

**Brookshire Municipal Water District
District Development Policy Packet**

1. Index of Forms to Include

Index of Forms to be included in Development Policy Packet:

- ___ Policy, Procedures and Application for Water and Sewer Service/Annexation
- ___ Affidavit of Authorization to Complete Application
- ___ Development Policy Checklist
- ___ Policy regarding Subdivision Requirements
- ___ Manufacturing Business Wastewater Questionnaire
- ___ Waller County 911 Address Request Form
- ___ Letter re: Scheduling Inspections
- ___ Industrial Waste Order
- ___ Order Adopting Amended Land Use Assumptions, Capital Improvement Plan and Impact Fees

**Brookshire Municipal Water District
District Development Policy Packet**

**2. Policy, Procedures and Application for
Water and Sewer Service/Annexation**

**BROOKSHIRE MUNICIPAL WATER DISTRICT
POLICIES AND PROCEDURES FOR PROVIDING WATER AND SEWER SERVICE**

The Board of Directors (the "Board") of the Brookshire Municipal Water District (the "District") has adopted the following policies and procedures for providing water and sewer service ("Service"). The Board has determined that such policies and procedures are in the best interest of the District in order to ensure the development of all property within the District ("Development") is provided Service in a uniform and nondiscriminatory manner.

Any person or entity desiring Service from the District (the "Applicant"), other than an individual applying for service to an existing single-family residence, including a townhome or apartment unit, shall complete the attached Application for Service/Annexation (the "Application") and submit it along with the appropriate deposit made payable to the District. The deposit for the review of an Application for a new Development within the District is \$1,000. In an event where an Application indicates that providing Service to such development does not constitute a change in land use from the previously approved Development located on the property, the deposit for the review of the Application shall be \$500.00. For the purposes of this Policy, a Change in Land Use shall mean a change in the use of the property that would require additional Service to the Development. The District requires that any person or entity desiring Service to a Development located outside the boundaries of the District shall be annexed into the District prior to receiving Service. The deposit for the review of an Application for a Development outside the boundaries of the District is \$7,500.00. In an event where a Development: a) already has Service; b) is not considered a Change in Use; and c) the purpose of the Application is to update the name/ownership information for a Development, no deposit will be required. Applications determined to be complete shall be considered by the Board at the District's next regularly scheduled meeting. Any Application that does not include all necessary documentation and the required deposit shall not be considered complete. Upon the District's determination that the Application is complete, the District's Engineer will review such application and prepare a report determining the feasibility of serving the Development and water/wastewater capacity required for the Development (the "Capacity Report") and submit such report to the Board for review and approval.

Failure to timely submit all necessary documentation shall delay preparation of the Capacity Report and further review and approval of such report by the Board.

The Applicant should plan to attend such meeting in order to address any questions or concerns of the Board regarding the Development. Applicant's deposit will be used to cover the expenses incurred by the District for the preliminary evaluation and preparation of the Capacity Report by the District's Engineer and any necessary evaluation by other District consultants as to whether the District's facilities are able to provide Service to the Development.

In the event it is determined that providing Service does not constitute a change in use from the District's previously approved use for the property where the new Development is located, the timeline for the District Engineer's review of the Application and necessary documentation may be, but is not guaranteed to be, shorter.

If the District Engineer's determines that Service cannot be provided to the Development through the District's existing water and wastewater facilities (the "Facilities"), the Applicant will be required to

pay the costs necessary for extending the Facilities necessary to Service the property. Should the Applicant determine that it does not wish to pay the necessary costs to provide Service, the remaining portion of the deposit will be refunded to the Applicant. Fees charged by the District's consultants will be in accordance with their normal rate schedules to the District, plus any expenses incurred during their review. Consultants include, but are not limited to, the District's Engineer, Attorney and Financial Advisor. The District reserves the right to request additional deposits from Applicant should the initial deposit not be sufficient to cover the District's costs for reviewing the Application. If additional monies are not deposited when requested, then all review of the Application will be stopped and the Application will become null and void upon ten (10) days written notice to the Applicant. Upon completion of the Application's review by the District, the remaining portion of Applicant's deposit, if any, will be returned to Applicant.

Additionally, the following policies and procedures shall apply for providing Service to any new or additional Development in the District:

1. Any party requesting Service from the District or seeking annexation into the District shall be required to submit an Application for Service to the Board for its consideration.
2. Commitments for water/sewer capacity ("Utility Commitments") issued by the District shall not be valid for more than one (1) year from the date of approval by the Board.
3. Construction of the Development must begin prior to the expiration date contained in the Utility Commitment, which shall be one (1) year from the date of approval of such commitment by the Board, and diligently pursued thereafter. Should construction not commence within one (1) year from the date of approval by the Board, Applicant should request an extension of such commitment no later than 60 days prior to its expiration.
4. Commitments and Applications for Service/Annexation are non-transferable; provided, however, prospective buyers of a property being developed may jointly apply for Service with the current owner of the property.
5. Applications will not be considered for Development with delinquent Impact Fees or taxes owed to the District.
6. All Development receiving Service must be platted through the City of Brookshire, Waller County and other appropriate agencies with jurisdiction prior to Service being provided by the District.
7. No construction may begin on the Development until Applicant's plat and construction drawings have been (i) reviewed and approved by both the General Manager and the engineer for the District and (ii) approved and accepted by the Board.
8. Applicant must pay for the District to extend the necessary Facilities to serve a Development in areas where such facilities do not exist. All temporary and permanent arrangements for Service must be worked out in advance of construction with the District's Engineer and General Manager.

9. Applicant, at its sole cost, must convey all necessary easements and rights of way to the District with all lienholder subordination prior to provision of Service.
10. All water and sewer lines constructed for a Development that are not in permanent and acceptable easements, or that lie within the boundaries of a Development (apartments, condominiums, etc.) shall remain the permanent property of the owner of the Development and shall remain such owner's permanent maintenance responsibility.
11. Applicant shall furnish a statement of the estimated value of the proposed Development as a part of the Application, broken down by land value and improvement value.
12. If the Development proposes any change in use from the previously approved Development located on the property receiving Service from the District, such Development must be approved by the District.
13. All Development receiving Service shall be billed by the District in accordance with the District's then-current Rate Order.
14. Notwithstanding the terms stated above, all Applicants that intend to develop a Residential or Commercial Subdivision shall be required to adhere to the terms and conditions of the District's Subdivision Requirements.
15. Water and sewer lines that are to become the property of the District must meet the "Costs and Fees," "Bonds" and "Construction Standards" included in the District's Subdivision Requirements, which are attached hereto and incorporated by reference, regardless of whether the Development is a Residential or Commercial Subdivision.
16. In addition to the other referenced prerequisites, if annexation is required and the Capacity Report has been approved by the Board and accepted by the Applicant, the following documents will need to be provided to the Attorneys for the District to prepare the requisite annexation documents, i.e. Petition for Annexation, Petition for City Consent to Annexation (if in the City's ETJ), Certificates of Authority, No Residents and Consent of Lienholder:
 - a. Real Property Deed / Title Commitment;
 - b. Names & Addresses of ALL Lienholders of record;
 - c. Property Owner's Organizational Documents (i.e. LLC, LP, Corp., Agmts etc.);
 - d. Waller County Appraisal District Certificate of Ownership;
 - e. All costs of annexation, including attorney's fees, engineering fees, and any and all other fees relating to said annexation, must be paid by the Applicant with advance deposits being made by Applicant upon request by the District; and
 - f. All costs relating to providing service to the annexed tract, including without limitation, construction of required water and sewer lines, lift stations, etc., must be borne by Applicant.

SIGNED, PASSED and APPROVED this 15th day of May, 2023.

/s/ Stephanie Green
President, Board of Directors

ATTEST:

/s/ Erin Jackson
Secretary, Board of Directors

(DISTRICT SEAL)

Brookshire Municipal Water District

4004 6th St ■ Po Box 1850 ■ Brookshire, TX 77423 ■ 281-375-5010

Application for Service / Annexation

Date of Application: _____

Type of Application: _____ Residential _____ Commercial _____ Plat / Re-Plat

Street Address of Property: _____

Lot: _____ Block: _____ Subdivision: _____

(If the property is not platted, please provide a legal description of the property in the form of metes/bounds and a map, along with applicable deposit made payable to the District.)

Waller County Appraisal District Account Number: _____

Is the property located within the District? _____

(If the property is not located within the District, annexation shall be required for service.)

Applicant's Name: _____

Applicant's Address/City/St/Zip: _____

Applicant's Office Phone #: (____) _____ - _____ Cell Phone #: (____) _____ - _____

Email Address: _____

Legal Property Owner: _____

Owner's Address/City/St/Zip: _____

Owner's Home Phone #: (____) _____ - _____ Owner's Cell Phone #: (____) _____ - _____

Name and Address of title-holder to referenced property: _____

(If Applicant is not Legal Property Owner, please complete the attached Application Authorization Form.)

Type of Service Requested (check all that apply): _____ In District _____ Out of District/Annexation
_____ Water _____ Wastewater _____ Irrigation

Intended use of the property after construction: _____

(Please include additional pages if more space is needed.)

Wastewater/water capacity required: _____

Type of Wastewater to be collected by the District wastewaters system: _____

Estimated No. and Size of Meters required: _____

No. of Water/Sewer Users: _____

Estimated date utility construction is expected to begin: _____

Estimated proposed acreage in development: _____

Estimated total taxable value: _____ Land _____ Improvements

Estimated number of lots: _____

Estimated commercial value: _____

Estimated value of house and lot: _____

Does the Project have/need a building permit from the City of Brookshire? _____

Signature of Applicant: _____ Date: _____

Applicant agrees that it shall notify the District if any of the above information (including ownership of the tract) should change during the Application process.

Circle One

Does Applicant now own the property where the project is located? Y / N
 Does Applicant have an earnest money contract to buy it? Y / N
 Is Applicant seeking information about it? Y / N

Check all that apply

What does Applicant plan to do with the property?
 Build new multi-family rental property _____
 Build new commercial, retail, or office project _____
 Develop single-family subdivision _____
 Develop multi-family subdivision _____
 Develop commercial subdivision _____
 No immediate plans to build or develop, wants capacity commitment. _____

Temporary Service: Purpose is _____

Other Situation (Describe fully): _____

- **MUST** submit 3 full sets of paper plans and 1 digital USB set
- **MUST** Attach a legal description (Metes and Bounds) Y / N
- **MUST** Attach a final plat Y / N
- **MUST** Attach a drawn sketch of the location on separate blank sheet. Show streets and cross streets and names of nearby business and address of nearby properties. Y / N

Summaries:

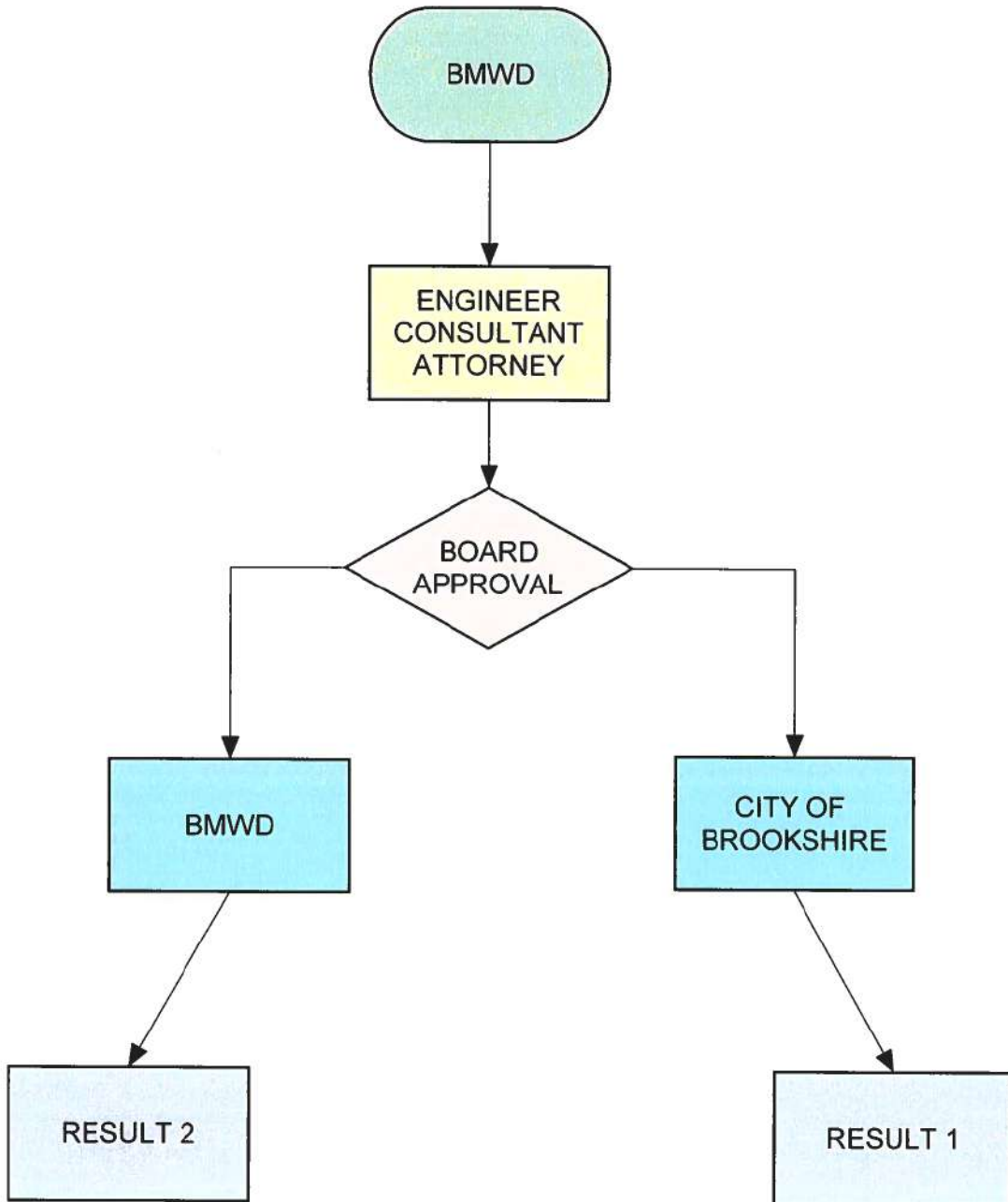
- a. Application Deposit: \$1,000.00
- b. Application Deposit for Development not considered as a change in use from the previously approved Development located on the property: \$500.00
- c. Application Deposit for Development requiring Annexation: \$7,500.00
- d. Impact Fees
- e. Capacity Commitments
- f. Subdivision of property
- g. Inspection fees & connection charges
- h. Application for service
- i. Account Deposit (Determined by meter size)
- j. Plumbing & gas permits (City of Brookshire)

Applicant agrees that it shall notify the District of **any** of the above information (including ownership of the tract) should change during the Application process.

Signature of Applicant: _____ Date: _____

Relationship to Legal Property Owner: _____

For District Use Only



For District Use Only

Engineer's recommendation: _____

Operator's recommendation: _____

Is annexation required? _____

Amount of deposit paid: _____

Amount of service recommended: _____

Impact Fee required: _____

Tap fee required: _____

Additional considerations: _____

**Brookshire Municipal Water District
District Development Policy Packet**

3. Affidavit of Authorization to Complete Application

Brookshire Municipal Water District

4004 6th St ■ Po Box 1850 ■ Brookshire, TX 77423 ■ 281-375-5010

AFFIDAVIT OF AUTHORIZATION TO COMPLETE APPLICATION FOR WATER AND SEWER SERVICE/ANNEXATION

As fee simple owner of the property referenced in the attached Application for Water and Sewer Service/Annexation ("Application"), I hereby authorize ("Representative") to submit the Application and all required documentation on my behalf.

This authorization:
(check one for each)

- DOES** **DOES NOT** - Authorize Representative to make changes or corrections to the Application.
- DOES** **DOES NOT** - Authorize Representative to obtain a copy of the capacity commitment letter after processing by the Brookshire Municipal Water District.

Printed Name of Representative

Printed Name of Fee Simple Owner

Signature of Representative

Signature of Fee Simple Owner

Email

Email

Date

Date

**Brookshire Municipal Water District
District Development Policy Packet**

4. Development Checklist

Brookshire Municipal Water District

4004 6th St. PO Box 1850 Brookshire, TX 77423 Phone: 281-375-5010 Fax: 281-934-4877

Project Account #: _____

Name: _____ Date: _____

Development Address: _____

Development Checklist

The information below is provided as a summary of the process and checklist of the requirements for review and approval of an Application for Service/Annexation. Further details on requirements can be found in the District's current Rate Order, the District's Policy, Procedures, and Application for Water and Sewer Service/Annexation and the District's Subdivision and Property Development Requirements, all of which can be found on the District's website at www.brookshirerwd1.org or upon request from the District's Office. The actual timeline and process is subject to timely receipt of all documentation necessary for review of a Development by the District.

_____ Obtain copy of *Policy, Procedures and Application for Water and Sewer Service/Annexation and Subdivision and Property Development Requirements*.

_____ Complete and submit *Application for Service/Annexation* ("Application") along with the following documents and requisite deposit:

- Proof of ownership of the property being Developed (or authority to act on behalf of owner).
- Written summary of the Development.
- Three (3) – 24X36 Sets of Completed Plans and one (1) digital set via USB.
- Legal Description – (Either metes and bounds description or a copy of the recorded plat)
- Survey (showing cross streets) of the location showing streets and cross streets, names of nearby business, and address of nearby property
- If Development is not platted at the time the Application is submitted, a recorded plat will be required prior approval of project.

(Failure to provide all requisite documents at time of submittal of the Application will result in delays of approval of Development.)

_____ If annexation is required and the Capacity Report has been approved by the Board and accepted by the Developer, the following documents will need to be provided to the Attorneys for the District to prepare the requisite annexation documents, i.e. *Petition for Annexation, Petition for City Consent to Annexation* (if in the City's ETJ), *Certificates of Authority, No Residents and Consent of Lienholder*

- Deposit for preparation of annexation documents.
- Letter requesting annexation.
- Real Property Deed / Title Commitment
- Names & Addresses of ALL Lienholders of record
- Property Owner's Organizational Documents (i.e. LLC, LP, Corp., Agmts etc.)
- Waller County Appraisal District Certificate of Ownership

_____ Schedule Pre-Facility Inspection with the District's Office.

_____ The District will forward Application along with submitted back up documentation to the engineer for review.

Brookshire Municipal Water District

4004 6th St. PO Box 1850 Brookshire, TX 77423 Phone: 281-375-5010 Fax: 281-934-4877

- _____ Preliminary meeting with District's Engineer, as needed. Items to be discuss in such meeting shall include questions related to the preparation of the Capacity Report and Utility Commitment for service, preliminary plat, and utility plan.
- _____ Meet with Board to address Capacity Report and Utility Commitment for service, preliminary plat, and utility plan.
- _____ Pay all necessary fees including, but not limited to, Impact Fees, Tap fees, Inspection Fees and deposit for service.
- _____ Retain bonded Construction Contractor.
- _____ Submit copies of Contractor's bonds and the construction contract.
- _____ Receive District consent to begin construction of water and sanitary sewer lines necessary to connect to the District's water and sewer system.
- _____ Perform construction according to the District's Subdivision and Development Requirements.
- _____ Schedule Inspections.
- _____ Provide "as built" drawings to the District.
- _____ Request the District's approval of completed construction and final plat.
- _____ Plat can be recorded after approval by the District, the City, the Brookshire-Katy Drainage District (if applicable) and the County (if applicable).

**Brookshire Municipal Water District
District Development Policy Packet**

5. Policy Regarding Subdivision Requirements

BROOKSHIRE MUNICIPAL WATER DISTRICT SUBDIVISION REQUIREMENTS

Purpose:

The Board of Directors ("Board") of the Brookshire Municipal Water District (the "District") has adopted the following requirements for the subdivision and all land within the boundaries of the District or that is being considered for annexation ("Subdivision"). Such requirements shall apply to all property owners, developers of land and their authorized representatives ("Developers").

General Requirements:

The following requirements shall apply to all Subdivisions:

1. Developers shall request in writing and receive a copy of the District's Subdivision Regulations and full development packet from the District's Office.
2. Developers shall be responsible for submitting all information required in the Development Packet, including but not limited to, preliminary subdivision plat and utility plans for the Subdivision, to the District's Office.
3. Once all requisite information is submitted, such information shall be provided by the District's General Manager to the District's Engineer and Operator for review.
4. The District's Engineer will review the information submitted by the Developer and coordinate with the Developer as needed for any additional information required for review of the Subdivision.
5. The District's Engineer will prepare a report determining the feasibility of serving the Subdivision and water/wastewater capacity required for the Subdivision (the "Capacity Report") and submit such to the Board for review and approval.
6. Developers shall be given notice of the Board meeting where the Capacity Report will be reviewed by the Board. The Developer is entitled to attend such meeting to discuss the Subdivision. If the Board approves the Capacity Report, the Developer shall receive a commitment for water and wastewater service to the Subdivision (the "Utility Commitment"). Such commitment is subject to the Developer's acceptance of the Capacity Report, payment of all requisite fees to the District and compliance with the requirements herein.
7. Upon approval by the Board of the Capacity Report, the District's General Manager shall execute the necessary consent forms required by the City of Brookshire (the "City") for the issuance of building permits necessary for the Subdivision.

8. If it is determined that the Subdivision requires the construction of additional water and sewer facilities necessary to serve the Subdivision, such facilities shall be described in the Capacity Report. Requirements for financing and construction of Facilities necessary to serve the Subdivision shall be set forth by separate agreement between the District and the Developer.
9. The District will coordinate with the Developer to schedule the required inspection(s) pursuant to the District's Rate Order.
10. Upon approval of the Subdivision's final plat by the City, the Developer will provide the District with evidence of same.

Construction Requirements:

Upon confirmation of completion of nos. 1 - 9 above, the Developer may then proceed with construction of the water and sewer facilities (the "Facilities") within the Subdivision in strict conformance with the plans and specifications of the Subdivision, as approved by the District's Engineer, and in compliance with the requirements of all other entities with jurisdiction.

The District's Engineer will observe the construction of the Facilities on behalf of the District. However, the Developer and his engineer will be responsible for ensuring that the Facilities conform to the plans and specifications approved by the District's Engineer and, in compliance with the requirements of all other entities with jurisdiction.

After completion of such construction, the District's Engineer will, when applicable, advise the Board that the construction of Facilities is completed.

Costs and Fees:

In addition to all construction, testing, engineering, surveying, inspection, permitting, and other Subdivision-related costs, the Developer will be responsible for the following costs and fees payable to the District:

- a. **District Administration Costs:** All legal and engineering costs incurred by the District, are payable to the District as the costs are incurred. (These costs do not relieve the Developer and his engineer of the responsibility for ensuring that the Subdivision and the Facilities conform to the District's requirements set forth herein and comply with the requirements of all other entities with jurisdiction.)
- b. **Impact Fees:** See the District's office for additional information.
- c. **Connection charges:** See the District's office for this information.

Platting, Easement and Deed Restriction Requirements:

- a. No subdivision plat or replat may be recorded until such plat has been approved the Board.
- b. Subdivision plats and replats must include language dedicating right-of-way and easements in a manner that is satisfactory to the District.
- c. Where wastewater lines are located within easements at the rear of a property, subdivision plats and deed restrictions for the Development must clearly indicate that:
 - 1. All fencing includes six-foot (6') wide gates in the side fences at the rear of each property. Such gates must be lockable with pad locks to which the District has amaster key.
 - 2. No trees or shrubbery with a mature height greater than three feet (3') may be planted or grown in such easements.

Bonds: All construction contracts for construction of Facilities to the Subdivision shall include a Payment Bond, Performance Bond and Maintenance Bond (for one (1) year following completion and District acceptance of construction).

Construction Standards. All Facilities shall meet or exceed the following requirements and specifications.

- a. **General.** All Subdivisions shall have Service connected to the District's system. All Facilities shall meet the current requirements of the Texas Commission on Environmental Quality (TCEQ).

If conflicts occur between the requirements of the District, the Developer's drawings (plans) and specifications, and any other applicable code, the conflict shall be resolved so as to provide the outcome most favorable to the District as determined by the District's Engineer. (The Developer must include this statement in his construction contract.)

All crossings of existing roads, streets, and paved driveways must bedone by boring or tunneling.

- b. **Water System:**

- 1) **Main Lines:**

- (a) Minimum diameter - Eight inches (8"). See (d) below.
- (b) Minimum Depth - Three feet, six inches (3' 6") of cover below final grade.

- (c) Material - Type: Polyvinyl chloride pipe; AWWA C- 900; DR 18. Field test per American Water Works Association Specification C-605. Manufactured within the United States.
 - (d) Location - In street right-of-way. Mains shall be looped, with no dead end pipe serving more than four (4) lots. Said dead end may be six-inch (6") pipe. Mark with blue two-inch (2") wide conductive tracer tape located one foot (1') below finished grade.
- 2) Valves:
- (a) Locations - At tees: Two (2) valves. At crosses: Three (3) valves. At each connection to the District's Water System: One (1) valve.
 - (b) Type - Nam-rising stem, 0-ring seals, Mueller or American-Darling brand, CCW opening, M.J. joints.
- 3) Fire Hydrants:
- (a) Locations - At each street intersection and cul-de-sac end. Single-Family Residential Subdivision six hundred foot intervals, approximately. Multi-family Residential or Commercial Subdivision, including restricted or unrestricted reserves dedicated by plat: three hundred foot intervals.
 - (b) Type - Mueller Improved, or American-Darling, 3-way, CCW opening, M J. joints; nozzles shall match Brookshire VFD hose standard.
- 4) Fittings:
- (a) Material - Ductile iron, cement lined, M.J. concrete blocked.
 - (b) Pressure rating - 250 pounds per square inch.
- 5) Services:
- (a) Corporation stop - Mueller H-15000
 - (b) Curb stop - Mueller H-15275, in approved concrete meter box. (One (1) required per future customer.)
 - (c) Pipe material - Type K soft copper
 - (d) Size - Single: three fourths (3/4") inch diameter. Double: one-inch (1") diameter, with tee at end.
 - (e) Location - Extend to right-of-way line (property line) on each side of street.

6) Bedding and Backfill:

- (a) Pipe bedding - Hand Tamped sand or select granular material under pipe and on both sides of pipe in 4-inch (4") loose layers until the bedding is one foot (1') above the top of the pipe.
- (b) Backfill - under streets - 1.0 sack cement per cubic yard stabilized sand. Other locations - compacted to 90% Standard Proctor density.

c. Sanitary Sewer System:

1) Main Lines:

- (a) Minimum diameter - Eight inches (8").
- (b) Minimum depth - Four feet, zero inches (4' 0").
- (c) Future extensions - Where sewer pipes may be extended in the future to serve other properties, they shall be of a size as determined by the District and as deep as circumstances allow.
- (d) Air test - Per TCEQ requirements.
- (e) Location - within 20 foot (20') wide easement at rear of lots, five feet (5') off of easement line. May be located in public right-of-way for unusual situations; however, an extra easement along such right-of-way may be required.

2) Manholes:

- (a) Minimum size - Four feet (4') inches inside diameter.
- (b) Spacing - Three hundred feet (300') maximum.
- (c) Material - Reinforced concrete
- (d) Minimum wall thickness - Six inches (6").

3) Services:

- (a) Pipe diameter - Four inches (4").
- (b) Material - Same as main lines.
- (c) Fittings required - Wye, bend, and plug.
- (d) Location - Extend from sanitary sewer main to outside boundary of easements on each side of main line (or to right-of-way line on each side of the street where sanitary sewer is in street).
- (e) Stack required - Where sewer depth exceeds six feet (6').
- (f) Marking - "As built" plans required showing locations. Also mark each service using a marker satisfactory to the District.

4) Bedding and Backfill. Same as for water system.

5) Lift Stations and Force Mains.

(a) Lift Stations: In the event the District's Engineer determines that a lift station is necessary for a Subdivision, it shall be so located and designed to serve the maximum undeveloped area surrounding the subdivision. Lift stations shall meet such design and construction criteria as the District's Engineer finds to be appropriate for the Subdivision.

(b) Force Mains:

Material - DR 26 minimum wall thickness, PVC pressure pipe approved by N. S. F., for potable water service. Field test same as water mains.

Depth - Minimum three-foot, six-inch (3'-6") cover.

Marking - Two-inch (2") wide brown conductive tracer tape buried twelve inch (12") below finished grade.

Backfill - Same as for water system.

**Brookshire Municipal Water District
District Development Policy Packet**

6. Manufacturing Business Wastewater Questionnaire

BROOKSHIRE MUNICIPAL WATER DISTRICT

MANUFACTURING BUSINESS WASTEWATER QUESTIONNAIRE
(Revised 4-9-2018)

1. Name of Business: _____
2. Is this an existing business that is relocating to Brookshire? Yes or No _____
3. If "No", skip to Section 5 below.
4. If "Yes", please provide the following information for the old location.
 - a. Name of the business at its old location:

 - b. Address and Zip Code for the old location:

 - c. Will the production capacity at Brookshire be greater than at the old location? Yes or No _____
If "Yes", what will be the percent increase? _____
 - d. Please attach water and wastewater (sewer) bills for the last twelve months of full operations.
If the bills are not attached please explain why:

 - e. Did the business ever pay a surcharge or penalty of any type for its wastewater discharge? Yes or No _____
If "Yes", describe in full the circumstances, volumes of wastewater, concentrations (strength) of the wastewater, and dollar amounts involved. Use a separate sheet of paper labeled "Question 4.e".
 - f. Did the business have any wastewater pretreatment equipment or grease traps or other separators or tanks? Yes or No _____
If "Yes", describe in full the equipment and its purpose. Use a separate sheet labeled "Question 4.f".
 - g. Did the business have a wastewater permit from the City or other utility provider? Yes or No _____
If "Yes", please attach a copy of the permit.
 - h. Now go to Section 5.

5. Please provide the following information for the Brookshire location:

a. Name of the business at the Brookshire location.

Address and Zip Code for the Brookshire location:

b. What is the total area of the building(s) in square feet? _____

c. Please give the square feet of building area for each different use, such as manufacturing, warehouse, offices, and others. The total should add up to the total building area stated above. _____

d. How many employees will initially be working per shift and how many shifts per week? _____

e. Describe the production process in full, starting with the raw materials as they are received, and continuing through each step of the complete process. Use a separate sheet labeled "Question 5.e".

f. Describe each point where wastewater is discharged during the manufacturing process. Show the maximum flow rate (gallons per minute) and the average daily rate (gallons per day) from each point. Use a separate sheet labeled "Question 5.f".

g. Please attach a laboratory analysis report of the typical discharge at each point including at least BOD5, COD, Total Suspended Solids, Ammonia, pH, and Oil & Grease.

If there are no such laboratory reports, please estimate the wastewater flow and concentration (BOD5, COD, TSS, etc.) for each point. Give the source and supporting information for the estimates. Use a separate sheet labeled "Question 5.g".

h. What is the average daily flow expected from all manufacturing and sanitary sources combined? _____ gallons per day.

i. What is the maximum peak flow rate expected from all manufacturing and sanitary sources combined? _____ gallons/minute.

j. Please attach a laboratory analysis report of the typical total combined discharge, including at least BOD5, COD, Total Suspended Solids, Ammonia, pH, and Oil & Grease.

- k. If no laboratory reports on the combined discharge are available, please estimate the concentration (BOD5, COD, TSS, etc.). Give the source and supporting information for the estimates. Use a separate sheet labeled "Question 5.k".
- l. What is the highest temperature that can be expected from the combined discharge? _____ degrees F
- m. Is there any chance that the company's raw materials or discharges might ever contain any heavy metals, toxic substances or substances that might interfere with the wastewater treatment facilities operated by the Brookshire Water District? Yes or No _____
- n. Is any type of wastewater pretreatment, flow equalization, oil or grease traps, or other such equipment or tanks planned? Yes or No _____
 If "Yes", please describe what is planned, its location, and the problem that it is designed to resolve. Use a separate sheet labeled "Question 5.n".
- o. Please give an estimate of the average total water usage that is expected: _____ gallons per day.
- p. Explain how the water use was estimated.

- q. Is evaporation from the manufacturing processes expected to amount to more than five percent of the total combined discharge?
 Yes or No _____
 If "Yes", please identify the processes involved and explain how the evaporation occurs. Also estimate the amount of evaporation in gallons per day. Use a separate sheet labeled "Question 5.q".
- r. Will the new location have a separate water meter for landscape irrigation? Yes or No _____. If "Yes", please provide a landscape plan that shows at least the area (square feet) that will be watered.
- s. Please provide any other comments or information that might help us to more clearly understand your business and the quantity and quality of water and wastewater involved. Use a separate sheet labeled "Question 5.s".
- t. Thank you.

Printed Name of person who provided the information above:

Signature of person who provided the information above:

Date: _____

Job Title: _____

What company do you work for? _____

Your company's physical and mailing addresses:

Your contact information:

Cell Phone: _____

Office Phone: _____

Email: _____

**Brookshire Municipal Water District
District Development Policy Packet**

7. Waller County 911 Address Request Form



WALLER COUNTY 9-1-1 ADDRESS REQUEST

775 Bus 290 E ~ Hempstead TX 77445 979-826-7702 ~ 979-921-0402 fax 911addressing@wallercounty.us

Effective March 1, 2016, Revised Jan 1, 2018:

\$10.00 sign fee - single sided

\$15.00 double sided (non-refundable)

Forms of payment: Cash, Check (payable to Waller County), Credit Card (online or in the office)

I am aware that this address is for 9-1-1 services ONLY. I am aware that additional permit(s) from Waller County must be obtained for all development & septic (if applicable) Permits are required to be obtained **PRIOR** to the start of construction. I understand that development includes, but is not limited to: major earthwork, buildings, barns, storage structures, houses, manufactured homes, driveways/culverts, and buildings moved onto the property. **This address will NOT be valid for any future construction until all permits are obtained.**

CURRENT OWNER:		CURRENT STRUCTURE(S) ON PROPERTY:	
CURRENT MAILING ADDRESS:		EMAIL ADDRESS:	
CITY & ZIP:		OCCUPANT NAME:	
PHONE NUMBER:		OCCUPANT PHONE NUMBER:	

PROPERTY ID:

(R# from WCAD)

(if known - no other below info needed)

ASSIGN ADDRESS FROM COORDINATES:

LATITUDE:

LONGITUDE:

Additional notes:

OWNER SIGNATURE: _____ DATE: _____

***** FOR OFFICE USE ONLY *****

NEW ASSIGNED ADDRESS:

CITY & ZIP

ASSIGNED BY:

DATE:

PAYMENT

Cash

Check - # _____

Credit Card

Payment ID _____

Picked up by: _____

**Brookshire Municipal Water District
District Development Policy Packet**

8. Letter Regarding Scheduling Inspections

Brookshire Municipal Water District

4004 6th St. PO Box 1850 Brookshire, TX 77423 Phone: 281-375-5010 Fax: 281-934-4877

Re: Scheduling Inspections

Dear Developers, Contractors and/or Property Owners:

Pursuant to the District's Rate Order, the District's inspection and approval of certain facilities is required prior to the District providing service to such property. Such inspections include, but are not limited to, customer service inspection, pre-facility and final builder inspection, wastewater connection inspection, backflow prevention assembly inspection and swimming pool/hot tub inspection.

Failure to have facilities inspected by the District prior to receiving service could result in termination of service or fees pursuant to the District's Rate Order.

Inspection scheduling will be as follows:

- Inspections can be requested any time from Monday – Friday, the inspection will be conducted within the following 7 business days between 8:30 a.m. and 3:30 p.m.
- A specific time (a.m. or p.m.) is not guaranteed with the exception of Residential/Commercial Final Inspections.

If an inspection needs to be cancelled for any reason, the cancellation needs to be called in 24 hours prior to the day of the scheduled inspection.

If the inspector arrives at a job site and the address is not posted and/or the work is not ready for inspection or is incorrect, it will be turned down. If a red tag is issued, a re-inspection fee must be paid **prior** to rescheduling the same inspection. The re-inspection will be conducted within the following 7 business days.

IT IS VERY IMPORTANT TO MAKE SURE YOU ARE GOING TO BE READY FOR INSPECTION BEFORE YOU SCHEDULE YOUR INSPECTIONS.

NOTE: CSI Inspections

BEFORE A FINAL CSI INSPECTION CAN BE SCHEDULED, ALL REQUIRED PAPERWORK MUST BE SUBMITTED FOR APPROVAL. THE INSPECTOR HAS 48 HOURS TO APPROVE PAPERWORK. ONCE THE PAPERWORK IS APPROVED, THE CONTRACTOR MUST SCHEDULE DATE & TIMES FOR INSPECTION WITH THE DISTRICT'S CLERK. THE INSPECTOR MUST HAVE COMPLETE ACCESS TO THE DEVELOPMENT TO BE INSPECTED.

**Brookshire Municipal Water District
District Development Policy Packet**

9. Industrial Waste Order

CERTIFICATE OF ORDER

**STATE OF TEXAS
COUNTY OF WALLER
BROOKSHIRE MUNICIPAL WATER DISTRICT**

§
§
§

We, the undersigned officers of the Board of Directors (the "Board") of **BROOKSHIRE MUNICIPAL WATER DISTRICT** (the "District"), hereby certify as follows:

The Board convened in regular session, open to the public, on Monday, July 9, 2018, at 6:00 p.m., at 4004 6th Street, Brookshire, Texas, and the roll was called of the members of the Board, to-wit:

Edith Penrice-Kelley	President
Albert Wilkins	Vice President
Havanaugh "Kirk" Glover	Secretary
Vanessa Johnson	Assistant Secretary
Stephanie Harris-Green	Investment Officer

All members of the Board were present, except the following: Vanessa Johnson, thus constituting a quorum. Whereupon other business, the following was transacted at such Meeting: A written

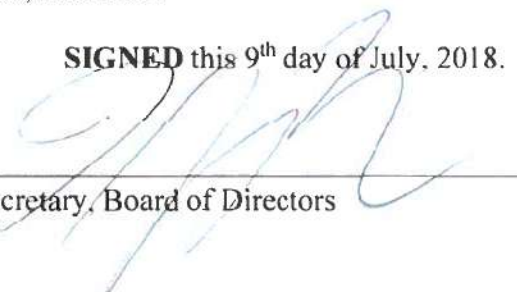
ORDER REGULATING THE INTRODUCTION OF WASTEWATER INTO THE SANITARY SEWER SYSTEM OF THE DISTRICT

was duly introduced for the consideration of the Board. It was then duly moved and seconded that such Order be adopted; and after full discussion, such motion, carrying with it the adoption of such Order prevailed, carried, and became effective by the following vote:

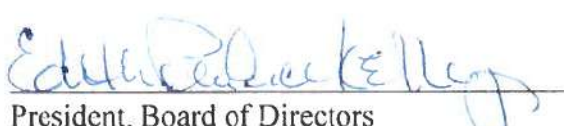
AYES: 4 **NOES:** 0

A true, full and correct copy of the aforesaid Order adopted at the Meeting described in the above and foregoing paragraph is attached to and follows this Certificate; such Order has been duly recorded in the Board's minutes of such Meeting; the above and foregoing paragraph is a true, full, and correct excerpt from the Board's minutes of such Meeting pertaining to the adoption of such Order; the persons named in the above and foregoing paragraph are the duly chosen, qualified, and acting officers and members of the Board as indicated therein; each of the officers and members of the Board are duly and sufficiently notified officially and personally, in advance, of the time, place, and purpose of such Meeting, and that such Order would be introduced and considered for adoption at such meeting, and each of the officers and members consented, in advance, to the holding of such Meeting for such purpose; and such Meeting was open to the public and public notice of the time, place, and purpose of such Meeting was given, all as required by Chapter 551 of the Texas Government Code and Section 49.063 of the Texas Water Code, as amended.

SIGNED this 9th day of July, 2018.



Secretary, Board of Directors



President, Board of Directors

(DISTRICT SEAL)

Order #18-111
BROOKSHIRE MUNICIPAL WATER DISTRICT

**ORDER REGULATING THE INTRODUCTION OF WASTEWATER INTO
THE SANITARY SEWER SYSTEM OF THE DISTRICT**

SECTION A. PURPOSE

(1) This Order sets forth uniform requirements for Indirect Contributors into the Wastewater Facilities of the District and enables the District to comply with all applicable State and federal laws required by the Clean Water Act of 1977, as amended, and the General Pretreatment Regulations (40 CFR, §403).

(2) The objectives of this Order are:

- (a) To prevent the introduction of Pollutants into the District's Wastewater Facilities which will interfere with the operation of the facilities or contaminate the resulting sludge;
- (b) To prevent the introduction of Pollutants into the District's Wastewater Facilities which will pass through the facilities, inadequately treated, into receiving waters or the atmosphere or otherwise be incompatible with the facilities;
- (c) To provide for equitable distribution of the cost of the District's Wastewater Facilities; and
- (d) To protect both Wastewater Facilities personnel who may be affected by wastewater and sludge in the course of their employment and the general public.

(3) This Order provides for the regulation of Indirect Contributors to the District's Wastewater Facilities through the issuance of permits to certain non domestic Users and the enforcement of general requirements, authorizes monitoring and enforcement activities, requires User reporting, and provides for the setting of fees for the equitable distribution of costs resulting from the program established herein.

(4) This Order shall apply to all Users of the District's Wastewater Facilities, whether such Users are located within or outside the boundaries of the District. Except as otherwise provided herein, the Board shall administer, implement and enforce the provisions of this Order.

SECTION B. DEFINITIONS

Unless the context specifically indicates otherwise, the following terms and phrases, as used in this Order, shall have the meanings hereinafter designated:

- (1) Act or "the Act". The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended by the Clean Water Act, 33 U.S.C. 1251, et. seq.
- (2) Amenable to Treatment. Susceptible to reduction in concentration by Treatment routinely provided in the District's Wastewater Treatment Plant, to a level which

is in compliance with federal and State effluent limitations for discharge into Waters of the State.

- (3) Biochemical Oxygen Demand (BOD5). The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure, five (5) days at twenty degrees Centigrade (20 C) expressed in terms of weight and concentration (milligrams per liter (mg/l)).
- (4) Board. The Board of Directors of BROOKSHIRE MUNICIPAL WATER DISTRICT.
- (5) Building Sewer. A privately owned sanitary sewer line conveying Wastewater from the premises of a User to the Wastewater Facilities.
- (6) Categorical Pretreatment Standard or Categorical Standard. Any regulation containing pollutant discharge limits promulgated by EPA in accordance with Sections 307(b) and (c) of the Act (33 U.S.C. § 1317) which apply to a specific category of users and which appear in 40 CFR Chapter I, Subchapter N, Parts 405-471.
- (7) CFR. The Code of Federal Regulations, containing a codification of documents of general applicability and future effect, published by the office of the Federal Register, National Archives and Records Administration, as a Special Edition of the Federal Register.
- (8) Chemical Oxygen Demand (COD). A measure of the oxygen consuming capacity of inorganic and organic matter present in water or Wastewater as determined by oxygen consumed from a chemical oxidant in a specific test, but not differentiating between stable and unstable organic matter and thus not necessarily correlating with Biochemical Oxygen Demand.
- (9) Control Manhole or Sample Well. A manhole or sample well which provides access to a Building Sewer for purposes of inspection, sample collection, and flow rate measurement, and is located at some point before the Building Sewer discharge mixes with other discharges in the public sewer.
- (10) Cooling Water. The water discharged from any use such as air conditioning, cooling or refrigeration, or to which the only Pollutant added is heat.
- (11) Daily Composite. Daily composite shall mean the composite of all samples of a user's wastewater that may be taken in any 24-hour period selected by the District. A daily composite shall be determined from not less than 3 grab samples or such higher number of samples as may be required by the District taken over equal time intervals, and may or may not be flow weighted at the option of the District.
- (12) Discharge Permit. The Texas Pollutant Discharge Elimination System permit issued by the Texas Commission on Environmental Quality to the District.
- (13) District. BROOKSHIRE MUNICIPAL WATER DISTRICT.

- (14) District Operations Consultant. Municipal Operations & Consulting, Inc., 312 Spring Hill Drive, Suite #100, Spring, Texas 77386 (281) 367 5511 or such other company or Person as may from time to time be duly appointed by the District.
- (15) Environmental Protection Agency (EPA). The U.S. Environmental Protection Agency, or where appropriate, the term may also be used as a designation for the Administrator or other duly authorized official of said agency or be used to refer to the Texas Commission on Environmental Quality in those instances where the duties and/or authority of the EPA have been transferred to the Texas Commission on Environmental Quality.
- (16) Floatable Grease. Grease, oil or fat in a physical state such that it will separate or stratify by gravity in water.
- (17) Garbage. Animal and vegetable wastes and residue from the preparation, cooking, and dispensing of food; and from the handling, processing, storage, and sale of food products and produce.
- (18) Grab Sample. An individual sample collected in less than fifteen (15) minutes.
- (19) Grease. Fatty acids, soaps, fats, waxes, petroleum products, oil, and any material which is extractable by hexane or freon solvent from an acidified sample and which is not volatilized during evaporation of the solvent.
- (20) Holding Tank Waste. Any waste from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks and vacuum-pump tank trucks.
- (21) Indirect Contributor. A Person who discharges or introduces non-domestic Pollutants from any source regulated under Section 307 (b) or (c) of the Act (33 U.S.C. 1317) into the District's Wastewater Facilities.
- (22) Non-Domestic User. A Person who discharges Non-Domestic Waste, provided that schools, churches and day care centers shall not be considered to be Non-Domestic Users for purposes of this Order.
- (23) Non-Domestic Waste. The water-borne solids, liquids, and/or gaseous wastes (including Cooling Water), excluding Normal Domestic Sewage, resulting from any industrial, manufacturing, trade, business, commercial, or food processing operation or process, or from the development of any natural resource, or any mixture of such solids, liquids or wastes with water or domestic sewage, or any other wastes defined as Industrial Waste under the Act.
- (24) Non-Domestic Waste Charge. The additional charge made on those Non-Domestic Users that discharge into the Sanitary Sewer Non-Domestic Wastes which are Amenable to Treatment but which exceed the concentration levels of Normal Domestic Sewage.

- (25) Interference. The inhibition or disruption of the Wastewater Facilities Treatment processes or operations which causes, or contributes to causing, a violation of any requirement of the Discharge Permit.
- (26) May. The term "may", when used herein, is permissible.
- (27) MGD. Million gallons per day.
- (28) Milligrams Per Liter (mg/l). A weight-to-volume ratio; the milligram-per-liter value multiplied by the factor 8.34 (pounds per gallon water) is equivalent to pounds of constituent per million gallons of water. It is the same as parts per million (ppm) for normal Wastewater.
- (29) Monthly Average. Monthly average with respect to any discharge limitation shall mean at the option of the District either: (i) the arithmetic average of all grab samples of a user's wastewater taken during a calendar month, or (ii) the arithmetic average of all daily composite samples of a user's wastewater calculated during a calendar month.
- (30) National Categorical Pretreatment Standard or Pretreatment Standard or Federal Categorical Pretreatment Standard. Any regulation containing Pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Act (33 U.S.C. 1347) which applies to a specific category of Non-Domestic Users.
- (31) Noncontact Cooling Water. Water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product, or finished product.
- (32) Normal Domestic Sewage. A combination of the water-carried wastes, exclusive of ground, surface and Storm Waters and Non-Domestic Wastes, normally discharging from the sanitary conveniences of dwellings (including apartment houses and hotels), office buildings, factories, and institutions in which the average concentration of 5-day BOD and Total Suspended Solids does not exceed 200 mg/l nor does the average concentration of Ammonia-Nitrogen exceed 25 mg/l. .
- (33) Person. Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their legal representatives, agents or assigns.
- (34) pH. The logarithm (base 10) of the reciprocal of the concentration of hydrogen ions expressed in grams per liter of solution.
- (35) Pollutant. Any dredged spoil, solid waste, incinerator residue, sewage, Garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

- (36) Pretreatment or Treatment. The reduction of the amount of Pollutants, the elimination of Pollutants, or the alteration of the nature of Pollutant properties in Wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such Pollutants into the Wastewater Facilities.
- (37) Sanitary Sewer. A public sewer which carries domestic Wastewater and/or Non-Domestic Wastes, and to which storm, surface, and groundwater are not intentionally admitted.
- (38) Shall. The term "shall", when used herein, is mandatory.
- (39) Significant Non-Domestic User. Any industry which discharges to the District's Wastewater Facilities that:
- (a) Is subject to categorical standards; or
 - (b) Discharges a nondomestic wastestream of 5,000 gallons per day (0.005 MGD) or more; or
 - (c) Contributes a nondomestic wastestream which makes up five percent (5%) or more of the current average dry weather hydraulic or organic loading of the Wastewater Facilities; or
 - (d) Has a reasonable potential, in the opinion of the Board, to adversely affect the District's Wastewater Facilities whether by inhibition, pass-through of Pollutants, sludge contamination, or endangerment of personnel of the Wastewater Facilities or any other means.
- (40) Sample -- Composite Sample. A sample prepared from Grab Samples collected no closer together than one hour per sample during hours in which a process wastewater is discharged.
- (41) Spill Discharge. Any discharge of a non-routine, episodic nature including, but not limited to, an accidental spill, a non-customary batch discharge, a discharge at a flow rate or concentration greater than four times the normal monthly average flow rate or concentration for the facility, or a discharge which could otherwise cause a violation of the prohibited discharge standards in Section C of this Order.
- (42) Standard Methods. The laboratory procedures set forth in the latest edition, at the time of analysis, of "Standard Methods for the Examination of Water and Wastewater", as prepared, approved, and published jointly by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation.
- (43) State. State of Texas.
- (44) Storm Sewer. A public sewer that carries Storm Water, but excludes sewage and polluted Non-Domestic Waste.
- (45) Storm Water. Runoff from rainfall or any other form of precipitation.

- (46) Texas Commission on Environmental Quality. The Texas Commission on Environmental Quality or any successor agency to its powers and duties.
- (47) Texas Open Records Act. The Texas Open Records Act, also known as the Texas Public Information Act is set forth in Chapter 552 of the Texas Government Code.
- (48) Total Suspended Solids (TSS). The total solid matter that floats on the surface of, is suspended in, or settles in water. Wastewater or other liquids, and which is removable by laboratory filtering.
- (49) Trap. A device designed to skim, settle, or otherwise remove Grease, oil, sand, flammable wastes or other harmful substances.
- (50) User. Any Person who, whether as of the date hereof or hereafter, has a Building Sewer connected to the District's sewer, or contributes, causes or permits the contribution of Wastewater into the District's Wastewater Facilities, including those who discharge Holding Tank Waste into the facilities.
- (51) Wastewater. The liquid and water-carried industrial or domestic wastes from dwellings, commercial buildings, industrial facilities, and institutions, together with any groundwater, surface water, and Storm Water that may be present, whether treated or untreated, which is contributed or discharged into or permitted to enter the Wastewater Facilities.
- (52) Wastewater Facilities. All facilities of the District for collecting, pumping, treating, and disposing of sewage, sludges and residues.
- (53) Wastewater Treatment Plant. Any District-owned facilities, devices, and structures used for receiving, processing, and treating Wastewater, Non-Domestic Waste, and sludges from the Sanitary Sewers.
- (54) Waters of the State. All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the State or any portion thereof.

SECTION C. PROHIBITED DISCHARGES

No User shall contribute or cause to be contributed, directly or indirectly, any Pollutant or Wastewater which will interfere with the operation or performance of the District's Wastewater Facilities. No User shall contribute any of the following substances to any Sanitary Sewer:

- (1) Any inflows or infiltration, including but not limited to, Storm Water, groundwater, roof runoff, sub-surface drainage, Noncontact Cooling Water, or from sources such as downspouts, yard drains, yard fountains or ponds, or lawn sprinklers.

- (2) Any liquids, solids or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances, likely to cause fire or explosion or be injurious in any other way to the Wastewater Facilities or to the operation of the Wastewater Facilities. At no time, shall two successive readings on an explosion hazard meter, at the point of discharge into the system (or at any point in the system) be more than five percent (5%) nor any single reading over ten percent (10%) of the Lower Explosive Limit (LEL) of the meter. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides and any other substances in concentrations which the District, the State or EPA has notified, or hereafter notifies, the User is a fire hazard or a hazard to the system.
- (3) Solid or viscous substances which may cause obstruction to the flow in a sewer or other Interference with the operation of the Wastewater Treatment Plant including, but not limited to, Garbage containing particles greater than one-half inch (1/2") in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, mud, glass grindings or polishing wastes. The District is entitled to review and approve the installation and operation of any Garbage grinder equipped with a three-fourth (3/4) horsepower or larger motor.
- (4) Any Wastewater having a pH less than 5.0 or higher than 10.0, as determined from a grab sample taken in less than fifteen (15) minutes and measured instantaneously, or Wastewater having any other corrosive property capable of causing damage or hazard to pipes, structures, equipment, and/or personnel of the Wastewater Facilities.
- (5) Any Wastewater containing toxic Pollutants in sufficient quantity, either singly or by interaction with other Pollutants, to injure or interfere with any Wastewater treatment process, which constitute a hazard to humans or animals, which create a toxic effect in the receiving waters of the Wastewater Facilities, or which exceed the limitation set forth in a National Categorical Pretreatment Standard. A toxic Pollutant shall include, but not be limited to, any Pollutant defined or identified pursuant to Section 307(a) of the Act.
- (6) Any Wastewater having a temperature which will inhibit biological activity in the Wastewater Treatment Plant or result in the Interference with the operations of such facility, but in no case Wastewater with a temperature at the designated Control Manhole which exceeds 65°C (150°F) or which causes the temperature of waste at the entrance to the Wastewater Treatment Plant to exceed 40°C (104°F). In addition, no Wastewater with such a temperature that will cause the temperature of Wastewater at the entrance to the Wastewater Treatment Plant to rise more than 10°F per hour.

- (7) Any Pollutants, including oxygen demanding Pollutants (BOD5, etc.) released at a flow rate and/or Pollutant concentration which will cause Interference to the Wastewater Facilities. No sludge discharges.
- (8) A volume of flow which will cause Interference or which exits the Wastewater Treatment Plant into Waters of the State in quantities or concentrations which causes or contributes to causing a violation of any requirement of the Discharge Permit. The design and installation of surge basins shall be subject to the review and approval of the District and to the requirements of all applicable laws.
- (9) Radioactive materials or isotopes of such half-life or concentrations which will permit a transient concentration higher than the maximum allowable as specified by the governing standards of all local, State and federal regulatory agencies.
- (10) Any of the following hazardous metals in concentrations (in terms of milligrams per liter) greater than those listed below:

NOT TO EXCEED (mg/l)

Pollutant	<u>Monthly Average</u>	<u>Daily Maximum</u>
Arsenic	0.15	0.30
Cadmium	0.12	0.24
Chromium	5.00	10.00
Copper	3.00	6.00
Cyanide	0.80	1.60
Lead	1.40	2.80
Mercury	0.016	0.032
Molybdenum	0.17	0.34
Nickel	0.60	1.20
Selenium	0.17	0.34
Silver	0.75	1.50
Zinc	1.70	3.40

- (11) Chlorides greater than 250 mg/l.
- (12) Dissolved sulfides greater than 10 mg/l.
- (13) Sulfates in concentrations which are not Amenable to Treatment.
- (14) BOD5 or Total Suspended Solids in excess of 1000 mg/l or ammonia in excess of 125 mg/l unless a variance is first obtained from the District. BOD5 or Total Suspended Solids in concentrations between 200 mg/l and 1000 mg/l and ammonia in a concentration between 25 mg/l and 125 mg/l and oil and Grease greater than 100 mg/l shall be subject to payment of Non-Domestic Waste Charges pursuant to Section E herein.
- (15) Total dissolved solids greater than 850 mg/l including, but not limited to,

- (a) sodium chloride
 - (b) sodium sulfate
- (16) Inert (nonvolatile) suspended solids greater than 250 mg/l including, but not limited to:
- (a) Fuller's earth
 - (b) lime slurries
 - (c) lime residues
- (17) Any Wastewater containing any fats, wax, Grease, or oils, whether emulsified or not, in excess of 200 mg/l or containing substances which may solidify or become viscous between 32°F and 150°F. These prohibitions include, but are not limited to:
- (a) Floatable Grease of any origin;
 - (b) free or emulsified Grease of petroleum or mineral origin, or both, including, but not limited to:
 - (1) cooling or quenching oil;
 - (2) lubrication oil;
 - (3) cutting oil; or
 - (4) non-saponifiable oil.
- (18) Substances having a chlorine demand in excess of 10 mg/l.
- (19) Substances having a COD demand in excess of 1000 mg/l.
- (20) Fluoride other than that contained in the public water supply, if any.
- (21) Any noxious or malodorous liquids, gases, or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance, hazard to life or the environment, or are sufficient to prevent entry into the sewers for maintenance and repair.
- (22) Any Wastewater with objectionable color not removed in the Treatment process and which may interfere with laboratory analysis including, but not limited to, blood, dye wastes, vegetable tanning solutions, and coffee processing wastes.
- (23) Any substance which might cause the Wastewater Facilities' effluent or any other product of the Wastewater Facilities such as residues, sludges, or scums, to be unsuitable for reclamation and reuse or which might interfere with the reclamation process.
- (24) In no case shall a substance discharged to the Wastewater Facilities cause the Wastewater Facilities to be non-compliant with federal or State sludge use or disposal criteria, guidelines or regulations.

- (25) Any substance which will cause the Wastewater Facilities to violate its Discharge Permit or the receiving water quality standards.
- (26) Any Wastewater which is a hazard to human life or the environment or which creates a public nuisance.
- (27) Trucked or hauled pollutants, except for septic tank waste, recreational vehicle waste, and commercial bus waste at discharge points designated by the District.
- (28) Medical waste, except as specifically authorized by the District in a wastewater discharge permit.
- (29) Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test.
- (30) Detergents, surface-active agents, or other substances which may cause unusual or excessive foaming in the Wastewater Facilities.
- (31) Hazardous wastes or any substances that, if otherwise disposed, would be hazardous waste under 40 CFR Part 261.

When the District determines that a User is contributing any discharge into the District's Wastewater Facilities in such amounts as to interfere with the operation of the Wastewater Facilities, the District shall: 1) advise the User of the impact of the contribution on the Wastewater Facilities; and 2) develop effluent limitation(s) for such User to correct the Interference with the Wastewater Facilities.

SECTION D. FEDERAL CATEGORICAL PRETREATMENT STANDARDS; INDUSTRIAL USER WASTEWATER DISCHARGE PERMIT

Upon the promulgation of Federal Categorical Pretreatment Standards for a particular industrial subcategory, such Federal Standards, if more stringent than limitations imposed under this Order for sources in that subcategory, shall immediately supersede the limitations imposed under this Order. The District shall notify all Non-Domestic Users of the applicable reporting requirements under 40 CFR §403.12 and a revised Wastewater discharge permit shall be required of each affected User by the District. The District shall have the authority to amend such permit whenever required by federal, State or local regulatory agencies. A permit issued pursuant to this Order shall be issued by the District's engineer and will be valid for a period of five (5) years. A permit fee of one thousand dollars (\$1,000.00) shall be paid to the District in equal installments of \$200.00 each, with the first of such payments being due and payable on the date of issuance of such permit and continuing thereafter on the same date in each successive year until paid in full.

After the period of time has lapsed for affected Users to obtain a Non-Domestic User Wastewater discharge permit as set forth in this section, it shall thereafter be unlawful for such affected Users to discharge without such permit into any of the District's Wastewater Facilities. All existing affected Non-Domestic Users connected to or contributing to the District's Wastewater Facilities shall obtain a Non-Domestic User Wastewater discharge permit within 60 days after the effective date of this Order.

Non-Domestic Users required to obtain a Non-Domestic User Wastewater discharge permit shall complete and file with the District an application in the form prescribed by the District. Existing affected Users shall apply for such permit within 30 days after the effective date of this Order. Proposed new Non-Domestic Users shall apply at least 90 days prior to connecting to or contributing to the District's Wastewater Facilities. In support of the application, the affected User shall submit, in units and terms appropriate for evaluation, the following information:

1. Name, address, and location of User's facility (if different from the address):
2. SIC number according to the Standard Industrial Classification Manual, Bureau of the Budget, 1972, as amended;
3. Wastewater constituents and characteristics including, but not limited to, those mentioned in Section C of this Order as determined by a Texas Commission on Environmental Quality certified analytical laboratory; sampling and analysis shall be performed in accordance with procedures established by the EPA pursuant to Section 304(g) of the Act and contained in 40 CFR, Part 136, as amended;
4. Time and duration of contribution;
5. Average daily and 30 minute peak Wastewater flow rates, including daily, monthly and seasonal variations, if any;
6. Site plans, floor plans, mechanical and plumbing plans and details to show all sewers, sewer connections, and appurtenances by the size, location and elevation;
7. Description of activities, facilities and plant processes on the premises including all materials which are or could be discharged;
8. Where known, the nature and concentration of any Pollutants in the discharge which are limited by any District, City, State, or Federal Pretreatment Standards, and a statement regarding whether or not the Pretreatment standards are being met on a consistent basis and if not, whether additional Operation and Maintenance (O&M) and/or additional Pretreatment is required for the User to meet applicable Pretreatment Standards;
9. If additional Pretreatment and/or O&M will be required to meet the Pretreatment Standards; the shortest schedule by which the User will provide such additional Pretreatment. The completion date in this schedule shall not be later than the compliance date established for the applicable Pretreatment Standard:

The following conditions shall apply to this schedule:

- (a) The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional Pretreatment required for the User to meet the applicable Pretreatment Standards (e.g., hiring an engineer, completing preliminary plans, completing final plans, executing contract for major components, commencing construction, completing construction, etc.).

(b) No increment referred to in subparagraph (a) shall exceed 9 months.

(c) Not later than 14 days following each date in the schedule and the final date for compliance, the User shall submit a progress report to the District including, as a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps being taken by the User to return the construction to the schedule established. In no event shall more than 9 months elapse between such progress reports to the District.

10. Each product produced by type, amount, process or processes and rate of production;
11. Type and amount of raw materials processed (average and maximum per day);
12. Number and type of employees, and hours of operation of plant and proposed or actual hours of operation of Pretreatment system;
13. Any other information as may be deemed by the District to be necessary to evaluate the permit application.

The District will evaluate the data furnished by the User and may require additional information. After evaluation and acceptance of the data furnished, the District may issue a Non-Domestic User Wastewater discharge permit subject to such terms and conditions as the District deems reasonable and necessary. A permit issued to any person identified as a significant industrial user shall contain at minimum the following: a statement of duration (in no case more than five (5) years); a statement of non-transferability without prior notification to the District and provision of a copy of the existing permit to the new owner or operator; effluent limits based on applicable general pretreatment standards, categorical pretreatment standards, local limits, and state and local law; self-monitoring, sampling, reporting, notification and record keeping requirements; and a statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements as well as any applicable compliance schedule.

SECTION E. INDUSTRIAL WASTE CHARGE

In addition to the permit fee set forth above and the Wastewater service charges made by the District, all customers of the District that discharge Non-Domestic Waste into the Sanitary Sewer collection systems or into the District's Wastewater Facilities shall pay the Non-Domestic Waste Charges provided for herein. If the District determines that the volume or the character of Non-Domestic Waste to be treated by the District's Wastewater Facilities will not cause overloading of the Wastewater Facilities, the Person responsible for the discharge of Non-Domestic Waste shall nevertheless pay equitable Industrial Waste Charge sufficient to provide payment for the amortization of all capital expenses for the collection and treatment of Non-Domestic Waste (excluding new capital expenses and a proportionate share of the value of the existing Wastewater Facilities used in handling and treating the Non-Domestic Waste, but taking into account amortization costs resulting from annual tax payments) and operation and maintenance costs including salaries and wages, power costs, cost of chemicals and supplies, allowances for maintenance, depreciation, overhead and administrative and general expense. For such purposes, amortization shall be considered to be completed in a fifteen-year period.

(1) The Non-Domestic Waste Charge shall be calculated by the following formula:

$$C = Q/1000 * (b * (BOD - 200) + n * (N-25) + s * (S - 200) + g * (G - 100)) * 8.34$$

Formula values are:

C = Non-Domestic Waste Charge (in dollars)

Q = Billable quantity (based on water billed or actual measurement of Wastewater discharged) of Wastewater in thousands of gallons.

b = unit cost of treatment chargeable to B.O.D., \$/lb.

n = unit cost of treatment chargeable to ammonia, \$/lb.

s = unit cost of treatment (including sludge treatment) chargeable to suspended solids, \$/lb.

g = unit cost of disposal chargeable to grease, \$/lb.

BOD = concentration of B.O.D. in discharge from industrial user in mg/l. but not less than 200 mg/l.

N = concentration of NH₃-N in discharge from industrial user in mg/l, but not less than 25 mg/l.

S = concentration of TSS in discharge from industrial user in mg/l, but not less than 200 mg/l.

G = concentration of Oil & Grease in discharge from industrial user in mg/l, but not less than 100 mg/l.

Until revised or amended by the District, the initial coefficients of charge for use in the foregoing formula shall be: b = \$0.80/lb.; n = \$2.34/lb., s = \$0.90/lb., and g = \$0.22/lb.

(2) Those industries defined herein as dry industries, or industries producing waste containing BOD of less than two hundred (200) milligrams per liter (mg/l) and suspended solids of less than two hundred (200) mg/l and NH₃-N of less than 25 mg/l and Oil and Grease of less than 100 mg/l will pay a sewer service charge at the uniform rate as set forth in the District's Rate Order as same may be amended from time to time.

(3) When either BOD is equal to or exceeds two hundred (200) mg/l, ammonia is equal to or exceeds 25 mg/l, or suspended solids is equal to or exceeds two hundred (200) mg/l, or oil and Grease is equal to or exceeds 100 mg/l, in a delivered waste, the formula provided in subsection (1) above shall be used to determine the Non-Domestic Waste Charges. The amount of BOD to be used in the formula shall equal to the actual amount or two hundred (200) mg/l, whichever is greater. The amount of ammonia to be used in the formula shall equal the actual amount of ammonia or 25 mg/l, whichever is greater. The amount of suspended solids to be used in the formula shall equal the actual amount or two hundred (200) mg/l, whichever is greater. The amount of Oil and Grease to be used in the formula shall equal the actual amount or one hundred (100) mg/l, whichever is greater.

(4) When an industry produces both domestic and processed waste with one connection to the sewer system, the waste so delivered shall be considered as Non-Domestic Waste with the rate being the uniform rate as set forth in the District's Rate Order as same may be amended from time to time, or calculated by the Non-Domestic Waste Charge computations, in compliance with the above, based on the combined volume, BOD, suspended solids content, NH3-N, and Oil and Grease, all as determined by the District.

(5) A permittee may reduce its Non-Domestic Waste Charge rate by greater removal in Pretreatment or plant operation procedure. Once the Pretreatment or plant procedure is established, the permittee must obtain a lower rate consent from the District to reduce the permittee's Non-Domestic Waste Charge rate. However, charges for a higher Non-Domestic Waste Charge rate based on tests by the District may be made without other notice to the permittee.

(6) The District shall review and, if appropriate, adjust the Non-Domestic Waste Charge at least annually to reflect changes in the characteristics of the Non-Domestic Waste based upon the results of sampling and testing. The District shall also review at least annually the basis for determining Non-Domestic Waste Charge and shall adjust the unit Treatment costs in the above formula to reflect increases or decreases in the waste treatment costs based upon the previous year's experience. Increases in Non-Domestic Waste Charge shall be retroactive for two (2) billing periods and shall continue for two (2) billing periods unless subsequent tests determine that the charge should be further increased. The District shall bill its customers in a manner which will show Non-Domestic Waste Charge as a separate item from Wastewater service charges.

SECTION F. SPILL PREVENTION PLANS

(1) Each Non-Domestic User shall provide protection from accidental discharge of prohibited materials or other substances regulated by this Order. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the owner or User's sole cost and expense. Detailed plans showing facilities and operation procedures to provide such protection shall be submitted by the User to the District for review, and such User must obtain District approval before construction of the facility. No Non-Domestic User who commences contribution to the District's Wastewater Facilities after the effective date of this Order shall be permitted to introduce Pollutants into the system until accidental discharge procedures have been approved by the District. Review and approval of such plans and operating procedures shall not relieve the User from the responsibility to modify the User's facility as necessary to meet the requirements of this Order and any amendments hereto. In the case of an accidental discharge, it is the responsibility of the User to telephone and notify the District Operator of the incident within one hour of becoming aware of the incident and provide the following information: location of discharge, type of waste, concentration and volume, and corrective actions.

(2) Within five (5) days following an accidental discharge, the User shall submit to the District a detailed written report describing the cause of the discharge and the measures to be taken by the User to prevent similar future occurrences. Such notification shall not relieve the User of any expense, loss, damage, or other liability which may be incurred as a result of damage to the District's Wastewater Facilities, fish kills, or any other damage to Persons or property; nor

shall such notification relieve the User of any fines, civil penalties, or other liability which may be imposed by this Order or other applicable law.

(3) A notice shall be permanently posted by the User on the User's bulletin board or other prominent place advising employees to telephone and notify the District Operator in the event of a dangerous discharge. It shall be the responsibility of such User to notify all its employees who may cause or suffer such a discharge to occur of such emergency notification procedure.

(4) Any related costs, including fines, fees or court costs, involved in the cleaning up of accidental spills shall be paid by the Non-Domestic User causing such spill. This shall include the costs of cleaning up the District's Wastewater Facilities, and the costs shall include any labor, equipment or materials involved. The cleaning up of the District's Wastewater Facilities shall be completed by the District's operator or other contractor approved by the District.

SECTION G. SUPERVISION

If the District or its designated representative determines that a discharge or a proposed discharge into the Wastewater Facilities may deleteriously affect the Wastewater Facilities or receiving waters, or create a hazard to life or health, or create a public nuisance, it may require any one or more of the following:

- (1) Pretreatment to an acceptable condition for discharge into the Wastewater Facilities;
- (2) Control over the quantities and rates of discharge; and
- (3) Non-Domestic waste charge payments sufficient to compensate the District for the cost of handling and treating the waste.

SECTION H. PRETREATMENT

(1) The owner of premises from which Non-Domestic Waste is discharged shall provide Grease and sand Traps for the proper handling of liquid wastes containing oil, Grease or sand. The Traps must be of a type and capacity approved by the District to adequately handle the waste and must be located so that they are easily accessible for cleaning, inspection and monitoring.

(2) When Pretreatment of waste is required by the District as a condition for acceptance of the waste into the District's Sanitary Sewer, the owner of the premises from which the waste is discharged shall plan, construct, operate and maintain waste treatment facilities in an efficient manner at his sole cost and expense. Plans for such facilities must be submitted for, and receive, District approval prior to beginning installation or construction. In the event that the installation of Pretreatment facilities is necessary for a User to meet applicable federal Pretreatment standards, the District shall establish and enforce deadlines for the installation of such facilities.

(3) No owner or operator of premises from which Non-Domestic Waste is discharged shall allow the use of extraneous water intermixed for the purposes of diluting the concentration of waste.

(4) Chemicals that emulsify or treat oil in grease in the grease trap shall not be added to the grease trap.

SECTION I. INSPECTION SAMPLE WELLS

(1) A Non-Domestic User that discharges waste into the District's Sanitary Sewer or Wastewater Facilities shall provide, at his sole cost and expense, an inspection manhole or sample well in an accessible location on the premises from which such waste is discharged.

(2) An inspection manhole or sample well must be:

- (a) located reasonably near the outlet of each sewer, drain, pipe, or channel that connects with the Sanitary Sewer or Wastewater facility; and
- (b) designed and constructed to prevent infiltration by ground and surface water; and
- (c) constructed to include a flow measuring flume or weir; and
- (d) maintained so that a Person may easily and safely measure volume and obtain flow samples.

(3) Before beginning construction of an inspection manhole or sample well, a Non-Domestic User shall submit plans to the District for review and approval to insure compliance with this section. Plans must include the sewage metering device if one is to be installed.

SECTION J. SAMPLING OF WASTE

(1) The District is authorized to require samples of waste discharges from Users at intervals specified in the permit to adequately monitor and control the discharges. In the event the District requires such samples at intervals as specified in the permit, a User shall retain the services of a Texas Commission on Environmental Quality certified commercial laboratory acceptable to the District and pay all costs of sample collection and laboratory services and to determine and report the Wastewater characteristics. If the District requests additional samples over the number specified in the permit, results of the sample analysis shall be at the User's expense if the sample is not in compliance with the allowable pollutant concentrations in this Order or the User's permit; otherwise, the District shall bear the expense of the analysis. Users shall retain records of sampling results at their premises for three years from the date such samples were taken.

(2) Each User subject to federal categorical Pretreatment standards shall submit self-monitoring reports as required by 40 CFR § 403.12.

(3) The District may take samples of waste discharges from Users as often as is necessary to adequately monitor and control the discharges. The cost of such sampling and laboratory analysis shall be paid by the Users.

(4) Samples may be taken manually or by use of mechanical equipment and shall be flow-weighted composites. The District may require a User to install, use and maintain

monitoring equipment. Standard Methods laboratory procedures shall be used for determining concentrations of Non-Domestic Waste.

SECTION K. RIGHT OF ENTRY

The District and other authorized representatives or employees of the District, bearing proper credentials and identification, shall be permitted to enter immediately upon any premises in which a Wastewater source is located, or in which any records required to be maintained pursuant to this Order are located, and may at reasonable times have access to and copy any records, and conduct any inspection, observation, measurement, sampling, or testing necessary to enforce this Order. Reasonable times shall mean any time when waste is being discharged or any time during normal operating hours.

SECTION L. TRADE SECRETS

All information and data relating to a User which is obtained from reports, questionnaires, monitoring programs or inspections shall be available to the public without restriction to the extent required by the Texas Open Records Act. Any user desiring to restrict the availability of the information submitted to the District shall identify the provision of the Texas Open Records Act pursuant to which the User believes such information may be withheld from the public.

SECTION M. FEES

(1) It is the purpose of this section to provide for the recovery of costs from Users of the District's Wastewater Facilities related to the implementation of the program(s) established herein. The applicable charges or fees shall be set forth by the District and may be revised from time to time.

- (2) The District may adopt any one or more of the following charges and fees:
- (a) fees for reimbursement of costs of setting up and operating the District's Pretreatment Program;
 - (b) fees for monitoring, inspections, surveillance procedures, sample collection and analysis costs;
 - (c) fees for reviewing accidental discharge procedures and construction;
 - (d) fees for removal (by the District) of Pollutants otherwise subject to National Categorical Pretreatment Standards;
 - (e) Non-Domestic Waste Charges;
 - (f) other fees as the District may deem necessary to carry out the requirements contained herein.

SECTION N. NOTIFICATION OF VIOLATION

Whenever the District finds that any User has violated or is violating this Order, the District shall serve notice, either personally or by certified mail, return receipt requested, upon such Person stating the nature of the violation. Within thirty (30) days of service of such notice, a plan for satisfactory correction thereof shall be submitted to the District by such User. If such a plan is not submitted, or if such violation is not corrected within such thirty (30) day period, unless User has perfected his right to review pursuant to Section O below, the District shall proceed with enforcement pursuant to Section S; provided, however, nothing contained in this section or any other section of this Order shall prevent the District or the Board from taking action in an emergency situation pursuant to Section P below.

SECTION O. REVIEW

Any User objecting to a finding by the Board of a violation of this Order shall have the right as set forth herein to a hearing before the Board. In the event such User disagrees with the District's finding of such violation(s), the User shall, within thirty (30) days of service of such notice by the District, serve notice by certified mail, return receipt requested, on the District, that such User disagrees with the District's finding and, further, that such User requests a hearing before the Board. Such hearing shall be conducted at the next regular or special meeting of the Board which is held not less than ten (10) days following the date of User's service of notice on the District. At such hearing, both sides will be allowed to present such testimony as is reasonably necessary to present a clear understanding of the contested issues. The Board President shall be the presiding officer and may at his discretion request other professional opinions prior to the Board's rendering a decision on the matter of review.

SECTION P. EMERGENCY RELIEF

Notwithstanding anything contained herein to the contrary, the District may immediately suspend Wastewater treatment service to a User when such suspension is necessary, in the opinion of the Board, in order to stop or prevent an actual or threatened discharge that presents an imminent and/or substantial danger to the health or welfare of Persons, the environment, or the District's Wastewater Facilities or that causes, or would cause, the District to violate any of the terms of its Discharge Permit. The District shall reinstate the Wastewater service upon proof by the User of the elimination of the non-complying discharge.

SECTION Q. NOTICE

Notice to the District required hereunder shall be served at the following address:

Brookshire Municipal Water District
c/o Radcliffe Bobbitt Adams Polley PLLC
America Tower, 2929 Allen Parkway, Suite 3450
Houston, Texas 77019-7120

SECTION R. PENALTIES AND CHARGES FOR VIOLATION

Each violation of this Order shall be punishable by a civil penalty as set forth in the District's Rate Order as same may be amended from time to time. Each day's violation shall be

and constitute a separate offense. In addition, the violator may be required to pay such other charges, attorney's fees and court costs as set forth in said Rate Order.

SECTION S. ENFORCEMENT

In addition to any remedies set forth in the District's Rate Order, any one or more of the following remedies may be utilized by the District to abate or prevent any violation of this Order:

- (1) Discontinuance of water service.
- (2) Disconnection and sealing of Sanitary Sewer connection.
- (3) The District may and is hereby authorized to:
 - (a) File suit in a court of competent jurisdiction to secure appropriate judicial relief, including, but not limited to, injunctive relief and/or the penalty provided in Section R for the violation by such User of the provisions of this Order.
 - (b) Seek a resolution of the Board authorizing the filing of a lawsuit under the provisions of Sections 7.351 and 7.352 of the Texas Water Code, as amended.

SECTION T. SEVERABILITY

All Orders or parts of Orders in conflict herewith are hereby repealed to the extent of such conflict. The invalidity of any section, clause, sentence, provision or provisions of this Order shall not affect the validity of any other part or parts of this Order, which other part or parts shall be given effect as though such invalid section, clause, sentence or provision were omitted.

SECTION U. EFFECTIVE DATE

This Order shall be effective upon adoption.

(SIGNATURE PAGE FOLLOWS)

ADOPTED this 9th day of July, 2018.

BROOKSHIRE MUNICIPAL WATER DISTRICT

By: *Colin Pedice-Kelly*
President, Board of Directors

ATTEST:

By: *[Signature]*
Secretary, Board of Directors



**Brookshire Municipal Water District
District Development Policy Packet**

- 10. Order Adopting Amended Land Use Assumptions,
Capital Improvement Plan and Impact Fees**

ORDER #18-114
CERTIFICATE FOR ORDER

THE STATE OF TEXAS
COUNTY OF WALLER
BROOKSHIRE MUNICIPAL WATER DISTRICT

§
§
§

We, the undersigned officers of the Board of Directors (the "Board") of Brookshire Municipal Water District (the "District"), hereby certify as follows:

The Board convened in regular session, open to the public, on Monday, November 5, 2018, at 6:00 p.m., at 4004 6th Street, Brookshire, Texas, and the roll was called of the members of the Board, to-wit:

Edith Penrice-Kelley	President
Albert Wilkins	Vice President
Havanaugh "Kirk" Glover	Secretary
Stephanie Harris-Green	Investment Officer
Vanessa Johnson	Assistant Secretary

All members of the Board were present, except the following: Vanessa Johnson, thus constituting a quorum. Whereupon, among other business, the following was transacted at such meeting:


ORDER ADOPTING AMENDED LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS PLAN AND IMPACT FEES

was duly introduced for the consideration of the Board. It was then duly moved and seconded that such Order be adopted; and, after due discussion, such motion, carrying with it the adoption of said Order, prevailed and carried by the following vote:

AYES: 3 NOES: 1

A true, full, and correct copy of the aforesaid Order adopted at the meeting described in the above and foregoing paragraph is attached to and follows this Certificate; such Order has been duly recorded in said Board's minutes of such meeting; the above and foregoing paragraph is a true, full, and correct excerpt from the Board's minutes of such meeting pertaining to the adoption of such Order; the persons named in the above and foregoing paragraph are the duly chosen, qualified, and acting officers and members of the Board as indicated therein; each of the officers and members of the Board was duly and sufficiently notified officially and personally, in advance of the time, place, and purpose of such meeting and that such Order would be introduced and considered for adoption at such meeting and each of such officers and members consented, in advance, to the holding of such meeting for such purpose; such meeting was open to the public, as required by law, and public notice of the time, place and purpose of such meeting was given as required by Chapter 551, Government Code and Section 49.063, Texas Water Code, as amended.

SIGNED AND SEALED the 5th day of November, 2018.


Secretary, Board of Directors


President, Board of Directors



2018

CAPITAL IMPROVEMENTS PLAN
AND
IMPACT FEE CALCULATION

BROOKSHIRE MUNICIPAL WATER DISTRICT

AUGUST 9, 2018

CLAY & LEYENDECKER, INC.
ENGINEERS
TEXAS FIRM REGISTRATION NO. 2309



H. M. Clay Jr.
8 - 9 - 2018

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BROOKSHIRE MUNICIPAL WATER DISTRICT
CAPITAL IMPROVEMENTS PLAN
AND
IMPACT FEE CALCULATION

Preface. Preparation of this report has been authorized by the Board of Directors of the Brookshire Municipal Water District for consideration by its Capital Improvements Advisory Committee. It documents the procedures relating to the possible adoption of revised Water and Wastewater Impact Fees, also called Capital Recovery Fees.

The process of calculating and adopting impact fees is governed by Texas Local Government Code Chapter 395. The statute also mandates the formation of a Capital Improvements Advisory Committee and lists the requirements for a public input process. The Brookshire Municipal Water District appointed the Advisory Committee on July 9, 2018.

1. Existing Capital Improvements. This section includes a description of the existing capital improvements within the service area and the costs to upgrade, update, improve, expand, or replace the improvements to meet existing needs and usage and stricter safety, efficiency, environmental, or regulatory standards.
 - a. Water Plants.
 - 1) Connection Count and Equivalent Service Units. The Texas Commission on Environmental Quality (TCEQ) sets minimum standards for public drinking water systems. Their criteria are based on the number of connections within the water systems. In general, each water meter is considered to be one connection; however, each multi-family unit, such as an apartment unit, is counted as one connection, regardless of the size of the dwelling or whether the multi-family complex is served by a single connection (master meter) or individual connections and meters for each unit. After adjusting for the varying water usage by non-residential users, Brookshire MWD presently includes approximately 1920 connections.
 - 2) Existing Facilities. The District operates three water production plants. Two of them (Plants No. 1 and No. 2) each include two wells, storage, and high service pumping facilities. The third plant

consists only of a well and pressure tank. The existing capacity of the major components and regulatory requirements are shown in Table 1.

Water Plant No. 3 is not connected with Plants No. 1 and 2, and at present it only serves the Love's truck stop east of Brookshire. None of the land around the truck stop is within Brookshire MWD. Therefore, Water Plant No. 3 is not included in the following table or in the subsequent calculations.

CAPACITY OF <u>EXISTING WATERWORKS</u> FACILITIES (Based on 1920 connections)					
	<u>Existing</u> Plant No. 1	<u>Existing</u> Plant No. 2	<u>Existing</u> Total	<u>TCEQ</u> <u>Minimum</u> <u>Required</u> <u>Per</u> <u>Conn.</u> ⁽¹⁾	<u>Minimum</u> <u>Required</u> <u>Total</u>
Water Wells – gpm ⁽⁵⁾	0 & 300	450 & 550	1300	0.6 ⁽¹⁾	1152
Ground Storage – gallons	200,000	572,000	772,000	----	----
Elevated Storage – gallons	75,000	200,000	275,000	100	192,000
Total Storage – gallons	275,000	772,000	1,047,000	200	384,000
Pump Stations	1	1	2	----	----
High Service (Booster) Pumps – gpm. ⁽⁵⁾	500 & 500	1200 & 1200	2200 ⁽²⁾	---- ⁽²⁾	836
Auxiliary Power	Yes ⁽³⁾	Yes ⁽⁴⁾	---	Not Req'd	Not Req'd
Year Built (approx.)	1950, 1956	1982, 2013			
¹ Based on TCEQ "Rules and Regulations for Public Water System". ² Must deliver peak hourly flow, estimated at peak day multiplied by 125% = 963,000 gpd x 1.25 = 836 gpm, with the largest pump not included. ³ Generator can operate all pumps. ⁴ Generator operates only Well No. 3 ⁵ Gallons per minute.					

Comparing the "Existing Total" to the "Minimum Required Total" in Table 1 above shows that the existing major components of Brookshire's water plant are adequate to meet existing needs.

a) Water Wells. The principal requirement for a municipal well system is that the wells furnish ample quantities of water during periods of maximum demand, which may continue for several consecutive days or even weeks. The Texas

Commission on Environmental Quality (TCEQ) requires that the District's total well capacity be at least 0.6 gallons per minute per connection. For a total 1920 connections this requirement amounts to 1152 gallons per minute (gpm). At present, Brookshire's production with all wells operable is approximately 1300 gpm.

- b) Ground Storage. The purpose of ground storage is to provide a large supply of water that the high service pumps may draw upon during periods of heavy demand or during a serious fire or water well breakdown. The TCEQ requirement is that the water system provides 200 gallons of total storage per connection served (including elevated storage). However, fire protection and emergency considerations are other important factors in evaluating the need for ground storage facilities. The present ground storage tank capacity is 772,000 gallons.
- c) Elevated Storage. The function of elevated storage is to provide a pressurized water supply during power failures and provide for short term surges of demand. The District has existing elevated storage capacity of 275,000 gallons.
- d) Total Water Storage. The maximum water demand must be satisfied by a combination of ground storage flow (provided by the high service pumps) plus elevated storage flow. For the current situation, the existing combination of ground and elevated tanks (1,047,000 gallons) is calculated to be sufficient for the existing customers.
- e) High Service Pumps. High service (or booster) pumps must be capable of providing firefighting requirements and simultaneously service the maximum daily demand. TNRCC criteria require 2.0 gpm per connection or a minimum of 1000 gallons per minute with the capability of delivering peak hourly flow. For Brookshire's current demand, the peak hourly requirement was estimated to be 836 gpm by the state inspector. The existing high service pumps have a total capacity of 2200 gpm with one of the larger pumps out of service.

b. Wastewater Treatment Plant.

- 1) Existing Facilities. Brookshire's wastewater treatment system consists of a single plant located east of the developed part of the City. The original wastewater treatment plant was put into operation in the early 1950's with an initial capacity of approximately 0.100 million gallons per day (MGD). Its permitted capacity has been increased in increments to the current value of 0.970 MGD.

The plant employs the activated sludge treatment process. Operating experience has shown that the plant normally can meet its permit requirement except during some wet weather events, when excessive rainwater enters the collection system. The repairs involved in reducing the rainwater inflow have been an ongoing process, which is funded from the District's operating budget.

The District's operating permit from TCEQ limits the capacity of the plant that is usable before expansion is necessary. When measured flow for the highest three consecutive months exceeds seventy-five percent of the permitted value, a permittee must begin engineering and financial planning for plant expansion. Seventy-five percent of the permitted flow is 0.727 MGD. When the three-month flow reaches 90 percent, the permittee must begin implementation. The effect of this regulation is that the flows for the three highest consecutive months (rather than the actual average flow) are compared to 90 percent of the permitted flow (rather than 100 percent) in determining when plant expansion is necessary. Ninety percent of the permitted flow is 0.873 MGD. In the past the flow has reached approximately 0.500 MGD for three consecutive months.

At this time the existing wastewater treatment plant appears adequate to serve the District's current needs and usage, and no capital expenditures for stricter safety, efficiency, environmental, or regulatory standards appear to be necessary beyond the operating budget.

2. Total Capacity, Current Usage, and Commitments of Capacity.

a. Water Plants.

	<u>Existing Total Capacity</u>	<u>Current water usage</u>	<u>Commitments</u>
Wells	1300 gpm = 1.87 MGD ⁽¹⁾	0.96 MGD ⁽³⁾	41 esu ⁽⁴⁾
Elevated Storage	0.275 MG ⁽²⁾	0.96 MGD ⁽³⁾	41 esu ⁽⁴⁾
Total Storage	1.047 MG ⁽²⁾	0.96 MGD ⁽³⁾	41 esu ⁽⁴⁾
High Service Pumps	3,400 gpm	0.96 MGD ⁽³⁾	41 esu ⁽⁴⁾
¹ MGD = million gallons per day ² MG = million gallons ³ Estimated peak day ⁴ Prepaid commitment to Royal ISD of 41 equivalent service units (esu)			

b. Wastewater Treatment Plant.

<u>Existing Total Capacity</u>	<u>Current Capacity Utilization</u>	<u>Commitments</u>
0.970 MGD ⁽¹⁾	0.700 MGD ⁽²⁾	41 esu ⁽³⁾
¹ MGD = million gallons per day ² Projection from current flows plus organic growth within existing customer base. ³ Prepaid commitment to Royal ISD of 41 equivalent service units (esu)		

3. Capital Improvements, New Development, and Land Use. This section contains a description of the capital improvements and related costs necessitated by and attributable to new development in the service area, based on land use assumptions.

a. Service Area. The following analysis was prepared on a system-wide basis. The service area is that area which is currently within the boundaries of the District, as required by Chapter 395 of the Texas Local Government Code.

b. Equivalent Service Unit (esu). The basic service unit in this study is a single-family residence. For evaluation of drinking water systems, the Texas Commission on Environmental Quality (TCEQ) requires that each single- and multi-family dwelling unit, regardless of size or number of bedrooms, be considered as one connection when calculating the capacity of a water system. Since TCEQ's regulations control the size and,

consequently, the cost of the water plant components, this study will adopt the same criteria for residential developments. For wastewater, a concentration factor is included, based on the strength, or concentration, of the discharge.

Please see Section 4 of this report for the quantitative definition of "equivalent service unit" used in this report.

- c. Existing Service Units. The District conducted a field survey of connections in 2011. Updating the survey results in the following approximate distribution of connections:

Single-family	900
Multi-family	405
RV Spaces	143
Mobile home spaces.....	283
Hotel rooms	380
Brookwood	20
Commercial connections	210
Empty lots with meter	190

The survey data can be converted to an estimate of existing esu's (based on water use) by adjusting each category by an equivalence factor:

Single-family	900 x 1.00 =	900 esu
Multi-family	405 x 1.00 =	405 esu
RV Spaces	143 x 0.12 =	17 esu
Mobile home spaces	283 x 0.70 =	198 esu
Hotel rooms	380 x 0.20 =	76 esu
Brookwood	20 x 1.00 =	20 esu
Commercial connections	210 x 1.35 =	285 esu
Empty lots with meter.....	190 x 0.10 =	<u>19 esu</u>
		1920 esu

The preceding calculation results in an estimate of 1920 existing esu's, based on water use.

- d. New Development Land Use. The "Existing Land Use" map and the "Future Land Use" map at the end of this report were used to estimate the potential new development within the service area. The results are expressed in esu's, based on water use (consumption).

The following major categories of future land use were adopted for this report:

- 1) Residential. Includes single-family and multi-family development. Since Brookshire has no zoning, a blended density of eight connections per acre was used. The density estimates are four single-family dwellings per acre and twelve multi-family units per acre, with a ratio of one acres of multi-family for each acre of single family development. The ratio is based on estimated development trends in Brookshire over approximately the last ten years.
- 2) Commercial. Includes retail, office, sales, office-warehouse, distribution, and similar enterprises other than industrial land use. A blended density of 2.5 esu's per acre was used. The density estimates are shown below based on estimated current development trends in the Brookshire area:

	A	B	C
	<u>esu/acre</u>	<u>% of New Development</u>	<u>A x B esu/acre</u>
Retail	3.0	10%	0.30
Office	4.3	10%	0.43
Sales	2.0	5%	0.10
Warehouse	2.2	40%	0.88
Distribution	2.2	<u>35%</u>	<u>0.77</u>
Blended Density		100%	2.48

- 3) Industrial. Includes manufacturing, assembly, food processing, and similar land uses. An estimated density of 2.4 esu's per acre was used.
 - 4) Public and Semi-Public. Includes all publicly-owned facilities. An estimated density of 0.5 esu's per acre was used.
- e. Projected Service Units. This section contains an estimate of the total number of projected service units necessitated by and attributable to new development within the service area, based on the land use assumptions.

A "Future Land Use" map is included at the end of this report. The map indicates projected land use for within the service for a future "built out" condition. Future additions of land area to the District are not considered because the governing statute defines the service area as the boundaries

of the agency, plus its extraterritorial jurisdiction, if any. So the service area for the Brookshire MWD is the area within its current boundary.

- 1) Land Use Assumptions. The "Future Land Use" Map, at the end of the report, sets out four broad categories of land usage. Two other categories, agriculture and vacant land, constitute a substantial portion of the area today. An "Existing Land Use" Map, also at the end of this report, shows the current situation. The development and build out of the undeveloped area form the basis for projecting the future number of equivalent service units.

The maps show the following areas within the service area.

<u>Land Use</u>	<u>Current</u>	<u>At full Development</u>	<u>Additional</u>
Agriculture & Vacant	840 acres	0	---
Residential	1086 acres	1228 acres	142 acres
Commercial	217 acres	863 acres	646 acres
Industrial	248 acres	296 acres	48 acres
Public or Semi-Public	37 acres	47 acres	<u>10 acres</u>
			846 acres

Since Brookshire is not a zoned city at this time, frequently there is a mixture of land uses within a given area. The maps indicate the predominate usage.

- 2) Equivalent Service Unit. For purposes of this report, one "equivalent service unit" (esu) is defined as a single-family residential dwelling. Please see Section 4 on Page 9 of this report for a quantitative definition.
- 3) Service Unit Density. Even in the highest density locations, a substantial area is not used for structures. Streets, parking, driveways, walkways, utility easements, drainage easements, ponds, open space, and setbacks all act to reduce the density. The following density, expressed in esu's per acre, were estimated in the previous subsection of this report.

<u>Land Use</u>	<u>Density</u>
Vacant	0 esu's/acre
Agricultural	0 esu's/acre
Residential	9.0 esu's per acre
Commercial	2.5 esu's per acre
Industrial	2.4 esu's per acre
Public or Semi-Public	0.5 esu's per acre

- 4) Service Unit Projections. The total number of projected new service units necessitated by and attributable to full development of the service area is shown below

<u>Land Use</u>	<u>Additional Area</u>	<u>Service Unit Density</u>	<u>New esu's Projected</u>
Residential	142 acres	8 per acre	1136
Commercial	646 acres	2.5 per acre	1615
Industrial	48 acres	2.4 per acre	115
Public or Semi-Public	10 acres	0.5 per acre	5
			<u>2871</u>

- f. New Capacity Requirements. The previous section of this report quantified the additional water and sanitary sewer requirement of the service area to be 2871 esu's at full development.

- 1) Water Plants. In order to serve the projected 2871 new esu's, the following additional major water plant components will be required:

<u>Component</u>	<u>Criteria ⁽¹⁾ (per esu)</u>	<u>New Capacity Required</u>
Wells	0.6 gpm	1722 gpm
Elevated Storage	100 gallons	278,000 gallons
Total Storage	200 gallons	556,000 gallons
Service Pumps	⁽³⁾	1300 gpm
⁽¹⁾ Based on TCEQ "Rules and Regulations for Public Water Systems".		
⁽²⁾ gpm = gallons per minute		
⁽³⁾ Must deliver peak hourly flow, estimated at peak daily flow multiplied by 125%.		

- 2) Wastewater Treatment. In order to serve a projected increase of 2871 esu's, additional wastewater treatment capacity of 0.7 MGD (million gallons per day) will be required. That is based on a mean daily sewage flow of 240 gallons per day per esu.

g. Cost of Capital Improvements

- 1) Cost Estimates and Scale. Cost estimates in this report are expressed in 2018 dollars.

One difficulty in planning the financing of facility improvements lies in the matter of scale. It is not economical to do capacity expansions in small increments. Attempting to do so would raise the capital cost per gallon of water produced, and consequently the impact fee per esu would also increase. The result is that a substantial accumulation of impact fees must be collected before any expansion can be undertaken. Eventually, if the District has no surplus capacity, then no new development can be permitted, and no impact fees will be collected. Fortunately, at this time the District has available capacity to serve new development. But if that capacity is used up without collecting impact fees to replace it, then the District will not have the funds to construct additional capacity beyond that point. So further development would not be possible, unless it was funded by some other means, such as tax bonds.

- 2) Costs of New Water Plant Facilities. The following cost estimates are for the water plant facilities necessary to accommodate new development within the service area.

ESTIMATED COSTS OF NEW WATER PLANT EXPANSION		
Component	Total Capacity	Estimated Cost
Two Wells & Site ⁽¹⁾	1722 gpm	\$1,500,000.00
Elevated Storage	278,000 gallons	1,400,000.00
Ground Storage	556,000 gallons	500,000.00
High Service Pumping Station ⁽²⁾	1,300 gpm	1,200,000.00
Total for Water Plant Improvements		\$4,600,000.00
⁽¹⁾ Includes site and pipeline to site		
⁽²⁾ Includes piping, electrical and other site development costs		

- 3) Costs of New Wastewater Treatment Plant Facilities. It was previously shown that additional permitted wastewater treatment discharge of 0.7 MGD will be needed to accommodate the estimated full development of the service area. This need will

require an expansion of the plant capacity and site, the cost of which is estimated below.

ESTIMATED COSTS OF WASTEWATER TREATMENT EXPANSION	
0.7 MGD Expansion	\$5,600,000.00

4. Quantity of Consumption and Discharge. The following levels of water consumption and wastewater discharge represent one equivalent service unit (esu) for the new development areas included in this report:

Water. 1 esu = 300 gallons per day (gpd)

Wastewater. 1 esu = 240 gallons per day (gpd), with a 5-day B.O.D. and TSS up to 200 mg/l each, Oil & Grease concentration up to 100 mg/l, Ammonia (NH₃-N) up to 25 mg/l, and other characteristics of Normal Domestic Sewage as defined in the "Order Regulating the Introduction of Wastewater into the Sanitary Sewer System of the District", current edition, as adopted and amended by the Brookshire Municipal Water District.

The Table at the end of this report shows the level of water consumption and wastewater discharge for a variety of common types of land uses. In general, the data was adapted from the City of Houston, Planning and Development Services Division, "Discharge Criteria Sheet". Water consumption and wastewater discharge for a single-family home are considered to constitute one (1.00) esu. The table also establishes the ratio of an equivalent service unit to the various type of land uses.

5. Projected Five-Year Demand. This section contains the projected demand for facility expansions required by new esu's over a five-year period.

A five-year period was selected because the land use projections are required to be reviewed and, if necessary, reworked at five-year intervals. Also, the changing nature and rate of development in the area makes forecasting difficult.

The past five years have been a period of accelerating, but still limited growth for the area within the District's boundaries. However, the last several years have witnessed large-scale commercial development in the area east of the District. It appears that the recent trend will be more representative of the future, and the projections herein are based on that concept.

The following table is a projection of anticipated five-year development, using an initial growth rate of two percent, and increasing as shown in the table.

PROJECTED FIVE-YEAR DEMAND										
Year	Growth Rate	Residential (8.0 esu/acre)		Commercial (2.5 esu/acre)		Industrial (2.4 esu/acre)		Public, etc. (0.5 esu/acre)		Total esu's
		Acres	esu's	Acres	esu's	Acres	esu's	Acres	esu's	
2019	2 %	7	56	32	80	3	7	1	1	144
2020	3 %	7	56	33	82	3	7	1	1	146
2021	3 %	8	64	34	85	3	7	1	0	156
2022	3 %	8	64	35	88	3	7	1	1	160
2023	4 %	8	64	36	90	3	7	1	0	161
Grand Total										767

The projected five-year demand is 767 service units. The built-out demand was projected previously to be 2871 new esu's. So the five-year projection represents 27 percent of the built-out condition. Applying that percentage to the built-out costs results in the following cost estimate for the five-year projection:

Water:	27 % x \$4,600,000.00 =	\$1,242,000.00
Sanitary Sewer:	27 % x \$5,600,000.00 =	1,512,000.00
Total:		\$2,754,000.00

6. Credits. The District will give the following credits to certain payors of the impact fees.
 - a. Change in Land Use. Where a new structure replaces an older structure which has had water and/or sanitary sewer service, a credit may be given in calculating the impact fee. The credit will reflect the previous land use. However, the credit will not exceed the calculated impact fee for the new structure.
 - b. Ad Valorem Tax. A credit will be given for the portion of ad valorem tax paid by new service units during the period that is used for the payment of the improvements. A similar credit would be given for utility service revenues if any of the District's revenues were used for the capital improvements that are the subject of this report; however, no revenues are used for that purpose. Therefore, the credit will only apply to the wastewater plant bond issue of 2013, in the principal amount of \$815,000.00, which is supported by ad valorem tax. Total debt service

requirements amount to \$1,272,905.00, according to the Official Statement for the bond issue.

The total cost of necessary wastewater treatment plant improvements was shown to be \$5,600,000.00, of which the \$1,272,905.00 in bond payments represents 22.73 percent. So a credit of 22.73 percent should be deducted from the sanitary sewer impact fee that is charged to all entities that are subject to the ad valorem tax.

7. Maximum Impact fee per Equivalent Service Unit. Section 395.014.(b) of the Texas Local Government Code sets out the formula for computing the impact fee. The maximum impact fee per service unit is calculated by dividing the costs of the part of the capital Improvements necessitated by and attributable to the projected new service units in Section 5 of this report by the projected new service units described in that section:

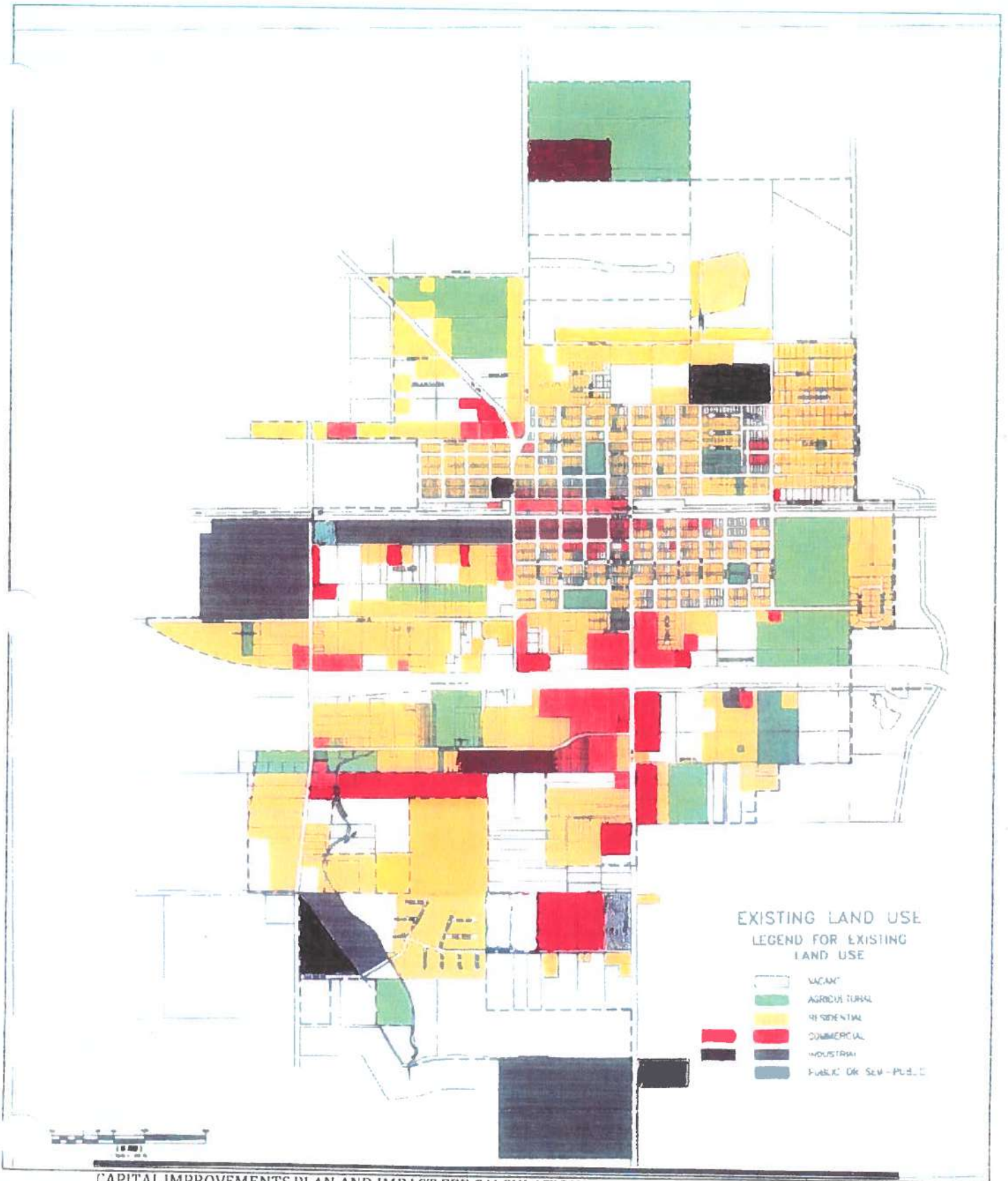
Maximum Water Impact Fee =
 $\$1,242,000.00 / 767 \text{ esu's} = \$1,619.00 \text{ per esu}$
 Maximum Sanitary Sewer Impact Fee =
 $\$1,512,000.00 / 767 \text{ esu's} = \$1,971.00 \text{ per esu}$
 (not including effect of the tax credit).
 Credit for ad valorem taxpayers =
 $\$1,971.00 \times 22.73\% = \448.00 per esu

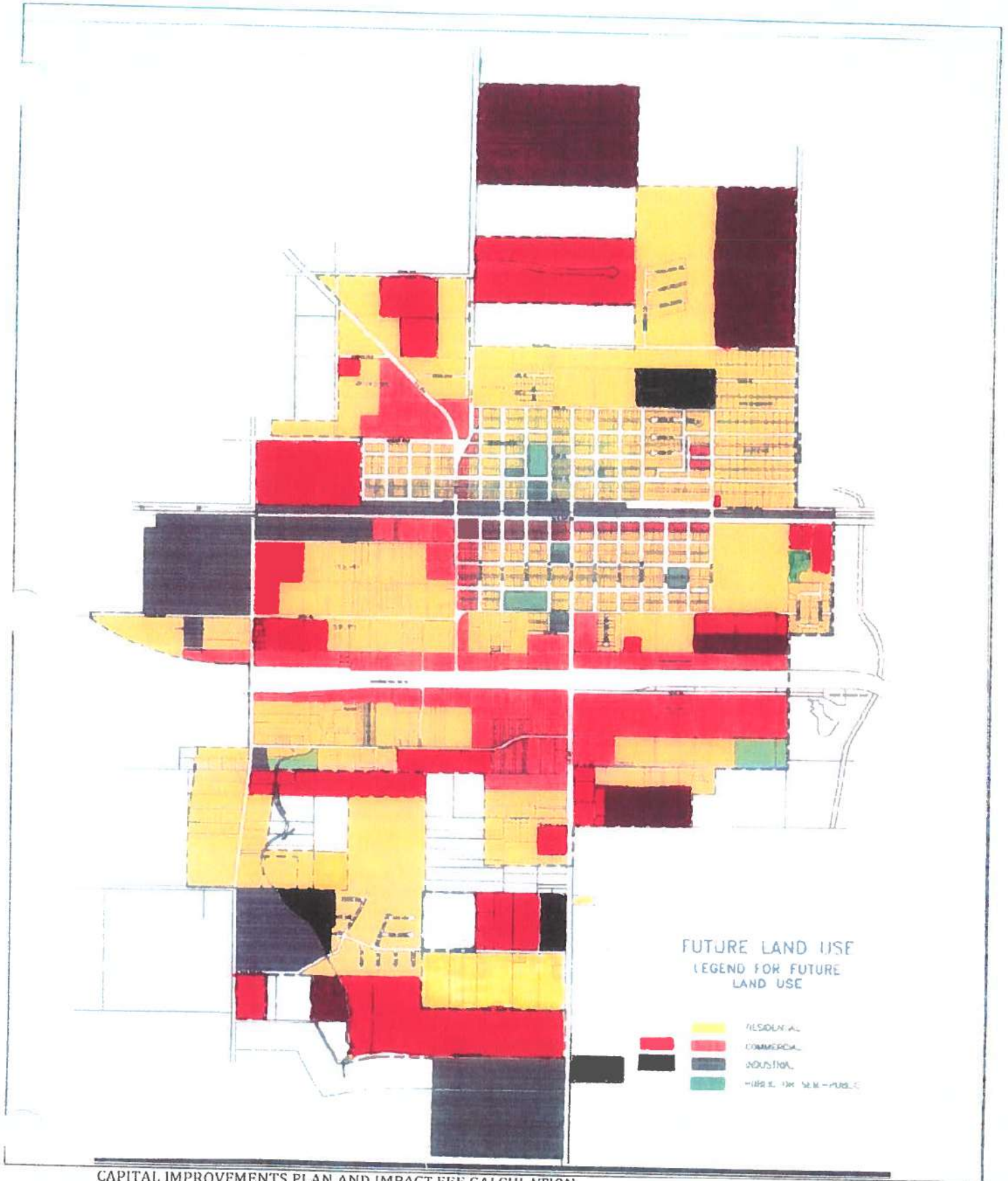
Most entities will be ad valorem tax payers, and will be eligible for the tax credit. The maximum impact fee is shown in the table for both types of entities.

MAXIMUM IMPACT FEE PER ESU		
	Non-Ad Valorem Taxpayer	Ad Valorem Taxpayer
Water	\$1,619.00	\$1,619.00
Wastewater	\$1,971.00	\$1,523.00
Total	\$3,590.00	\$3,142.00

It should be emphasized that the impact fees calculated above only recapture the cost of water and wastewater plants, and that water mains, sewers, or lift stations are not included except those which are located within the plant sites.

LAND USE, WATER USAGE, SEWAGE FLOW & SERVICE UNITS						
Land Use	Water Usage ⁽¹⁾⁽²⁾	Water esu/s	Sewage Flow	Sewage Concentration ⁽³⁾	Concentration Factor ⁽⁴⁾	Sewage esu/s ⁽⁵⁾
Single Family Residence; Townhome; Townhouse; Pato Home; Duplex Unit; Apartment or Condominium	300 gpd/residence	1,000 / residence	240 gpd / residence	200 mg/l	1.00	1.00/residence
Mobile Home	210 gpd/per home	0.70 / home	200 gpd / home	200 mg/l	1.0	0.83/home
Hotel without Kitchensettes	50 gpd / unit (plus Restaurant usage)	0.20 / unit	57 gpd / unit	200 mg/l	1.0	0.24/unit
Hotel with Kitchensettes	30 gpd / unit (plus Restaurant usage)	0.27 / unit	76 gpd / unit	200 mg/l	1.0	0.32/unit
Recreational Vehicle	35 gpd / RV space	0.12 / RV space	33 gpd / RV space	300 mg/l	1.5	0.20 / RV space
Landscape Irrigation - Single Family	0.04 gpd/sf of area	0.00013 / sf of area				
Landscape Irrigation - All others	0.10 gpd / sf of area	0.0003 / sf of area				
Office Space	0.10 gpd / sf	0.0003 / sf	0.0095 gpd / sf	300 mg/l	1.5	0.0005 / sf
Medical, Dental, Urgent Care space	0.10 gpd / sf	0.0003 / sf	0.0095 gpd / sf	300 mg/l	1.5	0.0005 / sf
Retail	0.06 gpd / sf	0.0002 / sf	0.057 gpd / sf	300 mg/l	1.5	0.00036 / sf
Convenience Store	0.06 gpd / sf	0.0002 / sf	0.057 gpd / sf	300 mg/l	1.5	0.00036 / sf
Barber Shop, general	140 gpd / chair	0.47 / chair	133 gpd / chair	300 mg/l	1.5	0.83 / chair
Barber Shop, supercuts type	70 gpd / chair	0.23 / chair	66 gpd / chair	300 mg/l	1.5	0.41 / chair
Beauty Shop	140 gpd / bowl	0.47 / bowl	133 gpd / bowl	300 mg/l	1.5	0.83 / bowl
Restaurant - takeout only	0.20 gpd / sf	0.00067 / sf	0.19 gpd / sf	300 mg/l	1.5	0.0012 / sf
Restaurant, fast food	0.75 gpd / sf	0.0025 / sf	0.71 gpd / sf	300 mg/l	1.5	0.0044 / sf
Restaurant, other	1.80 gpd / sf	0.0060 / sf	1.71 gpd / sf	300 mg/l	1.5	0.011 / sf
Health Club	0.36 gpd / sf	0.0012 / sf	0.34 gpd / sf	300 mg/l	1.2	0.0017 / sf
Nursing Home	85 gpd / bed	0.28 / bed	80 gpd / bed	300 mg/l	1.5	0.50 / bed
Church	1.00 gpd / sanctuary seat	0.003 / sanctuary seat	0.98 gpd / sanctuary seat	300 mg/l	1.5	0.006 / sanctuary seat
Washateria	275 gpd / washing machine	0.92 / washing machine	260 gpd / washing machine	200 mg/l	1.0	1.08 / washing machine
Day Care Center	10 gpd / occupant	0.03 / occupant	9.5 gpd / occupant	300 mg/l	1.5	0.06 / occupant
Warehouse	0.03 gpd / sf	0.00010 / sf	0.023 gpd / sf	300 mg/l	1.5	0.00017 / sf
Manufacturing space - no process wastewater	0.05 gpd / sf	0.00017 / sf	0.045 gpd / sf	300 mg/l	1.5	0.00028 / sf
Industrial space - process wastewater discharge ⁽⁶⁾	Calculate using ratio of BOD, TSS load & flow to 200 mg/l, 200 mg/l, & 240 gpd, respectively. Other measures of concentration may also be included, depending upon the circumstances.					
Other uses:	1.00 esu per 300 gpd of water use and 1.00 esu per 240 gpd of wastewater discharge, factored by concentration.					
Important Notes:						
⁽¹⁾ gpd = gallons per day						
⁽²⁾ sf = total square feet of space, including outside walls						
⁽³⁾ (BOD plus TSS) / 2. Other measures of concentration may also included.						
⁽⁴⁾ Sewage Concentration / 200 mg/l						
⁽⁵⁾ (Sewage Flow / 240 gpd) x Concentration Factor						
⁽⁶⁾ Also refer to "Order Regulating the Introduction of Wastewater into the Sanitary Sewer System" for other charges and limitations.						





FUTURE LAND USE
 LEGEND FOR FUTURE
 LAND USE

- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- PUBLIC OR SEMI-PUBLIC