

Dorr-Leighton Wastewater Authority

Development Guidance Manual

May 2019



Section 1.0 General Information

The purpose of these guidelines is to provide for the orderly development of wastewater systems that meet the growing needs of residents and businesses in the DLWA 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 handled professionally ensuring quality system design and construction is guaranteed. Consistent design standards and the application of this professional process ensures that any wastewater system installed will provide years of low-cost maintenance and excellent service to the customers in the DLWA and developers of the area.

This document is intended to serve as a guideline for Developers, Consulting Engineers, Business Owners and Contractors who intend to connect to the Authority's infrastructure. If a situation arises that is not detailed within this manual and specific guidance for decision-making is not readily apparent, the Authority's Engineer will assist in developing a workable solution for mutual benefit of all parties.

These guidelines are periodically updated, and contact should be made with DLWA's Engineer on a frequent basis to ensure that the most current guidelines are applied prior to proceeding with planning and designing a project or wastewater system extension.

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 DLWA's wastewater system.

2.1 Administration/Project Review Fees:

Review/Inspection fees are assessed against new development to recover project oversight expended by the Authority for wastewater infrastructure expansions installed by others. Fees are reviewed annually during the DLWA budget process to reflect actual costs expended for this review and any project oversight that was necessary. The fees are collected at the beginning of a project and are placed in escrow to cover the Authority's oversight costs for plan reviews, inspections, and final closeout of the project. Itemized labor invoices are used to document the use of the escrowed funds and to also determine the final project fee. An estimated project cost is required from the Developer when applying for the project connection permit, which is verified by the DLWA Engineer. If the project cost is not considered reasonable after the DLWA Engineer's review, the project costs will be negotiated until a fair and reasonable cost is determined as the basis for the required escrow fee. DLWA collects and escrows 5% of the estimated project cost to pay for the Authority's project plan reviews, inspections, testing, witnessing and close out costs at the hourly rates published on the DLWA fee schedule. If the project requires additional funding to complete the work, the Developer/Contractor/Owner shall be invoiced before the Authority will accept the final project. Likewise, any money remaining in escrow is reimbursed when the project is accepted by the Authority. When planning a project, the Developer/Contractor/Owner should contact DLWA's Engineer or visit the Authority's website (www.dlwwa.org) for the current review fee schedule.

2.2 How Connection and Trunkage Fees are Calculated:

DLWA uses Residential Equivalent Units (REUs) to determine a project's connection and trunkage fee. One REU is equal to 150 gallons per day (4500 gallons/month) of flow discharged to the System and is based on general water use for a single-family residence in the DLWA Service Area. Calculation of REUs are based on guidelines shown in Table 2.2 and on adopted REU application policies.

A Trunkage fee is assessed to cover capital expended by the Authority to install piping and pumping stations to transport wastewater to the Authority's Treatment Facility. The DLWA System is divided into five (5) defined Sewer Districts with varying trunkage charges based on size of pipe and other engineering factors. Simplistically, the determined REU factor for the project is multiplied by the assigned trunkage fee depending in which District the project is built.

A Connection fee is assessed to cover capital expended by the Authority to install wastewater treatment equipment in the DLWA Facility receiving the customer's wastewater for treatment and discharge back into waters of the State. Like the trunkage fee, the connection fee is based on the number of REU's assigned to the project multiplied by the current connection charge. When the customer pays this fee, a portion of the designed treatment capacity becomes available for their use.

Table 2.2 - Guidelines for Determining Residential Equivalency Units

Type of Connection	Gal/Day	REU	Type of Connection	Gal/Day	REU
Residential: Single Family Lot =	150	1	Schools: # of Students =	20	≥ 1
Condominiums, Townhomes: Per Unit =	150	1	Laundries self-service: # of Machine =	225	≥ 1
Apartments: One Bedroom =	75	0.5	Factories: # of Employees (no showers) =	20	≥ 1
Two or more Bedrooms =	150	1	# of Employees (w/showers) =	35	
Duplex: Per Unit =	300	2	Hotels/Motels: # of Rooms =	60	≥ 1
Bars: Each Employee =	20		Nursing Homes: # of Beds =	165	≥ 1
Each Seat (excludes restaurant) =	30	≥ 1			
Food Service Operations: Each Employee =	20		Shopping Centers: # of Retail Units =	75	≥ 1
Each Seat (varies by hours of operation) =	35-75	≥ 1			
Camps: # of Sites =	50	≥ 1	Offices: # of Employees =	20	≥ 1
# of Sites (with Dump Station) =	75				
Churches: Each Sanctuary Seat (No Daycare) =	5	≥ 1			

1. For projects other than single-family residential subdivisions, fees for connecting undeveloped parcels are typically assessed at one (1) REU per acre until a final use determination is made. As an example, multiple single-family homes on the parcel versus a large manufacturing facility would impact the total REU's assigned when the connection application is created.
2. If a category is not covered by either the DLWA REU Use Policy or REU Table, or there is a conflict of some kind, the DLWA Engineer will assign the REU(s) based upon best judgment.
3. Facilities not falling within the above listed categories may submit actual flow information, which may be accepted by DLWA for comparative purposes under the DLWA REU Use Policy.

2.3 Schedule of Required Fees

Trunkage and Connection fees are evaluated annually during the budget adoption process and are subject to change. A current fee schedule is available in the Appendices of this document and on the DLWA website (www.dlwwa.org) or at the DLWA Office, 4451 12th Street, Suite A, Wayland, MI 49348.

2.4 Maintenance Bond

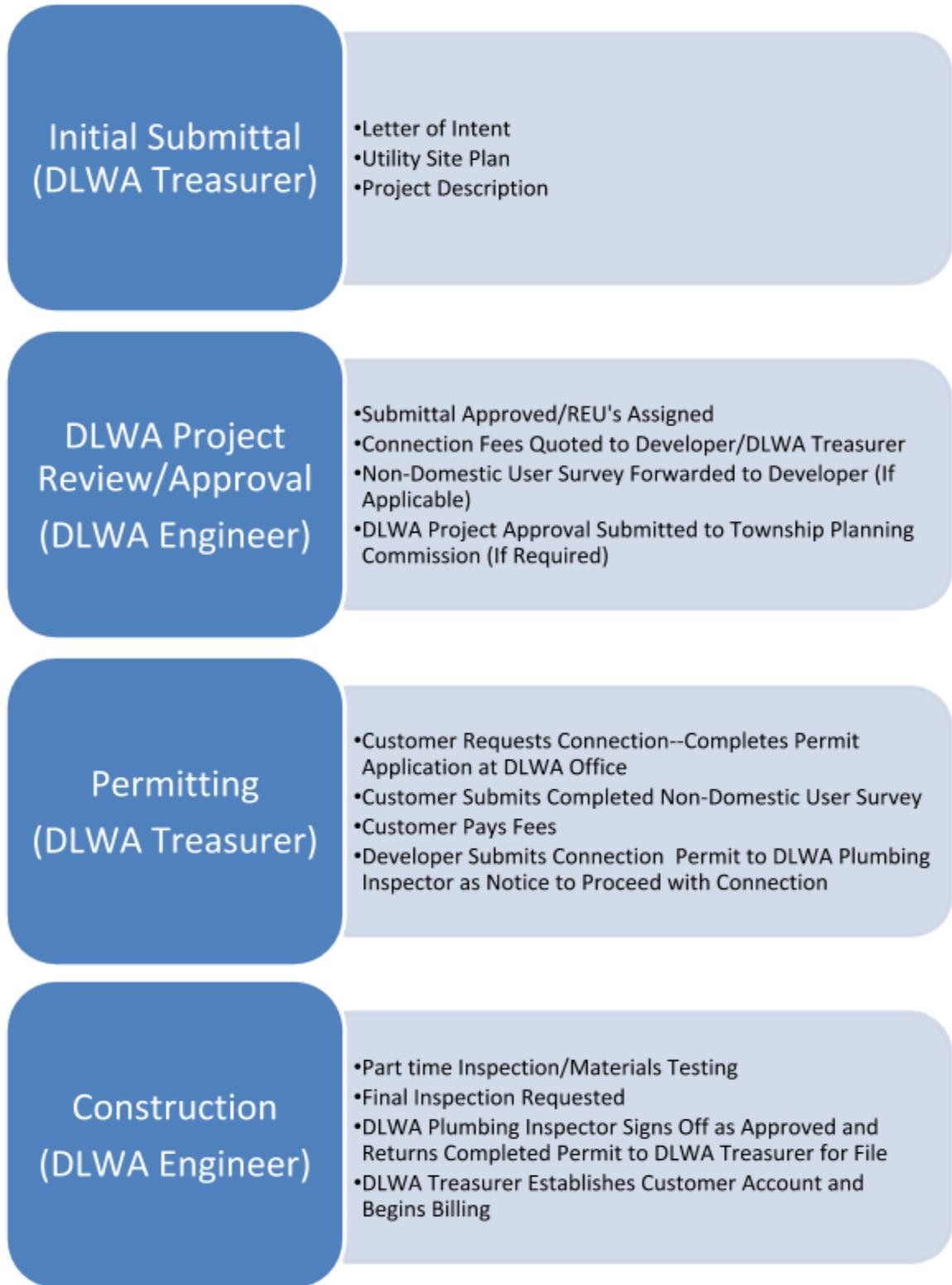
A Maintenance Bond is required for new sewers and extensions to cover any potential issues with the new piping for two (2) years after the line is in service. The amount of the bond shall be determined based on the cost of the newly installed wastewater system as approved by the DLWA engineer at the time of project closeout and is payable to the DLWA.

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 MDEQ Part 41 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 line is placed in service. DLWA 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 DLWA, DLWA shall refund the total bond amount to the Developer. In the event the Developer fails to correct the deficiencies within 30-days of notification from DLWA, the bond shall be forfeited by the Developer and used by DLWA to make the necessary repairs to correct system deficiencies.

Project Process Flow Chart



Section 3.0: Development Projects

The first step required for any development project in the DLWA Service Area is a Letter of Intent (LOI) submitted to the DLWA Treasurer along with a utility site plan and project description. These documents enable the Authority to determine how any new connections or customers will impact the System and if adequate capacity exists to properly serve the project. The initial submittal is then transmitted to the DLWA Planner/Engineer for further evaluation and follow up discussions with the Developer/Contractor if needed. After defining the scope of the project, the Engineer may schedule a Design Review meeting with the Developer to further discuss details about the project before deciding how it should be treated and how REU's must be assigned for billing.

3.1: Residential Development

This section outlines requirements for different types of residential development applying for service and/or requiring a new service connection.

A. Residential Service Accessible/Undeveloped Property/Wastewater Service Readily Accessible in existing Sewer District:

1. Existing residential home currently on a well and/or septic tank needing to connect to the DLWA System due to a failed or undersized septic system requires that
 - Customer meets with the DLWA Treasurer to receive a Connection Permit Application
 - Customer completes the Permit Application and pays Connection Fee
 - Customer delivers the completed Permit Application to the DLWA Plumbing Inspector for follow up
 - Customer installs new lateral and notifies DLWA Plumbing Inspector when final connection to main line sewer is ready to be made and inspected
 - DLWA Plumbing Inspector completes Permit Application form and approves connection. Signed form is returned to the DLWA Treasurer for filing and account set up
 - Billing commences at next quarterly billing cycle.
2. Existing single lot with wastewater service readily accessible requires that
 - Customer meets with the DLWA Treasurer to receive a Connection Permit Application
 - Customer completes the Permit Application and pays Connection Fee
 - Customer delivers the completed Permit Application to the DLWA Plumbing Inspector for follow up
 - Customer installs new lateral and notifies DLWA Plumbing Inspector when final connection to main line sewer is ready to be made and inspected

- DLWA Plumbing Inspector completes Permit Application form and approves connection. Signed form is returned to the DLWA Treasurer for filing and account set up
- Billing commences at next quarterly billing cycle.

3. Splits of existing lot into two or more lots requires
 - Submittal of a completed LOI to DLWA Treasurer along with the following information:
 1. Project Cost Estimate
 2. Utility Site Plan showing connections to existing infrastructure
 3. Preliminary subdivision plat
 4. Project Description.

Once the complete package of information has been submitted, it will be forwarded to the DLWA Engineer for evaluation and review.

- The Engineer will determine where wastewater service is available for the parcel(s) and where the best connection(s) can be established. The Engineer will assign REU's to the request and determine the Connection fee required to complete the project and forward the REU/Connection analysis to the DLWA Treasurer and Customer with instructions on how to proceed.
 - The proposed project is submitted to the appropriate Township Planning Commission for approval (if required).
 - The Planning Commission Secretary notifies DLWA Treasurer and the Customer that the project is approved and can proceed to Construction.
 - The Customer meets with the DLWA Treasurer to receive a Connection Permit Application.
 - The Customer completes the Permit Application and pays the Connection Fee.
 - The Customer delivers the completed Permit Application to the DLWA Plumbing Inspector for follow up.
 - The Customer installs new lateral and notifies DLWA Plumbing Inspector when final connection to main line sewer is ready to be made and inspected.
 - The DLWA Plumbing Inspector completes Permit Application form and approves the final connection. The signed form is returned to the DLWA Treasurer for filing and account set up.
 - The Customer's billing commences at next quarterly billing cycle.
4. Existing single lots served by an alternative wastewater system (grinder pump) must:
 - Submit a LOI to DLWA Treasurer with the following information
 1. Grinder pump location/Site Elevations
 2. Equipment Specifications/Shop Drawings

3. Project Description

4. Project Cost Estimate.

- The information is forwarded to the DLWA Engineer to determine the service and connection possibilities that meet the specifications of the grinder pump station. The Engineer assigns REU's to the request and determines the Connection fee required to complete the connection and forwards the REU/Connection analysis to the DLWA Treasurer and Customer with instructions on how to proceed.
- The Customer meets with the DLWA Treasurer to receive a Connection Permit Application.
- The Customer completes the Permit Application and pays Connection Fee.
- The Customer delivers the completed Permit Application to the DLWA Plumbing Inspector for follow up.
- The Customer installs the new lateral and equipment and notifies the DLWA Plumbing Inspector when the final connection to main line sewer is ready to be completed and inspected.
- The DLWA Engineer inspects the materials and equipment for the project to insure compliance with Standard Specifications.
- The DLWA Plumbing Inspector completes the Permit Application form and approves the connection. The signed form is returned to the DLWA Treasurer for filing and account set up.
- The Customer's billing commences at next quarterly billing cycle.

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

1. A commercial unit/space/building that is undergoing a change of ownership, must notify the DLWA Treasurer of the change. The Township Assessor sends a notice of the change in occupants to the DLWA Treasurer. 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, or Recreational uses.
 - The DLWA Treasurer provides the following information to the new owner when requesting a new/changed account:

1. Non-Domestic User Survey
 2. Fats, Oils, and Grease (FOG) Trap Program
 3. Metered Connection Information if desired.
- The Customer submits a completed Non-Domestic User Survey, pays any applicable fees and the account is established for billing.

B. Commercial Building Upgrade

1. 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) must notify the DLWA Treasurer of the change. The following outlines the procedures for obtaining DLWA's approval for obtaining wastewater service:
 - Submit a completed LOI along with the following information to DLWA for transmittal to the Authority Engineer along with
 1. A floor plan showing designated use of all areas including internal plumbing plan
 2. A civil plan showing water and wastewater service connections and grease traps required (if applicable)
 3. A completed Non-Domestic User Survey (if applicable)
 4. A Fats, Oils, and Grease (FOG) Trap Program (if applicable).
 - The Engineer will review the project and assign REU's for the revised use. Recommendations are forwarded with REU determination to the DLWA Treasurer and Customer with instructions on how to proceed.
 - Customer billing commences at next quarterly billing cycle with revised REU assignment.

C. Commercial Zoned Property with Service Accessible

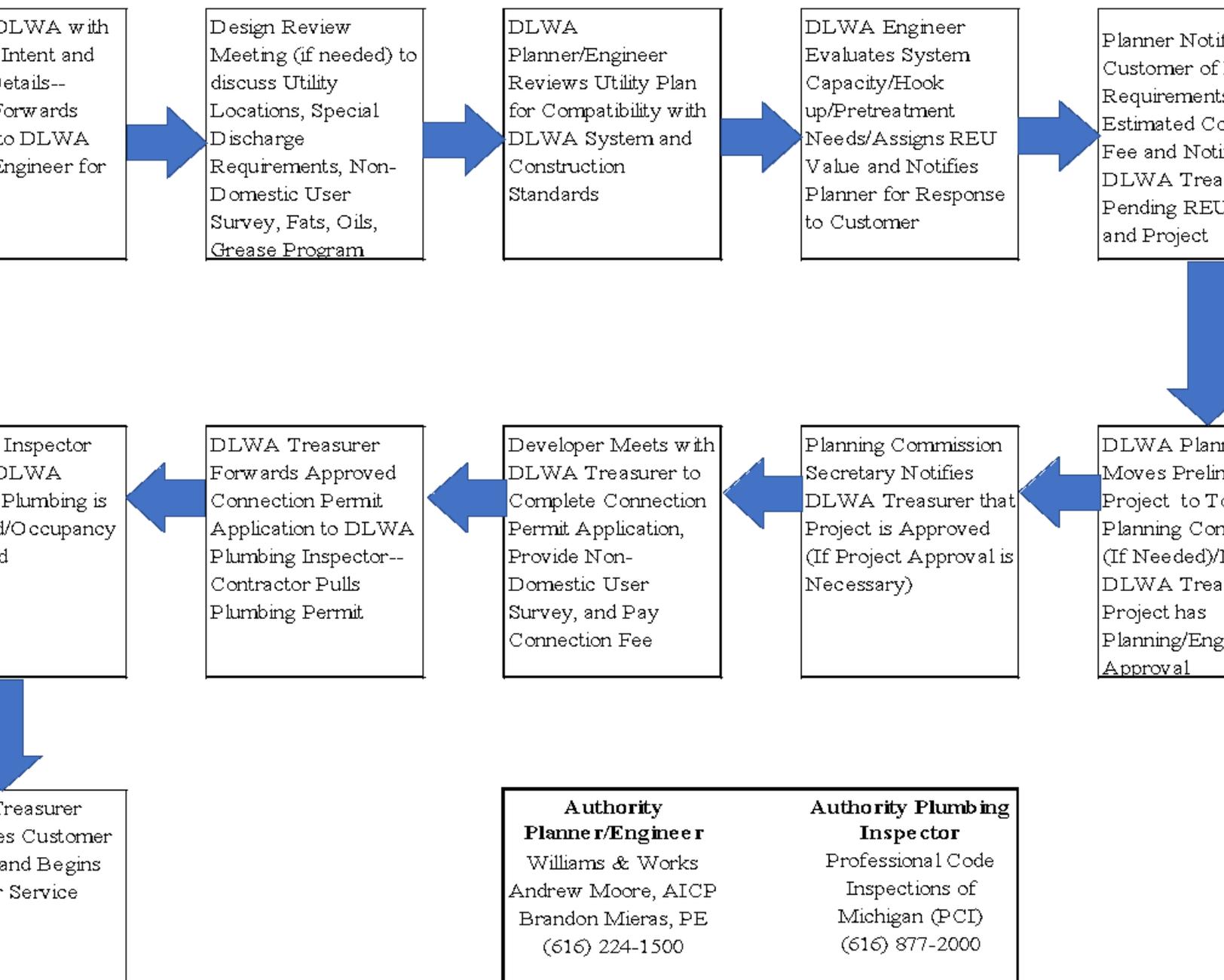
1. DLWA defines this as undeveloped property (vacant lot/outparcel) with wastewater readily accessible. The project requires a service connection and the following outlines the procedures for obtaining DLWA's approval for a Connection Permit:
 - The Owner/Developer Representative submits a completed LOI along with the following information to DLWA Treasurer for transmittal to the Authority Engineer:
 1. Engineer's Cost Estimate for the proposed project
 2. Site plan showing designated use of all areas including internal plumbing plan
 3. Project Description

4. Completed Non-Domestic User Survey (if applicable).

- The Engineer will determine where wastewater service is available for the parcel(s) and where the best connection(s) can be established. The Engineer will assign REU's to the request and determine the Connection fee required to complete the project and return the analysis to the DLWA Treasurer and Customer with instructions on how to proceed.
- The DLWA approved project is submitted to the appropriate Township Planning Commission for approval (if required).
- The Planning Commission Secretary notifies the DLWA Treasurer and the Customer that the project is approved and can proceed to Construction.
- The Customer meets with the DLWA Treasurer to receive a Connection Permit Application and submits a completed Non-Domestic User Survey. The Treasurer provides information on the DLWA Fats, Oils, and Grease (FOG) Trap Program (if required).
- The Customer completes the Permit Application and pays Connection Fee.
- The Customer delivers the completed Permit Application to the DLWA Plumbing Inspector for follow up.
- The Customer installs the new lateral and notifies DLWA Plumbing Inspector when final connection to main line sewer is ready to be completed and inspected.
- The DLWA Plumbing Inspector completes the Permit Application form and approves the connection. The signed form is returned to the DLWA Treasurer for filing and account set up.
- The Customer's billing commences at next quarterly billing cycle.

APPENDICES

- **Development Process Flow Chart**
- **Letter of Intent (LOI)**
- **Fee Schedule**
- **Non-Domestic User Survey**
- **Fats, Oils, and Grease Program**



DLWA Letter of Intent (LOI)

Date: _____

RE: _____

To Whom It May Concern:

Owner/Developer Information

Company Name: _____ Contact: _____

Company Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Email: _____

General Project/Property Information

- Single Family Home(s)
- Multiple Family Units (Apts., Condo's)
- Commercial/Industrial

Project Name: _____ Service Address: _____

Township: _____ Parcel #: _____

Project Description: _____

Estimated Completion Date: _____ Project Manager: _____

Owner Representative/Developer/Contractor

Company Name: _____ Contact: _____

Company Address: _____ City: _____

State: _____ Zip: _____ Telephone: _____

Email: _____

Owner/Developer Signature: _____ Date: _____

Fee Schedule

- DLWA LOI Administrative Fee \$ 25
- DLWA Engineer/Planner Project Review Fees (Cost Not to exceed 5% of Project Cost)
 - Site Plan Review (Hourly Rate = \$85/Hr.)
 - Construction Inspection/Witnessing (Hourly Rate = \$75/Hr.)
 - Construction Material Testing (Varies by Project)
 - Final Inspection/Project Turn-over to Authority (Hourly Rate = \$130/Hr.)

DORR/LEIGHTON WASTEWATER AUTHORITY

4451 12th Street, Suite A
Wayland, MI 49348

Phone 616-891-8238

Fax 616-891-2143

Non-Domestic User Survey

The DLWA is required by the Michigan Department of Environmental Quality (MDEQ) to manage its Non-Domestic Users. One of the requirements for compliance is development of a non-domestic user database listing the quantities, types, and characteristics of all industrial/commercial wastewater customers using the DLWA System. The Authority uses a non-domestic user survey to collect this information during the connection permitting process. Both Township Sewer Use Ordinances (Article 3, Sub-section 2) and the Authority's Rules and Regulations allow for the gathering of this information by the Authority at its discretion.

Attached is the non-domestic user survey used to gather the required information for the database. The survey must be completed, signed by an authorized business representative, and returned to the address listed below before the connection permitting process is complete. Failure to provide the information and return the survey in the allotted time will delay your project.

Any questions may be directed to staff using the contact information below:

Dorr-Leighton Wastewater Authority (DLWA)
4451 12th Street, Suite A
Wayland, MI 49348
(616) 891-8238

Thank you for your cooperation to assist us in gathering the necessary information about your business. The information will remain confidential as part of the established Non-Domestic User Survey protocols. We look forward to receiving your completed survey.

**DORR-LEIGHTON WASTEWATER AUTHORITY (DLWA)
NON-DOMESTIC USER SURVEY**

Please print legibly. Complete each section, be sure to include contact name and information, NAICS code(s), and sign the survey. Buildings containing multiple tenant spaces are required to submit a survey for each tenant space. If a tenant space is vacant, write “currently vacant” for question A.13.

Contact the Dorr-Leighton Wastewater Authority at (616) 891-8238 with questions.

A. Facility Information

1. Company Name: _____
Facility Address: _____
City, State, Zip: _____
Number of Employees: _____
Mailing Address (if different): _____
City, State, Zip: _____
Company Telephone: _____
Company FAX: _____
Company Representative: _____
Company Rep. Telephone: _____
Company Rep. E-mail address: _____
List NAICS Code(s) for this facility: _____,
_____, _____,
_____, _____,

- (For help with NAICS Codes, use this link (<http://www.census.gov/eos/www/naics/>), click the green “FAQ” tab and read Question #9:)

2. Facility water supplied by:
- Dorr-Leighton Water Authority, LLC
 - Well
 - Other (specify) _____
3. Facility sewer is currently connected to:
- Dorr-Leighton Wastewater Authority
 - Septic System
 - Other (Specify) _____
4. Does this facility have cooling towers?
- Yes

No

If yes, list number and size (tons) of cooling towers at facility.

If yes, list the names and volumes (in gallons) of all algaecides or bactericides used in cooling towers.

5. Check the boxes to indicate any water meter locations in the cooling tower piping.

- Influent water piping
- Effluent water piping
- None of the above

6. Does this facility have a grease trap or grease interceptor installed?

- Yes
- No

If yes, list number and capacity (in gallons) of grease trap and or grease interceptors installed

If yes, list the cleaning frequency of each grease trap or grease interceptor (i.e. weekly, monthly, yearly) and waste hauler name.

7. Does this facility have oil/water separators installed?

- Yes
- No

If yes, list number and capacity (in gallons) of oil/water separators at facility.

If yes, list the cleaning frequency of each oil/water separator (i.e. weekly, monthly, yearly) and name of the waste hauler used for the last cleaning.

8. Does this facility have multiple occupants?

- Yes
- No

If yes, complete and submit a non-domestic user survey for EACH tenant space.

9. What liquids are stored at this facility in quantities larger than five gallons? List materials stored and quantities in gallons. You may provide separate list as an attachment if a large quantity of liquids are stored at the facility.

10. Is any waste, other than office paper, trash, or cardboard, hauled from this facility?

- Yes
- No

If yes, specify waste and waste hauler used.

11. Is there any known contamination at this address?

- | | | | |
|-------------|------------------------------|-----------------------------|--------------------------------------|
| Groundwater | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Do not know |
| Soil | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Do not know |
| Other | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Do not know |

If yes, list the contaminants known to be present.

If yes, were the contaminants identified by:

- Testing of soil borings
- Testing of groundwater sampling
- Other means(specify) _____

12. In the Code of Federal Regulations, Title 40 (40 CFR), categories have been established to regulate industrial discharges. Use this link for more information:

[40 CFR, Chap 1, Subpart N](#)

Does your business have a Federally regulated industrial process?

- Yes
- No
- Do not know

If yes, list the 40 CFR part number(s) that apply

13. List all business activities performed at this facility, i.e. what does your company do? Be as specific and detailed as possible.

B. Wastewater Characteristics

1. What substances, other than waste from bathrooms, are discharged into the sewer system from this facility?

2. List all pretreatment devices or processes used for treating wastewater prior to being discharged to the sewer system.

3. Does this facility generate any Resource Conservation and Recovery Act (RCRA) hazardous wastes? For help with RCRA hazardous wastes enter this link www.epa.gov/osw/ into your web browser then select 'Hazardous Waste'.

- Yes
- No

Do not know

If yes, list waste and disposal method for all RCRA waste generated at this facility.

4. What was the facility water usage as listed on the most recent water bill?

_____ Gallons or Cubic Feet (Specify)

_____ Other (Specify)

How many days in the billing cycle for your water bill? _____

Whom should we contact, if we have any questions regarding this facility (if different from the person listed in Item A.1)?

Name:

Title:

Telephone No.:

Certification Statement:

I have personally examined and am familiar with the information submitted in this document. Based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, I believe that the submitted information is true, accurate and complete.

Company Representative:

Signature

Date

Please submit completed form to:

E-MAIL: dl@leightontownship.org (scanned PDF File, NO Zip files, please)

IN PERSON: DLWA, 4451 12th St., Suite A, Wayland, MI 49348
Attn: Fern O'Beshaw

MAIL: Dorr-Leighton Wastewater Authority
Leighton Township Hall
4451 12th St., Suite A
Wayland, MI 49348

Attn: Fern O'Beshaw, Treasurer