used during construction.

Pump Station Fees:

1. Standby Emergency Generator Fee.
2. Pump Station Review/Administration Fee.
3. Pump station upgrade costs for phasing (MPW Policy 5.5):

2.4 Maintenance Bond

The bond amount shall be determined based on the cost of the newly installed water and/or wastewater system as shown on the Project Completion Questionnaire completed by the certifying engineer at the time of project closeout. A maintenance bond equal to ten percent (10%) of total construction and engineering costs of the newly installed water and or/wastewater system shall be paid to MPW.

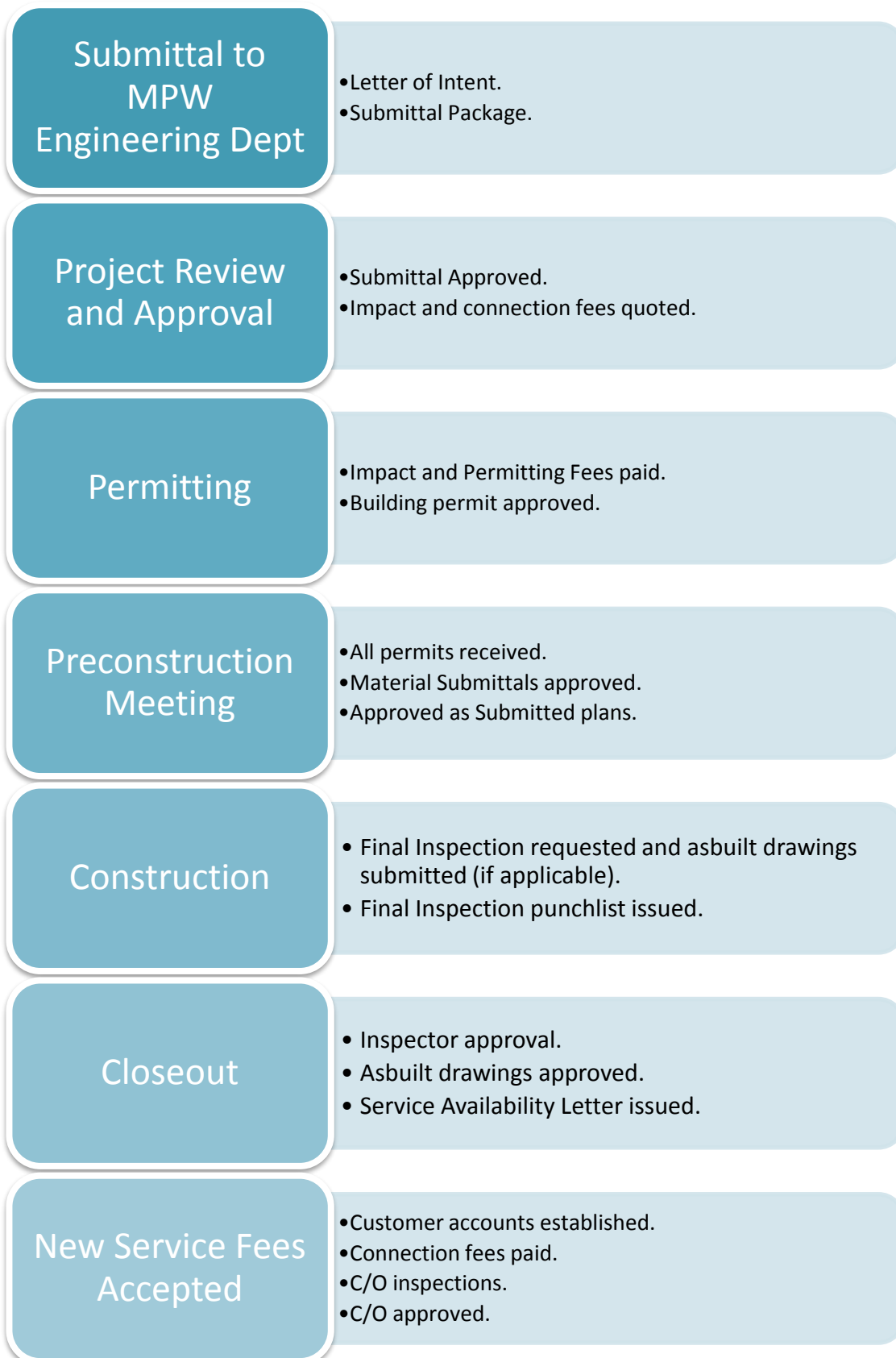
The requirements for the bond are as follows:

- A cash bond shall be posted for projects where the maintenance bond amount is \$20,000 or less.
- If the maintenance bond is greater than \$20,000, the Developer has the option to pay cash for the entire bond amount or post a cash bond up to \$20,000 and provide an Irrevocable Letter of Credit for the balance.
- The Letter of Credit shall be for a period of 30-months from the projected date the SCDHEC Operating Permit was issued.
- The cash portion of the bond shall be escrowed.

The Developer is liable for any/all repairs of system deficiencies including repair of all facilities damaged during phases of construction, paving, drainage, and installation activities for a period of 24-months from the date the SCDHEC Operating Permits are issued. MPW shall notify the Developer by certified letter listing any deficiencies noted during the final bond inspection. Upon correction of the system deficiencies by the Developer and approval of the repairs by MPW, MPW shall refund the total bond amount to the Developer with interest earned during the escrow period. In the event the Developer fails to correct the deficiencies within 30-days of notification from MPW, the bond shall be forfeited by the Developer and used by MPW to make the necessary repairs to correct system deficiencies and any remaining funds shall be returned to the developer.

<End Section>

Services Only Projects Process Chart



Section 3.0: Services Only Projects

The first step required for any development project is to submit a Letter of Intent (LOI). This request shall be submitted on MPW's standard Residential or Commercial LOI form. The form shall be reviewed to determine which scenario applies to your project as defined below and follow the requirements for that section. The LOI form(s) can be found on MPW's website.

Section 3.0.1: Town of Mount Pleasant Annexation Requirements

Any property that has wastewater service available and is not within the Town limits of Mount Pleasant, will be referred to the Town of Mount Pleasant Planning Department to ensure compliance with the Town's Sewer Use Ordinance, Annexation for Sewer Service requirements. The Engineering Department cannot provide service until notification is received from the Town Planning Department that annexation requirements have been met.

3.1: Residential Development

This section outlines the requirements for each type of residential development applying for service and/or requiring service connections.

A. Residential Service Accessible

Undeveloped property with water and/or wastewater readily accessible.

1. Existing residential home currently on a well and/or septic tank.

The following outlines procedures for an existing residential home currently connected to a private well and/or septic tank that wishes to connect to the public systems

1. Submit a completed Residential LOI to the MPW Engineering Department.
2. The Engineering Department determines if water and/or wastewater is available and connection requirements for the property.
3. The Engineering Department determines any appropriate New Service fees:
 - a. Water and/or Wastewater Impact Fees
 - b. Water and/or Wastewater Tap Fees
 - c. New Account Fees
4. MPW accepts New Service Fees.
5. Water Meter and/or Wastewater Tap installed by MPW.
6. Building Permit approved. (if applicable)

2. Existing single lot with water and/or wastewater readily accessible.

The following outlines procedures for obtaining water and/or wastewater service to a single vacant lot with water and/or wastewater readily accessible.

1. Submit a completed Residential LOI to the MPW Engineering Department.
2. The Engineering Department determines any appropriate New Service fees:
3. Water and/or Wastewater Impact Fees
4. Water and/or Wastewater Tap Fees
5. New Account Fees
6. MPW accepts New Service Fees.
7. Water Meter and/or Wastewater Tap installed by MPW.
8. Building Permit approved.

3. Existing lot being subdivided into two or more lots.

The following outlines the procedures for a developer/owner wishing to subdivide their property.

1. Submit a completed Residential LOI and the preliminary subdivision plat to the MPW Engineering Department.
2. The Engineering Department determines if water and/or wastewater is available and connection requirements for the property. A civil site plan showing proposed water and wastewater connections and an engineer's cost estimate may be required.
3. The Engineering Department determines any applicable New Service fees: The fees that may apply are:
 - a. Water and/or Wastewater Impact Fees
 - b. Water and/or Wastewater Tap Fees
 - c. New Account Fees
4. New Service fees are paid.
5. MPW installs new taps.
6. MPW issues service availability letter.

If the Engineering Department determines water and/or wastewater is unavailable, MPW issues a service unavailable letter.

4. Existing parcel being subdivided into multiple lots with water and/or wastewater readily accessible.

The following outlines procedures for subdividing a parcel into more than one lot with water and/or wastewater readily accessible.

1. Submit a completed Residential LOI to the MPW Engineering Department.
Submit the following information with the LOI where applicable:
 - a. Engineer's Cost Estimate
 - b. Civil Plan showing water and wastewater connections to existing infrastructure.
 - c. Preliminary subdivision plat.
 - d. Fire Department Proof of Coordination Letter (if applicable)
2. The Engineering Department sends the approval letter and fees to the Owner/Developer Representative listed on the LOI.
3. The Owner/Developer pays Impact and Project Administration fees.
4. Prior to scheduling a preconstruction meeting with MPW Inspector the following items must be completed:
 - a. Approved as submitted civil plans
 - b. Approved materials submittals
 - c. All agency permits received
5. Upon completion of construction, the engineer requests a final inspection in writing with a copy of the final asbuilts to MPW Inspector. See MPW's Standard Technical Specifications for the asbuilt requirements.
6. MPW Inspector conducts final inspection and generates a final inspection punch list.
7. Service is not provided until the following conditions have been met:
 - a. All legal requirements met (if required);
 - b. All punch list items noted during final inspection completed and reinspected by MPW.
 - c. Final asbuilt drawings approved.
8. MPW accepts New Service Fees.
9. Water Meter and/or Wastewater Tap installed by MPW.
10. Building Permits approved.

MPW does not approve a Building Permit for a service accessible property if it is a building that is served by a water/wastewater system extension which has not been accepted by SCDHEC for operation.

5. Existing single lot served by an alternative wastewater system (grinder pump).

The following outlines procedures for an existing single lot in an area being served by an alternative wastewater collection system.

1. Submit a completed Residential LOI to the MPW Engineering Department.
2. The Engineering Department reviews the LOI.
3. The Engineering Department requests grinder pump location, material submittals, and grinder pump maintenance agreement* for signature before quoting fees.
4. Customer submits required information to Engineering for approval.
5. Upon approval, MPW quotes fees for water and wastewater service.
6. Customer pays fees. Fees must be paid before MPW signs off on a building permit.
7. MPW installs water meter.
8. Sewer tap and grinder pump installation are inspected after construction.

*If a grinder pump is installed, the customer shall sign a maintenance agreement of understanding. Refer to MPW Policy 7.2 Grinder Pumps.

6. Residential houses requiring a fire suppression system.

The following outlines procedures for residential houses required to have a fire suppression system installed. It is assumed the residence is served by a standard 5/8" x 3/4" water meter.

1. Submit a completed Residential Letter of Intent indicating a fire line is needed to the MPW Engineering Department (Section 1 and Section 5.1 of the form must be completed). Submit the following information with the LOI:
 - a. Flow calculations from the fire sprinkler contractor or engineer.
2. The Engineering Department reviews the LOI and calculations. Depending on the flow needed, a separate fire line may be required for the residence.
3. The Engineering Department sends connection fees required for service, size of fire line, requirements for cross-connection/backflow, and a blank agreement* for signature if necessary.
4. Owner pays applicable fees and completed agreement is submitted to the Engineering Department.
5. A separate fire line account is established for the residence. Customer is billed the current monthly private fire line fee.
6. All cross-connection/backflow requirements must be met before MPW signs off on a TOMP Certificate of Occupancy.

*If a separate fire line/meter is required, the customer shall sign an agreement of understanding that failure to pay their domestic water bill may result in termination of service.

3.2: Commercial Development

This section outlines the requirements for each type of commercial development applying for service and/or requiring service connections.

A. Existing Commercial Buildings

A commercial unit/space/building that is undergoing a change of ownership, but the services provided remain the same.

The following outlines procedures for receiving service for an Existing Commercial Building such as, but not limited to, Retail, General Office Space, Medical, Dental, Veterinary, Salon, Restaurant, and Recreational.

1. Submit a completed Commercial LOI form to the MPW Engineering Department.
2. The Engineering Department reviews the information and ensures the building meets all MPW requirements where applicable:
 - a. Cross Connection Program
 - b. Industrial Pretreatment Questionnaire
 - c. Fats, Oils, and Grease Trap Program
 - d. Other
3. Customer pays applicable fees to MPW Account Management.
4. Water and wastewater service is turned on.

B. Commercial Building Upfit

A shell building or an existing commercial space being renovated for a different commercial usage (i.e. retail to restaurant; general office space to medical)

The following outlines the procedures for obtaining MPW's approval for a Building Permit, obtaining service and receiving approval for a Certificate of Occupancy.

1. Submit a completed Commercial LOI to the MPW Engineering Department.
Submit the following information with the LOI where applicable:
 - a. Floor plan showing designated use of all areas including internal plumbing plan.
 - b. Civil plan showing water and wastewater service connections and locations of backflow preventers and grease traps (if applicable)
 - c. Fire Department Proof of Coordination Letter (if applicable)
 - d. Completed Industrial Pretreatment Questionnaire (if applicable)
2. The Engineering Department sends the approval letter and fees to the Owner/Developer Representative listed on the LOI.
3. Once fees have been paid, MPW approves Building Permit.
4. Service is provided once fees have been paid and all conditions and inspections noted in the approval letter have been addressed.
5. Any inspections required by MPW Inspectors must be scheduled and completed prior to MPW signing off on a Certificate of Occupancy.

MPW may not approve a Building Permit for an upfit if it is a building that is served by a water/wastewater system extension which has not yet been accepted by SCDHEC for operation.

The Engineering Department reviews the information and ensures the building upfit meets all MPW requirements where applicable:

- e. Cross Connection Program
- f. Industrial Pretreatment Questionnaire
- g. Fats, Oils, and Grease Trap Program
- h. Other

C. Commercial Service Accessible

MPW defines this as undeveloped property (vacant lot/outparcel) with water and wastewater readily accessible. Project requires service connections.

The following outlines the procedures for obtaining MPW's approval for a Building Permit, obtaining service and MPW signing off on a Certificate of Occupancy (C/O).

1. The Owner/Developer Representative submits a completed Commercial LOI to the MPW Engineering Department
Submit the following information with the LOI where applicable:
 - a. Engineer's Cost Estimate
 - b. Floor plan showing designated use of all areas including internal plumbing plan
 - c. Civil plan showing water and wastewater service connections and locations of backflow preventers and grease traps (if applicable)
 - d. Fire Department Proof of Coordination Letter (if applicable)
 - e. Completed Industrial Pretreatment Questionnaire (if applicable)
2. The Engineering Department sends the approval letter and fees to the Owner/Developer Representative listed on the LOI.
3. The Owner/Developer pays Impact and Project Administration fees. Building Permit approved.
4. Prior to scheduling a preconstruction meeting with the MPW Inspector the following items must be completed:
 - a. Approved civil plans
 - b. Approved material submittals
 - c. All agency permits received
5. Upon completion of construction, the engineer requests a final inspection in writing with a copy of the final asbuilts to MPW Inspector. See MPW's Standard Technical Specifications for the asbuilt requirements.
6. MPW Inspector conducts final inspection and generates a final inspection punch list.
7. Service is provided and C/O approved only when the following conditions are met:
 - a. Backflow Certification (if required) submitted to MPW by a SCDHEC Certified Backflow Tester;
 - b. Grease Trap Inspection (if required);
 - c. All legal requirements met (if required);
 - d. All punch list items noted during final inspection completed and reinspected by MPW.
 - e. Final asbuilt drawings approved.
8. MPW accepts New Service Fees.
9. Water meter installed by MPW.
10. C/O approved.

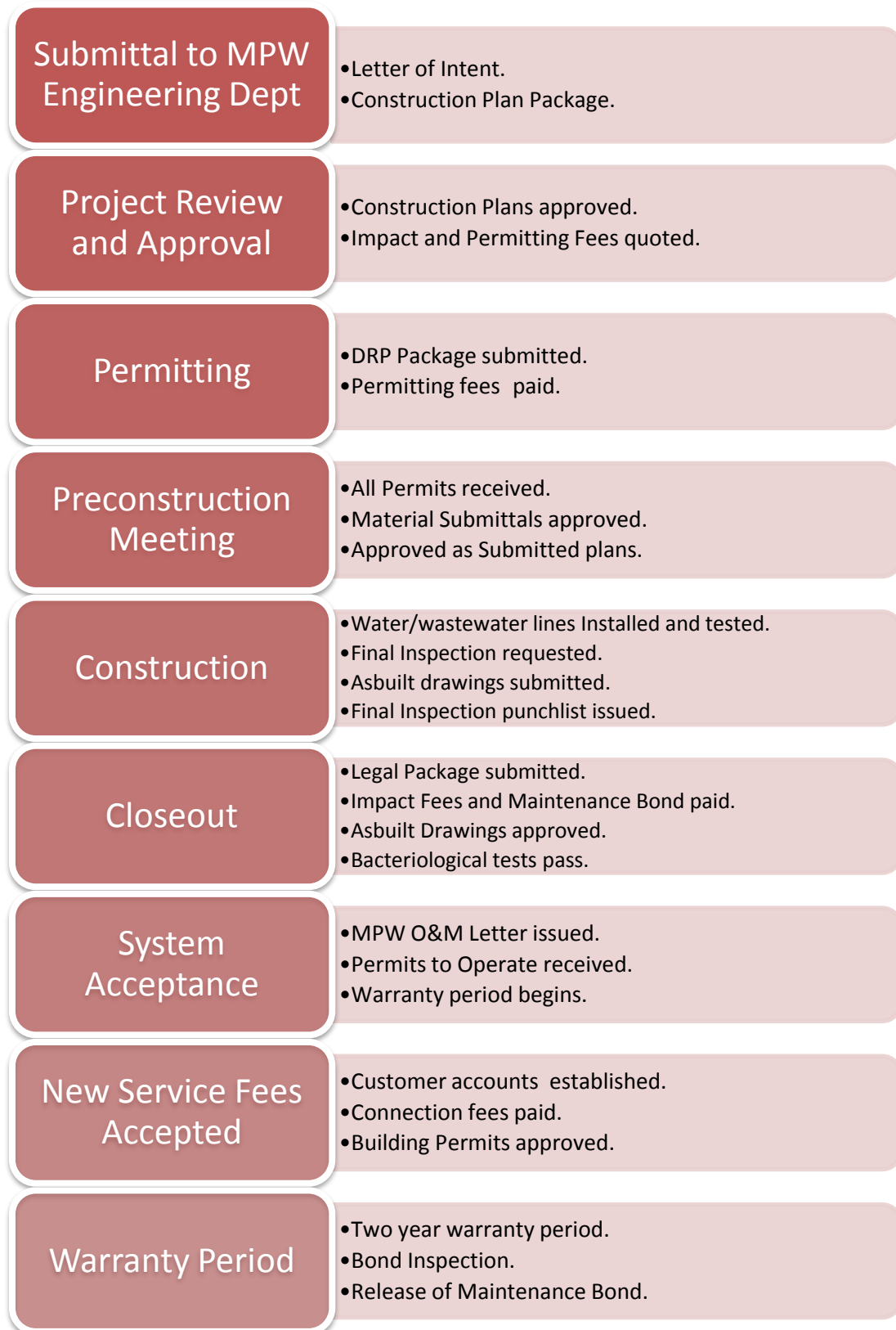
MPW does not approve a Building Permit for a service accessible property if it is a building that is served by a water/wastewater system extension which has not been accepted by SCDHEC for operation.

The Engineering Department reviews the information and ensures the building will meet all MPW requirements where applicable:

- f. Cross Connection Program
- g. Industrial Pretreatment Questionnaire
- h. Fats, Oils, and Grease Trap Program
- i. Other

<End Section>

System Extension Project Process Chart



Section 4.0 System Extension Projects

When water and/or wastewater main lines are required to be installed, MPW classifies this project as a system extension project. This section explains the requirements for a developer to design, construct and have accepted for service any water and/or wastewater extension to serve a commercial and/or residential development. A system extension project requires SCDHEC Construction and Operating Permits and is reviewed in accordance to MPW's Delegated Review Program (DRP) and system extension closeout procedure.

The following information outlines the process and sequence of events for a system extension project.

Section 4.0.1: Town of Mount Pleasant Annexation Requirements

Any property that has wastewater service available and is not within the Town limits of Mount Pleasant, will be referred to the Town of Mount Pleasant Planning Department to ensure compliance with the Town's Sewer Use Ordinance, Annexation for Sewer Service requirements. The Engineering Department cannot provide service until notification is received from the Town Planning Department that annexation requirements have been met.

4.1: Preliminary Plan Review and Approval

The developer has the option of submitting a preliminary plan review package for review. The Engineering Department conducts a courtesy review of the Letter of Intent (LOI) and preliminary plan and provides a Proof of Coordination letter. Approval of the preliminary plan is a conditional and conceptual approval and does not constitute final approval of the plan. The following outlines the procedure for MPW's preliminary plan review and approval for a system extension project.

1. Submit a completed LOI (Commercial or Residential) to the MPW Engineering Department.
2. Submit the following information with the LOI where applicable:
 - a. Preliminary Plan of the project including parcel boundaries.
 - b. Digital Boundary in Autocad DWG format. See Section 5, Digital Document Requirements.
 - c. The Engineering Department provides a Proof of Coordination letter.

Preliminary Plan Requirements:

1. Preliminary plans for water and/or wastewater extensions must be prepared by licensed engineer in South Carolina.
2. All documents should be submitted in Adobe PDF or Autodesk DWF format. Paper plans will not be accepted. Please refer to Digital Document Submittal Specifications in Section 5.
3. All preliminary plans shall contain the following information:
 - Proposed name of project, lot, and block numbers;
 - North arrow, graphic scale, written scale, and date, including the month, day, and year that the original drawing was completed, and the month, day, and year for each revision of the original drawing;
 - A vicinity or location map showing the relation of the property to the adjoining property and to all streets, roads, municipal boundaries, and recorded subdivision plats existing within one thousand (1,000') feet of any part of the property;
 - All existing streets, including streets of record (recorded but not constructed), on or abutting the tract, including the names and right-of-way widths. Lot and block numbers should be included if available;
 - Location and names of streams, lakes, swamps, and other water bodies. Areas subject to flood must be designated;

- Specify whether utility lines are in easements or public rights-of-way. Water and wastewater lines shall not be approved on back property lines or side property lines, unless it is determined by MPW staff to be in the best interest of MPW to have the lines located there. Easements are only accepted for utility lines in or adjacent to road rights-of-way. When lines are extended along back property lines or side property lines and MPW determines that ingress and egress is required, MPW may require that the property be deeded to MPW. MPW determines the width required. Recorded plats shall show this as being property owned by MPW. Water and wastewater facilities shall not be located in freshwater or saltwater wetlands, unless approved by SCDHEC Office of Ocean and Coastal Resource Management (OCRM), US Army Corps of Engineers, and MPW;
- Size, location, and type of materials of existing wastewater collection, water distribution, stormwater, or other underground facilities within the street or within the right-of-way of streets or roads adjoining the tract (only those that relate to interconnection of proposed facilities). Grade and invert elevations of existing gravity lines shall be shown. Location and elevation of existing water and wastewater lines shall be field verified. MPW is not be responsible for errors in any asbuilt Drawing or information;
- All other proposed utility easements and rights-of-way, including power, gas, telephone, TV cable, and storm drainage systems outside of road rights-of-way;
- Layout of streets, roads, alleys, and public walkways, including widths. Road names should be included if available;
- Designation of any land to be conveyed to MPW;
- Total number of lots and the use designation of each lot. A minimum of one REU per lot is assessed for permitting purposes. Additional capacity may need to be purchased when the lot is developed.
- Phased projects, and/or projects that are closely associated, shall be considered one project for determining the impact on MPW's system; and
- Layout of any fire protection system.

4.2: Construction Plans Submittal:

An LOI and construction plan submittal is required before applying for SCDHEC Water and Wastewater Construction Permits. The construction plan submittal includes the items listed below. When all of MPW's requirements have been met, MPW issues an approval letter for the construction plans. MPW's approval letter includes the Permitting and System Acceptance Fees for the project and any additional off-site improvements that the developer may be required to construct at their expense (See MPW Policy 5.5). Incomplete submittals are returned without review.

Construction Plan Submittal Requirements:

1. Completed LOI (Commercial or Residential) to the MPW Engineering Department.
2. Engineer's estimated cost of construction of water and wastewater.
3. Detailed design calculations for water and wastewater hydraulic loadings:
 - a. Design calculations for water system extensions must be based on a recent fire flow (no older than 12-months). Fire flow data used in preparing water system design calculations must be obtained from MPW. The design engineer shall submit a fire flow test request via email to the MPW Engineering Department (requests are submitted via email to engineering@mpwonline.com)
 - b. The fire flow test must be performed under "normal" system conditions (no "special" conditions such as manually energizing an extra booster pump at a nearby booster station is done during testing).

- c. Design water demands under fire flow conditions must include fire flow requirements (as specified in the Fire Department with jurisdiction's letter) plus 1/5 of the Maximum Instantaneous Demand (using Ameen's Tables);
 - d. MPW Engineering Department checks the impact of the proposed new extension on the existing system;
 - e. During the design review process MPW may help the Developer's engineer achieve a better design as it affects the existing systems – by adding another tie-in to existing mains, alternate pipe routing or size changes.
 - f. A schematic nodal map showing all junctions and pipes should be provided. Model results should be reported in a tabular format that clearly shows the following:
 - o Node identification;
 - o Nodal demands (both maximum instantaneous and fire flow);
 - o Pipe length, size, and friction coefficient;
 - o Node elevations;
 - o Head conditions and pump curves where applicable; and
 - o Connection point(s) to the MPW system with fixed node calculations.
4. Detailed construction plans for the water and wastewater systems. All comments and design modifications identified by MPW during the review of the preliminary plans shall be incorporated into the construction plan.

Construction Plan Requirements:

1. All documents should be submitted in digital format. Paper plans are not accepted. Please refer to Digital Document Submittal Specifications in Section 5.
2. Engineering firms shall use MPW's standard water and wastewater specifications as approved by SCDHEC.
3. All construction plans shall contain the following information:
 - Name of subdivision, date, north arrow, and graphic scale;
 - Name, registration number, seal of registered surveyor and engineer, and any referenced to information provided by others;
 - Names of owners of record for all adjoining land and all property boundaries, water bodies, streets, easements, utilities, and other such improvements which cross or form any boundary line of the tract being developed;
 - Exact boundaries of the tract of land being developed shown with bearing and distances;
 - Sufficient data to determine readily and reproduce accurately on the ground, the location, bearing, and length of every street and alley line, Lot line, easement, and boundary line, whether curved or straight;
 - Streets and alleys, rights-of-way, street names, and profiles of proposed streets showing materials for finished grades.
 - Rights-of-way or easement locations, widths, and purposes;
 - All dimensions shall be to the nearest one hundredth of a foot, and angles to the nearest minute;
 - Accurate description of the location of all monuments and markers;
 - Utility easements showing the accurate dimension to the nearest hundredth of a foot including notation of any limitations on such easements. All water and wastewater easements must be approved by MPW prior to final plan approval. Utility easements for gas, electric lines, telephone, and TV cable which cross or share proposed water and wastewater easements shall be designated where they will occur, and meet approval of MPW;

- Water and Wastewater profile sheets shall indicate elevations, finished grading, inlet and outlet inverts of each manhole, manhole rim elevation, grade, length, and type of pipe. Plan view of wastewater collection system shall include service locations, grade for service laterals, invert elevations of service taps, manholes, and station numbers at a minimum interval of 500-feet.
- The location and elevation of the benchmark to which contour elevations refer shall be shown when established benchmarks are within one (1) mile. All elevations shall be referenced to a USGS benchmark or a TBM established from a USGS monument. Elevations shall be stated relative to Mean Sea Level (MSL);
- Water line designs shall denote sizes and all special appurtenances, valves, tees, and bends, and, where necessary, detailed blowups of interconnections shall be shown with elevations designated. Location of fire hydrants and/or any special appurtenances provided in the water system design shall be shown. MPW may require that each individual dwelling or commercial unit have a separate water meter;
- Detailed pump station site layout on a separate sheet including proposed dimensions and delineation of boundaries;
- Designation of the owner of property of the pump station site;
- Proposed layout of force main including profiles, types of pipe, detailed discharge design, and, where necessary, air release valve design;
- Any other information considered by either the Developer or MPW to be pertinent to the plan review.

4.3: Permitting

A. South Carolina Department of Health and Environmental Control (SCDHEC) Delegated Review Program (DRP):

MPW is approved by SCDHEC for participation in its Water and Wastewater “Delegated Construction Permit Review Program.” This service is offered to Developers and Engineers as a means of expediting the current submittal process required to obtain a SCDHEC Permit to Construct. When all of MPW’s requirements are met, the engineer may submit the DRP package(s). SCDHEC accepts one submittal for water and wastewater projects under one application form where there is one project owner, using one engineer. SCDHEC issues separate construction permits once the projects are approved.

1. General Permitting Requirements:

SCDHEC Construction Permits:

1. MPW does not approve DRP submittals for system extensions connecting to a system being installed by a different developer until that system is permitted for operation by the SCDHEC. MPW must own and operate the system the developer will tie into.
2. MPW does not approve requests for building permits for commercial projects requiring system extensions until the system extension fees are paid and a completed SCDHEC DRP Construction Permit package is submitted and approved by MPW.
3. For mixed use projects, MPW approves a request for building permits only if there is a single owner and the requirements outlined above are met.

2. MPW Conditional Permit to Construct:

A MPW “Conditional Permit to Construct” is required with the DRP submittal package and is issued once the DRP package is approved. Prior to MPW issuing a “Conditional Permit to Construct”:

1. MPW Permitting Fees must be paid.
2. MPW’s Water and Wastewater contracts must be completed and returned.
3. All plan review requirements and special conditions identified by MPW must be satisfied.

The following items must be submitted as part of the Water/Wastewater DRP packages for review and forwarding to SCDHEC (Refer to SCDHEC website www.scdhec.net/water for additional information pertaining to the DRP Program):

1. Current SCDHEC application fee.
2. One digital copy of the approved construction plans should be submitted for MPW’s records.
3. The original SCDHEC Construction Permit Application properly completed with one (1) copy (MPW Water System Number – SC1010002, MPW NPDES Number – SC0040771).
4. Two (2) copies of the signed and sealed construction plans to include with the DRP package.
5. One (1) copy of the appropriate design calculations. Wastewater: Design flow (based on R.61-67, Appendix A) and pump station calculations, pump curve, etc. Water: Recent flow test from a location near the tie-on site along with a copy of design calculations indicating the pressure maintained in the distribution system during instantaneous demand, during fire flow and flushing velocities achieved. Also, if applicable, the number and types of service connections.
6. One (1) copy of a detailed 8-1/2" x 11" location map, separate from the plans.
7. One (1) copy of recorded easements, unless the project owner has the right of eminent domain.
8. Documentation that SCDHEC’s Coastal Zone Consistency requirements have been met
9. SCDHEC’s Water Quality Division permit for placement in navigable water, and other Agency approvals.
10. The 208 Plan Certification from the BCD Council of Governments (wastewater systems only).

B. Residential Building Permits

MPW does not sign off on TOMP or Charleston County building permits or provide service for residential subdivisions until the project has been completely closed out per Section 4.4 of MPW Guidelines for Development.

At MPW’s discretion, if the following conditions are met, MPW will release a TOMP or Charleston County building permit.

1. Request must be made by the developer of record and not the homebuilder.
2. Impact fees paid in full for the total number of lots in the proposed subdivision.
3. MPW may only allow building permits for up to 10% of the total number of lots (rounded down) in the proposed subdivision.
4. Verification of approval received by the Fire Department.
5. Project must have SCDHEC permit to construct and/or construction must be substantially complete as determined by MPW.
6. MPW does not accept connection fees and service is not provided until the project receives the SCDHEC permit to operate for water and/or wastewater.

C. South Carolina Department of Transportation (SCDOT) Encroachment Permits

SCDOT utility encroachment permit submittal packages shall be prepared by the project engineer and submitted to MPW. MPW submits the permit package to SCDOT through the agency's online submittal process. It is the engineer's responsibility to address any comments from the SCDOT on behalf of MPW. The SCDOT issues the encroachment permit to MPW.

Submittal Requirements for the SCDOT encroachment permit:

1. Provide type and location of encroachment.
2. Civil plans in accordance to SCDOT guidelines.
3. Traffic control plans in accordance to SCDOT guidelines.
4. All documents shall be submitted in Adobe PDF format in accordance with SCDOT's requirements.

Once MPW receives the SCDOT encroachment permit, the Developer and Contractor is required to complete MPW's Standard Encroachment Agreement. The preconstruction meeting cannot be scheduled until this agreement is completed and returned to MPW.

4.4: Construction Procedures

Prior to scheduling a preconstruction meeting of water and/or wastewater system extensions the following is required:

1. SCDHEC Construction Permits.
2. SCDOT Encroachment Permit and MPW Encroachment Agreement.
3. Town Encroachment Permit (if applicable).
4. Any additional applicable regulatory agency permits.
5. MPW approved materials submittals.

A. Preconstruction Meeting:

No construction will begin until the preconstruction meeting is held and MPW gives authorization to proceed. Prior to scheduling the preconstruction meeting, MPW must be provided with the name and address of the utility contractor for verification of necessary licenses.

The purpose of this meeting shall be to outline construction inspection and project closeout procedures. A preconstruction meeting shall be scheduled by the design engineer once the SCDHEC Construction Permit(s) has been issued. The engineer shall make arrangements with MPW and those public agencies charged with the enforcement of the provisions of this document to conduct the preconstruction meeting. Reasonable advance notification to MPW to schedule the meeting should be allowed. In most cases, a minimum of two (2) days is necessary to verify that all requirements necessary to go to construction have been met. At a minimum, attendance shall include representatives of the following: utility contractor and engineer.

B. Contractor Responsibilities:

Contractor must be licensed by the State of South Carolina, and may not perform work outside of their licensed capacity. General contractors or subcontractors who have not previously performed work for MPW may be required to submit references and past project history in order for MPW to determine the competency of the contractor.

Refer to MPW's latest Water and Wastewater Specifications for all construction procedures.

C. Engineer Responsibilities:

Engineer shall be responsible for ensuring that the water/wastewater system extensions are constructed in accordance with MPW Standard Specifications and SCDHEC Construction Permits and regulations.

At the MPW Inspector's discretion, MPW may require the engineer to submit a weekly field observation report.

Refer to MPW's latest Water and Wastewater Design Standards and Water and Wastewater Specifications for all construction procedures.

4.5: Project Closeout

The developer is required to close out the system extension project in accordance to the following procedure prior to MPW issuing the Operation and Maintenance (O&M) Acceptance letter for the water and wastewater systems. The O&M letter is included in the engineer's submittal package to SCDHEC when applying for SCDHEC Operating Permits.

The Engineering Department offers a closeout meeting to the developer, engineer, and contractor when the project is approaching completion. Contact the Engineering Department to schedule this meeting.

A. Upon completion of construction:

1. The engineer shall request a final inspection in writing with a copy of the final asbuilt and easement plats to MPW Inspector. Refer to MPW's latest Water and Wastewater Design Standards and Water and Wastewater Specifications for asbuilt and plat requirements.
2. The MPW Inspector conducts final inspection and generates a final inspection punch list listing all field and drafting discrepancies.

B. Acceptance of System for Operation and Maintenance:

In order for MPW to accept the system for operation and maintenance the following items must be completed:

1. Punch list items addressed and approved by MPW Inspector.
2. Project engineer's certification that the system has been constructed in accordance with plans and specifications, and that the air test and mandrel pull for gravity wastewater collection lines, the hydrostatic pressure tests for force mains, and pressure tests for water mains have been satisfactorily performed. Copies of these tests shall be furnished to MPW.
3. Executed Contractor's Affidavit and Final Waiver of Lien.
4. Contractor Guaranty for not less than 24-months after receiving operating approval.
5. Final asbuilt drawings and easement plat in accordance with Section 5 of MPW Guidelines for Development
6. Required paper copies of easement plat for recording at the Charleston County RMC Office.
7. Twenty-four month Maintenance and Repair Bond paid to MPW.
8. Pump Station Elevation Certification and Standby Emergency Generator fee if applicable.
9. Pump Station Landscape Maintenance Agreement and/or Pump Station Fencing Maintenance Agreement if applicable.
10. Release by other agencies, such as State or County, applicable to encroachment permits or other liabilities.
11. Project Completion Questionnaires for water and/or wastewater extensions.
12. Legal Requirements:

- a. Execution of easements, titles and miscellaneous legal documents necessary for the conveyance of the water and/or wastewater facilities to be maintained and operated by MPW. The Developer must use MPW's standard legal documents. These original legal documents must be obtained from MPW. Copies and retyped documents are not accepted. Standard legal documents are not accepted if they have been retyped or altered without prior approval of MPW's Engineering Department Manager and Attorney.
 - b. A minimum fee of \$600.00 or actual legal cost, whichever is greater, is due for legal expenses resulting from involvement of MPW's attorney (if applicable).
 - c. For projects where the Developer is leasing the property, the property owner must execute all legal documents.
 - d. Attorney's Letter of Opinion
 - e. Title to Water and Wastewater Systems and Grants of Easement must be recorded at the Charleston County RMC Office. The original document must be submitted to MPW after being recorded and prior to acceptance of meter connection fees. MPW records utility easement plats, Grants of Easement and Title to Real Estate documents on the Developer's behalf.
13. MPW does not schedule bacteriological test until the closeout submittal has been received and approved, and all punch list items are completed to the satisfaction of the MPW Inspector.
14. MPW approved bacteriological tests.
15. Once the bacteriological tests pass, payment of construction water bill and/or any fees levied for illegal use of the systems (if applicable).

C. Issuance of MPW Water and Wastewater System Acceptance Letter

Once all closeout requirements have been met, MPW issues the Water and/or Wastewater System Acceptance Letter. The letter is to be included in the engineer's submittal package to SCDHEC Lowcountry EQC Charleston for SCDHEC operating permits.

D. System Operation:

MPW cannot accept connection fees (new account, security deposits, water meter connection, wastewater maintenance, wastewater tap inspection) or provide service until SCDHEC has permitted the system for operation. MPW may conduct a "courtesy" wastewater tap inspection prior to MPW's receipt of a SCDHEC Wastewater System Operating Permit in order to facilitate construction.

E. Partial Water and/or Wastewater System Extensions:

MPW does not accept partial water and/or wastewater system extensions. However, if the Developer receives written approval from SCDHEC, MPW does accept water and wastewater systems separately under the following conditions:

- a. An additional project administrative fee is due for the remaining system at the time of closeout.
- b. The original warranty period and maintenance bond for the first system turned over must be extended to coincide with the warranty/bond expiration date for the remaining system.

Section 4.6: Maintenance Bond Inspection:

The Developer is liable for any/all repairs of system deficiencies including repair of all facilities damaged during phases of construction, paving, drainage, and installation activities for a period of 24-months from the date the SCDHEC Operating Permits are issued or until site construction is complete. MPW notifies the Developer by certified letter listing any deficiencies noted during the final bond inspection. Upon correction of the system deficiencies by the Developer and approval of the repairs by MPW, MPW refunds the total bond amount to the Developer with interest earned during the escrow period. In the event the Developer fails to correct the deficiencies within 30-days of notification from MPW, the bond is forfeited by the Developer and used by MPW to make the necessary repairs to correct system deficiencies and any remaining funds are returned to the developer.

Section 4.7: Alternative Wastewater Collection Systems and Extensions:

Whenever possible, wastewater collection systems shall be conventional gravity and shall be built in accordance with the latest revision of the Wastewater Collection System Specifications developed by MPW. Any grinder pump connection to a force main is considered an alternative wastewater collection system. Alternative wastewater collection systems are not eligible to be reviewed in the MPW DRP program. The developer is required to obtain a SCDHEC construction permit through SCDHEC's Standard Submittal Process. In addition, the all conditions in MPW's Policy 7.2 – Grinder Pumps (Alternative Collection System) must be met.

The following information outlines the process and sequence of events for a system extension project for an alternative wastewater collection system.

- A. The developer engineer complies with Section 4.1 and 4.2 of this section.
- B. Upon Construction Plan Approval, MPW issues the Permitting and System Acceptance Fees, grinder pump maintenance agreement for signature, and any additional off-site improvements that the developer may be required to construct at their expense.
- C. Permitting Fees are paid and the signed grinder pump maintenance agreement is submitted.
- D. MPW provides the approval letter agreeing to be responsible for the operation and maintenance (O&M) of the systems. The engineer includes this letter in the Standard Submittal package for construction permits to SCDHEC.
- E. Upon receipt of SCDHEC construction permits, the developer engineer complies with Section 4.4, 4.5, and 4.6 of this document.

<End Section>

Section 5.0 Digital Document Submittal Requirements

Digital Document Submittal:

All digital document files shall be submitted on any acceptable media to MPW, such as CD, DVD, USB Flash Drive, or on MPW Sharepoint site, if approved for connection. Any physical media submitted, such as a CD, will not be returned. Do not submit by E-mail.

5.1 Documents for MPW Review

5.1.1 Construction Documents (Civil or Site Plans, Letters of Intent, Calculations, Cost Estimates, Plumbing Plans, Letters, or other documentation):

1. Submit one .PDF file for each document.

5.2 Documents for Project Closeout

5.2.1 For Closeout Review:

1. Submit one .PDF file of As-Built drawing for water and wastewater.
2. Submit one .PDF file of any plats (Preliminary Subdivision Plat, Easement Plat) as applicable.

5.2.2 For Final Submittal. Once final As-Builts have been approved by MPW, submit:

5.2.2.1 For As-Built Drawings:

1. One digital .PDF file (not scanned) of As-Built Drawings.
2. One .PDF file of As-Built drawings signed by surveyor and engineer of. File can either be scanned or digital file with electronic signatures.
3. One AutoCAD .DWG file oriented in State Plane Coordinates.

5.2.2.2 For Plats (as applicable to project):

4. One digital .PDF file (not scanned).
5. One AutoCAD .DWG oriented in State Plane Coordinates.

5.3 File Requirements:

5.3.1 Adobe .PDF Requirements:

1. File must be created digitally from software of origin, such as AutoCAD or Microsoft Word.
2. Clearly indicate the type of drawing being submitted, such as Construction Drawing, As-Built Drawing or Plat.
3. File must be multi-page document, not multiple single-page files.
4. Document must be print ready, to scale, to Arch D size (36" x 24"), with all drawing information within proper borders.
5. Ensure that all drawings are in a ready to read orientation. Generally, 36 x 24 sheets will be in landscape orientation.

5.3.2 AutoCAD .DWG Requirements:

1. In drawing Model space, all drawing features shall be drawn to full scale (1:1) in real world coordinates, with true north orientation. Features shall be spatially referenced to the MPW's GIS projected coordinate system: North American Datum 1983 (NAD83), South Carolina State Plane, FIPS 3900; Units: International Feet.
2. Provide Paper space layouts for Water, Sewer and Pump Station drawings as applicable to the project. A separate drawing page is required for each. The layouts shall be set up for monochrome plotting to scale to Arch D size paper (36" x 24") in landscape orientation. Suitable borders, title block, sheet numbers, revision block, scale bar, north arrow, legend, vicinity map and all other pertinent information should be included.
3. All accompanying files shall be submitted including all DWG, XML, SHX, TIFF, BITMAP, JPEG, CTB (Plot Style Table), all External Reference Files, Font Files, Texture Files, Files from Data Links, Photometric Web Files and any other files which are included in the CAD Drawing. Use AutoCAD "etransmit" or other method to ensure all files are provided.
4. AutoCAD Layers: All water and wastewater features shall be grouped together into layers. Layer names shall be intuitive and descriptive of the objects on that layer. Separate layers will be required for
 - Water mains
 - Water Valves
 - Fire Hydrants
 - Water Services
 - Water Meters
 - Water Fittings
 - Gravity Wastewater Lines
 - Wastewater Manholes
 - Wastewater Force Mains
 - Lift Stations
 - Wastewater Valves
 - Wastewater Services
 - Wastewater Fittings
 - Private Water Lines
 - Private Wastewater Lines
5. Show size and type of material of all lines and mains near the features on the drawing.
6. Show Wastewater Manhole elevations, station numbers, and ID # near each manhole feature.
7. Clearly show and indicate what features are newly installed or existing.
8. Data or Notes to be shown on Drawings:
 - Project Name
 - Drawing Date
 - Name and Address of:
 - Owner or Developer
 - Utility Contractor
 - Surveyor
 - MPW Project Number in Title Block.
 - DHEC Permit Number(s).
 - Horizontal and Vertical Datum used in the survey.
 - Date of Completion of Water and Wastewater construction.
 - Coordinate Table of water and wastewater features
 - Include Northing, Easting, Station Number and Description
 - Summary Table of Water and Wastewater Features installed for project.
 - Include Quantities, Sizes and Materials.
 - Manhole and Gravity Line Table
 - Include Rim and Invert Elevations (accurate to within +/- one hundredth of a foot), and Slope of Lines.

9. Show station numbers at all valves, manholes, fire hydrants, blowoffs, water services, wastewater services, air release valves, bends, tees, reducers and all other fittings.
10. Show private services, including sizes and materials, all the way to the building connection.
11. All CAD lines shall be snapped to end features. Lines shall be continuous starting at one feature and ending at another feature. Water and force main lines will start and stop at fittings but be continuous through pipe deflections, lateral and service connections. Gravity lines will start and stop at manholes but be continuous through laterals.
12. Show all corresponding Street Addresses, Unit Numbers, Tax Map Numbers, Block Designations and Lot Numbers for each parcel shown on the drawings, including Wastewater Pump Stations.
13. Each non-line feature shall be represented by an AutoCAD block whose insertion point is located at the center point of the structure's As-Built location.
14. All polygons must close without overlaps. All lines must be snapped at their endpoints and free of gaps or dangles. Annotation text that breaks the continuity of lines should be shifted out of the way of the line.
15. Show all street centerlines with street names, rights-of way lines with width indicated, property lines, building footprints, curbing, edge of pavement, drainage structures, easements, and other pertinent site features.
16. Show all MPW easements, property being deeded to MPW and access roads to wells and pump stations.
17. Water lines and force mains located within public rights-of-way shall be referenced to the center of roadway or back of curb. Elevation must be provided at any change in slope and/or 500-foot minimum thereafter. These measurements shall be accurate to within +/- one foot and provided every 50-linear feet on straight sections and 25-linear feet on curves and sufficiently dimensioned to provide location of such mains. The surveyor shall verify their drawings by utilizing the tracing wire and As-Built drawings.
18. All roads shall have the center line shown with station numbers beginning at 0+00 at the phase or project boundaries.
19. For Wastewater Pump Stations Only: On a separate drawing sheet, provide:
 - Detailed plan view of the pump station site including the locations and layout of all mechanical, electrical, and instrumentation equipment; piping and conduits; structures; and other facilities.
 - Profile view of the wet well and above ground piping showing pumps, piping, instrumentation, alarms and all other equipment, including pipe materials, sizes and wet well coatings. Show the elevations of wet well top, wet well bottom, influent pipe(s), pumps off, lead pump on, lag pump on, and high water alarm.
 - Completed pump station data sheet.

PUMP STATION DATA:	
1. ADDRESS	_____
2. POWER COMPANY SERVED BY	_____
3. POWER COMPANY METER NO.	_____
4. POWER COMPANY POLE/PAD NO.	_____
5. DESIGN CAPACITY	_____ GPM
6. WET WELL VOLUME	_____ GALLONS _____ FT. DIA.
7. CONTROL ELEVATIONS:	
a. TOP EL.	_____
b. INFLUENT EL.	_____
c. BOTTOM EL.	_____
d. PUMP OFF	_____
e. LEAD PUMP ON	_____
f. LAG PUMP ON	_____
g. HIGH WATER ALARM	_____
8. STATIC HEAD	_____ FT.
9. PUMP MODEL	_____
10. PUMP SERIAL NOS.	_____
11. PUMP DESIGN POINT	_____ GPM @ _____ TDH
12. PUMP H.P.	_____ PHASE _____
13. PUMP IMP. NO/DIA.	_____
14. PUMP VOLTS	_____ AMPS _____
15. PUMP SHUT-OFF HEAD	_____ FT.
16. PUMP SPEED	_____ RPM

20. The following statement shall appear on all As-Builts and shall be signed by electronically or on scanned paper copy by the engineer and show his registration number:

"It is my opinion that the water and/or wastewater utilities serving this project were constructed substantially in accordance with the plans and specifications approved by the Commissioners of Public Works of the Town of Mount Pleasant, South Carolina. It is further my opinion that the contractor used acceptable construction practices. Any deviations between the system As-Builts and the plans and specifications will not impact the operability, capacity, or capability of the system."

Engineer's Name and Registration Number.

21. The following statement shall appear on all As-Builts and shall be signed by electronically or on scanned paper copy by the surveyor and show his registration number:

"The dimensions shown on the As-Built Drawings were obtained using good surveying procedures. The horizontal dimensions shown are within the \pm one foot tolerance. Vertical dimensions on gravity wastewater pipe are accurate to within \pm one hundredth of a foot."

Surveyor's Name and Registration Number.

Easement Plats (AutoCAD):

1. In drawing Model space, all drawing features shall be drawn to full scale (1:1) in real world coordinates, with true north orientation. Features shall be spatially referenced to the MPW's GIS projected coordinate system: North American Datum 1983 (NAD83), South Carolina State Plane, FIPS 3900; Units: International Feet.
2. Provide Paper space layout for the easement plat drawings. The layout shall be set up for monochrome plotting to scale to Arch D size paper (36" x 24"), in landscape orientation, or other size as approved by MPW. Suitable borders, title block, revision block, scale bar, north arrow, legend and all other pertinent information should be included.
3. All polygons must close without overlaps. All lines must be snapped at their endpoints and free of gaps or dangles. Annotation text that breaks the continuity of lines should be shifted out of the way of the line.
4. All CAD lines shall be snapped to end features. Lines shall be continuous starting at one feature and ending at another feature.
5. Easements to be dedicated to MPW must be exclusive per MPW's standard Grant of Perpetual Easement document. Water and/or wastewater easements must be clearly identified as an MPW easement, and must state width and type of easement (i.e.: 7.5' MPW Water Easement). The plat shall be titled MPW Water or Wastewater Easement Plat (whichever is applicable). Platting information required for easements or real property to be dedicated to MPW shall be as follows:
 - a. All platting information shall conform to the Town Subdivision Regulations or Charleston County requirements, whichever is applicable;
 - b. Names and widths of all streets within or on the perimeter of the subdivision, with accurate dimensions in feet (hundredths) and showing angles to streets, alleys, and lot lines;
 - c. Distance and bearing of all easement lines.

d. Provide the following signature block on the easement plat:

APPROVED PLAT

David P. Niese, P.E.

Date: _____

Commissioners of Public Works of the Town of Mount Pleasant, South Carolina.

APPROVAL ONLY FOR WATER AND WASTEWATER UTILITIES EASEMENT ACQUISITIONS

<End Section>