

ORDER AMENDING DISTRICT'S PLUMBING CODE, PROVIDING FOR INSPECTIONS
AND CERTIFICATION OF COMPLIANCE THEREWITH, AND PRESCRIBING
PENALTIES FOR VIOLATION THEREOF:

I. The District's Plumbing Code of December 19, 1990, amended September 15, 1993, January 11, 1995, April 12, 1995, July 12, 1995, December 13, 1995, October 9, 1996, February 12, 1997, December 10, 1997, November 10, 1999, January 12, 2000, February 9, 2000, March 8, 2000, June 13, 2001, November 14, 2001, August 14, 2002, November 13, 2002, December 11, 2002, February 12, 2003, April 16, 2003, August 13, 2003, February 11, 2004, March 10, 2004, October 11, 2006, April 18, 2007, August 19, 2009, November 18, 2009 and November 9, 2011 is hereby amended to read as follows:

A. The Uniform Plumbing Code of 2009 with Appendix and Installations Standards, published by the International Association of Plumbers and Mechanical Officials hereafter referred to as the "Uniform Plumbing Code" or UPC" or "Plumbing Code" and cited as such and the Uniform Plumbing Code Amendments, 2009 Edition is adopted. A copy of which is on file in the District's office. The deletions, changes, additions hereinafter set forth are established to provide minimum and uniform standards to safeguard life, health, property and public welfare by regulating and controlling the design, construction, quality of materials and workmanship of all structures to be served with water and/or wastewater service by the Lakeway Municipal Utility District and identify certain equipment specifically regulated in this Code.

B. The following listed sections of the Uniform Plumbing Code are hereby *amended*:

1. Chapter 1 - Administration: - Schedule of Fees - "Shall be those schedules of fees as adopted by the Board of Directors and attached hereto as Exhibit A. Fees shall be payable in advance and are non-refundable. Additional fees for extra inspections are payable directly to the inspection firm and must be paid prior to approval of final inspection."

2. Chapter 1 - Administration: - Board of Appeals - "The Board of Directors shall act in this capacity."

3. Chapter 7 - Drainage System: - Section 707 - Cleanouts - "To include the installation of a cleanout at the property or easement line where yard line connects to District's collection system, as well as adjacent to the house or structure.

C. The following listed sections or part thereof of the Uniform Plumbing Code are hereby *deleted* or *altered*:

1. Chapter 6 - Section 603.0 shall delete references to approved vacuum breaker devices. The District requires a double check valve at the point of initiation of delivery of water to the sprinkler system. It shall be installed so it is covered and protected from damage. No piping or sprinkler heads may be installed within 7' of the hard surface of the street.

Where irrigation systems are installed above or within ten (10) feet of a septic tank, leach field, evaporation field or other on-site treatment system discharge, the irrigation system shall be isolated using a reduced pressure zone type backflow preventer. The device shall be properly installed, accessible for maintenance and tested annually at the customer's expense.

2. Appendix D - Rainwater System: - No connection or discharge from a rainwater system will be permitted to connect to the wastewater system.

3. Chapter 3 - Section 313.0, Protection of Piping, Materials and Structures (a) is supplemented as follows:

a. All cold water lines shall be insulated when in an outside wall, an attic, or any area not heated.

b. All hot water lines shall be insulated between the heater and the fixtures.

4. Chapter 6 - Section 605.0 - The definition of valves shall be expanded to denote that customer cut-off valves on their side of the meter shall be a brass-bodied ball valve. These shall be installed in their own valve box for protection.

5. Appendix K - Private Wastewater Disposal Systems: Approval must be by the appropriate agency (LCRA) and is not adopted by or enforced by the District as a part of this code. The District enforces interior plumbing installations.

6. Chapter 8 - Section 807.0 shall delete any reference allowing appliance condensate waste, or hot water heaters, to discharge into the District's wastewater system.

7. Air-conditioning primary and secondary condensate drains shall not discharge to the District's wastewater collection system. The primary condensate drain shall discharge to the yard, away from the house foundation and the secondary shall discharge above a sink if practical or to another location such as a porch or walkway that is likely to be observed by the owner.

D. Lead is totally banned from the District's water and wastewater system. This includes pipe, fixtures, and welding materials.

E. All structures shall have plumbing installed so that each dwelling unit or business enterprise will have a separate water meter.

F. A District approved grease interceptor will be installed for all commercial kitchens. Exhibit F outlines the guidelines for grease interceptors. Initially, it will be cleaned on a bi-monthly schedule with District personnel present. This schedule will remain in effect until the District determines if the cleaning frequency must change. The customer is responsible for costs associated with the grease interceptor cleaning. If the District does not receive the

grease interceptor cleaning receipt, it may, at the customer's expense, cause the grease trap to be cleaned.

G. MANAGEMENT STRUCTURE FOR GRINDER PUMP SYSTEMS

Plumbing Code Section G, Management Structure for Grinder Pump Systems, and Exhibit E, Residential Grinder Pump Guidelines, shall apply to all new and retrofit installations. Where portions of a structure are served by gravity wastewater collection system, all the way to the District's tap at the main, grinder service lines may not connect to the gravity service line. All grinder customer service lines shall discharge either to the District's gravity wastewater collection main or to the District's pressure collection system. The customer will be responsible for all costs associated with the connection

All customers requesting or having a grinder pump-pressure service line to the District's wastewater collection system shall sign the following Addendum to Service Contract:

ADDENDUM TO SERVICE CONTRACT

This Addendum to Service Contract (the "Addendum") is entered into by the District and Customer because Customer has, or intends to have, a grinder pump system to deliver Customer's wastewater to the District's collection system. This Addendum is a legally binding contract, based on the District's agreement to provide the service in consideration for Customer's agreement to be bound by the terms set forth herein, as follows:

1. Customer has, or intends to have, a collection tank, grinder pump and pressure service line (the "Grinder Pump System") to deliver the Customer's wastewater to the District's wastewater collection system.
2. [This paragraph only applies to new systems.] Existing pump tanks that are to be used as part of the Grinder Pump System must be cleaned, inspected, repaired, modified or replaced if necessary, to minimize inflow and infiltration into the collection system prior to connection. Septic tanks may not be used as part of the grinder system.
3. [This paragraph only applies to new systems.] The design of the Grinder Pump System shall be submitted to the District for approval before the commencement of construction. The Customer shall pay a design review fee at the time of submittal.
4. [This paragraph only applies to new systems.] The Grinder Pump System shall be installed by Customer's plumber at Customer's expense. The District must approve the installation of the Grinder Pump System after construction to ensure the installation was as specified. No service will be provided until the District has approved the installation. Customer shall pay an inspection fee. In the event an additional inspection is required, an additional fee shall be charged. These fees are shown in Exhibit A of the Plumbing Code.
5. The District has primary responsibility to ensure adequate operation and maintenance of the Grinder Pump System. The District's responsibility starts at the connection

point where the residence laterals enter the Grinder Pump System. Customer shall operate, maintain and pay for the operation and maintenance of the Grinder Pump System to where it joins the District's wastewater collection line in the street right-of-way or easement. If Customer does not fulfill this contractual obligation, the District shall assume that obligation and shall make the necessary maintenance, repairs and improvements to assure that the waters of the State and public health are protected from possible discharge of wastewater. Any expense related to the District's cost to operate or repair the Grinder Pump System shall be billed to Customer in the next monthly bill.

6. The District has authority to stop any discharges from any Grinder Pump System in order to prevent contamination of State waters.

7. The District has submitted a maintenance schedule to the Executive Director (the receipt of which is herewith acknowledged) which outlines routine service inspections and maintenance for Grinder Pump Systems. This maintenance schedule shall be followed.

8. Grinder Pump Systems shall be regarded as integral components of the District's system and not as a part of the residence plumbing.

9. Provision to ensure collection system integrity during a power outage (two-year event) shall be incorporated into the design of the Grinder Pump System as required by the District's guidelines.

II. A plumbing permit is required for all plumbing installations. This includes, but is not limited to, new construction, remodeling, sprinkler systems, and swimming pools. The Application for Plumbing Permit and Application for Service are available at the District Office. All permits must be completed, approved and a permit issued before construction begins. The Plumbing Permit must be displayed at all times. Permits are valid for a period of one (1) year. If a permit expires without the work being completed, any unused inspection fees will be forfeited, and the permitting process must be started over.

III. The District shall charge a minimum inspection fee, which shall be payable in advance and is non-refundable, and such additional fees as may be applicable for inspections exceeding the minimum, which fees shall be paid in full prior to approval for the final inspection. The fees are delineated in Exhibit A.

IV. The General Manager shall designate the Chief Plumbing Inspector for the District who shall hold a valid plumbing inspector's license issued by the State Board of Plumbing Examiners. The Chief Plumbing Inspector may appoint Assistant Plumbing Inspectors, who may or may not be employees of the District.

Exhibit B is a Summary of current District requirements for each installation. Items not covered in this or other attached Exhibits are regulated by the Uniform Plumbing Code.

Exhibit C establishes specific Conservation requirements for facilities constructed in the District and/or those units served outside the District.

Exhibit D establishes specific Bedding, Tie-in, Existing Wastewater Connection Points and Service Line, Safety, Accessibility and Penalty requirements for facilities constructed in the District and/or those units served outside the District.

Exhibit E establishes guidelines for pressure wastewater collection system and grinder pumps.

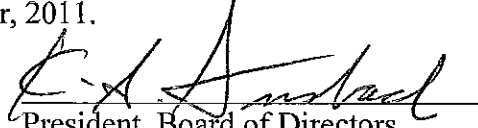
V. Any person, firm or corporation who shall violate any provisions of this Order, or fail to comply with any of the requirements hereof, shall be liable to having water and/or wastewater service refused or terminated and a fine of not more than \$200 per day, per violation.

VI. This order shall be effective immediately upon its adoption except for specific differences that are noted in each Exhibit. This specifically supersedes previous Orders addressing the District's plumbing code and single meter policy as well as any other Orders in conflict herewith, all of which are hereby repealed to the extent of such conflict.

PASSED AND APPROVED this the 9th day of November, 2011.

ATTEST.


Secretary, Board of Directors
[SEAL]



President, Board of Directors

EXHIBIT A

LAKELWAY MUNICIPAL UTILITY DISTRICT
PLUMBING FEES
EFFECTIVE SEPTEMBER 23, 2009

WATER/WASTEWATER		
Minimum ten (10) inspections		\$550.00
Each additional inspection over ten (10)		\$55.00
SPRINKLER SYSTEM		
Minimum two (2) S/S inspections		\$110.00
Each additional S/S inspection over two (2)		\$55.00
SWIMMING POOL		
Minimum two (2) inspections		\$110.00
Each additional inspection over two (2)		\$55.00
REMODELS		
Minimum three (3) inspections		\$165.00
Each additional inspection over three (3)		\$55.00
PROPANE GAS & WATER HEATER REPLACEMENT		
Minimum one (1) inspection		\$55.00
Each additional inspection		\$55.00
BACKFLOW PREVENTER RETESTING		
Annual inspection (1)	Actual cost by subcontractor	
GRINDER PUMP		
Design review		\$100.00
Plumbing/mechanical inspection		\$55.00
Electrical inspection		\$55.00
Start-up/Demonstration		\$55.00
GREASE TRAP CLEANING		
	Actual cost by subcontractor plus \$50 administrative fee	
BACKFLOW PREVENTER FOR SPRINKLER SYSTEM AND SWIMMING POOL		
Minimum one (1) testing inspection		By others
Each additional inspection over one (1)		By others

EXHIBIT B

LAKEWAY MUNICIPAL UTILITY DISTRICT
PLUMBING CODE

The following items are currently specific requirements of the District with all code requirements coming from the 2009 Uniform Plumbing Code or from the Lakeway Municipal Utility District:

I. SITE INSPECTION

Prior to establishing final slab elevation the builder (owner or owner's contractor) shall excavate & locate wastewater service connection point. When wastewater line and connection point are located, inspector will then check the elevation of the house to the main wastewater line and determine the proper fall of the wastewater line. When this is determined the hole will then be refilled for safety reasons until the wastewater line is installed. Water meters will not be set by the District until after the wastewater service connection point is located.

II. YARDLINES - WATER AND WASTEWATER SERVICE LINES

A. Water – The plumber must determine the water pressure at the meter. For District water pressure above 80 psi, a pressure reducing valve (PRV) is required. For pressures below 80 psi, no PRV should be installed. Properly sized pipe is to be laid on a bed of sand or 3/8" pea gravel in an open trench at least 12 inches deep with all sections visible. All sections of waterlines that will pass under drives, walks, and flatwork are to be sleeved at least two sizes larger than the water line. A properly covered shut-off valve shall be provided next to the water meter but outside of the meter box. This shall be a brass-bodied ball valve. If a pressure-reducing valve is required, it will be installed downstream from the shut-off valve. The meter, shut off valve, (and pressure reducing valve) each should be in their own separate boxes. Trench must be backfilled after inspection approval with adequately compacted clean fill containing no rock or debris that could damage the pipe.

B. Wastewater - Minimum requirement PVC schedule 40 four-inch diameter pipe. Cleanouts: A two-way cleanout shall be provided adjacent to the structure and another cleanout shall be installed in direction of flow not more than one foot from the property or easement line. (This does not apply on private wastewater systems.) Cleanouts shall be at least four-inch diameter or same size as yard line. All cleanouts must have screw type connections and be visible 6" above the final finish grade. All sections of wastewater line shall be visible for inspection and be bedded in 3/8" pea gravel or equivalent with a minimum of 1/4" of fall per foot of run. The wastewater service line shall exit slab/foundation at least 8" below grade. If a water service line and wastewater line is installed in the same trench, 12" separation must be maintained. At least 10-foot head of water is required for water test on building wastewater. Cleanouts in concrete and/or driveways shall have installation approved before concrete is poured to protect cleanout from traffic loads. All sections of pressurized wastewater service lines that will pass under drives, walks, and flatwork are to be sleeved at least two sizes larger than the

pressurized wastewater service line. Per UPC, Section 710, new and current structures shall be protected from backflow of sewage by installing an approved type backwater valve. All new and current structures will have a pressure relief valve at the owner's cleanout, 6" above finished grade.

III. PLUMBING ROUGH

A. Drainage, waste and vent pipes must be in place and visible. No horizontal venting allowed. Pipes must be adequately supported on a firm bed of sand or 3/8" pea gravel with a uniform slope of not less than 1/4" per foot. D.W.V. system must be tested by tightly sealing all openings and providing at least 10-ft. head of water on at least one vent not less than 15 minutes before inspection. All pipes passing through concrete floors or beams shall be protected from breakage or undue strain by sleeves or wrappings.

B. Water distribution system. Copper water lines must be protected from dissimilar metals or where copper may contact concrete must be sleeved or have armax type insulation. No joints are allowed below the concrete. All hot water lines are to be fully insulated. Copper shall be pressure tested at 100 psi minimum.

IV. PLUMBING TOPOUT

All drainage, waste and vent piping to be properly completed and supported. All copper water lines properly completed and supported. Any water lines located in exterior walls, attics or crawl spaces are to be insulated. Water lines are to be pressure tested to at least 100 psi. Drainage, waste, vent system to be pressure tested for leakage with at least 10-ft. head of water for buildings more than one story. Water test is required on shower pans. Any studs and plates that are cut for plumbing should be protected from damage in an approved manner (i.e. FHA straps). Structural members should not be overcut or improperly notched. Gas lines properly completed and supported and pressure tested to 10 psi for not less than 15 minutes for inspection.

V. PLUMBING FINAL

All plumbing fixtures and valves properly installed and all plumbing vents properly flashed. Water system tested. Wastewater lines properly tied into public or private wastewater system. Water pressure to house not to exceed 80 psi; provide pressure reducer valve if needed. Antisiphon/backflow protection required on all hose bibs.

VI. OTHER REQUIRED INSPECTIONS:

A. Swimming Pool:

1. Plumbing rough provide pressure test under a static water or air pressure of not less than 35 psi for 15 minutes on all PVC lines in open trench and visible.

2. Final: Provide backflow valve or airgap protection for fill line. All systems should be functional and tested. The use of house hose bibs, although equipped with

non-removable vacuum breakers for water supply, is not permitted. Testing inspections must be completed by a licensed backflow preventer inspector.

B. Sprinkler System Final: Tie into water yard line, proper installation of double check valve or reduced pressure zone (RPZ) type backflow protection device. Testing inspections must be completed by a licensed backflow preventer inspector. RPZ type backflow prevention devices must be installed above ground within an insulated enclosure (hot box, poly-roc™ #PHR1 or PHR2 or approved equal). Tape or other wrapped insulation is not acceptable.

C. Remodel or Additions: Rough, topout and final inspections required.

D. Grinder Pump: Plumbing, mechanical, electrical and final start-up/demonstration required.

EXHIBIT C

LAKEWAY MUNICIPAL UTILITY DISTRICT
CONSERVATION REQUIREMENTS

The following requirements shall be effective sixty (60) days from October 9, 1996.

I. CONSERVATION IMPROVEMENTS - require the following minimum standards for all new construction, and for existing structures undergoing renovations involving such fixtures.

A. For water closets and associated flushing mechanism, maximum volume shall not exceed an average of one and six-tenths gallons per flushing cycle when tested in accordance with the hydraulic performance requirements of the American National Standards Institute ANSI A 112.19.2m (June 21, 1982)

B. For urinals and associated flushing mechanism, maximum flow shall not exceed one gallon of water per flush when tested with the hydraulic performance requirements of ANSI A 112.19.2m (June 21, 1982)

C. For showerheads, maximum flow shall not exceed two and a half gallons of water per minute when tested in accordance with ANSI A 112.18.1m (November 16, 1979)

D. For sink and lavatory faucets, maximum flow shall not exceed two gallons of water per minute when tested in accordance with ANSI A 112.18.1m (November 16, 1979)

E. Installations shall have faucets in public restrooms that supply a maximum of 0.5 gallons per minute and must incorporate an automatic cutoff device.

F. Residential and commercial automatic irrigation controllers will be equipped with automatic rain shut-off devices to prevent operation during and after rain.

G. Installations of irrigation systems in new construction will be required to have a minimum soil depth of six (6) inches of top soil.

II. The above performance standards shall not apply to fixtures and fittings such as emergency showers and the fixtures that, in order to perform a specialized function, cannot meet the specified standards.

III. Any desired exceptions to the above requirements shall be directed in writing to the District's General Manager who will review the request and make a recommendation to the Board of Directors for a special variance if warranted.

EXHIBIT D

LAKEWAY MUNICIPAL UTILITY DISTRICT
BEDDING, TIE-IN, EXISTING WASTEWATER CONNECTION POINTS AND SERVICE
LINE, SAFETY, AND PENALTY REQUIREMENTS

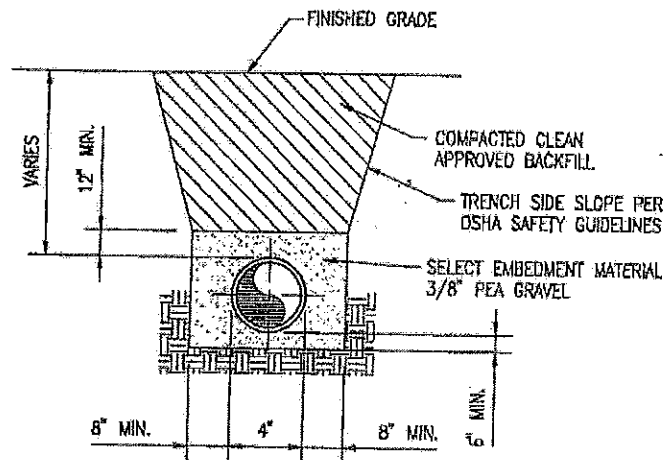
The purpose of this specific code is to insure that new construction and repairs of wastewater service lines maintain their integrity against leaks.

I. BEDDING

A. The service line from the customer's slab to the connection point at the main line, shall be uniformly bedded with 3/8" pea gravel from the house foundation to the wastewater tie-in. Bedding depth shall be 6" under the pipe and 12" over the pipe and 8" on either side.

B. Absolutely clean backfill must be used above the bedding gravel. No household trash, cans, bottles, boards, pieces of wood, building materials shall be mixed into the backfill. Trench excavation spoils can be used for backfill, provided it is free of rocks larger than 4" and with prior approval from the District inspector. Unsuitable excavation spoils will not be accepted as backfill. Proper backfill material may have to be imported to the site.

C. If the District inspector finds trash, rocks or other unacceptable materials in the backfill, the District will require the builder to remove the backfill and import proper backfill material. The District representative will approve imported backfill and materials prior to placement. See below.



NOTE:
SHORE TRENCH DURING
EXCAVATION AS REQUIRED.

II. TIE-IN FOR WASTEWATER

A. Multiple dwelling homes (duplexes, triplexes) will have separate wastewater taps for each dwelling.

B. The builder shall be responsible for excavating and locating the wastewater service connection point.

C. The District will provide an approximate location of the connection point. This location may not be exact.

D. If the connection point is not found, the builder will be expected to dig up along the entire lot line to demonstrate that the connection point is not there. Only then will the District agree to install a new connection point.

E. Other utilities, such as TV cable, electric lines, pedestals, and telephone cables, will not be a reason to abandon an existing connection point to make a new connection point.

F. When excavating a clay connection point on the short side of main (main on the same side of the street) the builder shall expose the connection point wastewater tee or wastewater wye completely, so the District inspector can determine the condition of connection point. If the connection point requires replacement the District will do so at that time.

G. When the tie-in is on the long side (main on the other side of the street) the builder shall expose 2' of the 4" pipe.

H. If the connection point is not found, the District will come in and install a connection point within the builder's trench.

I. When making the transition from existing clay pipe to PVC pipe the builder shall use the proper clay-to-PVC adapter. The coupling shall be DFW/HPI 4" non-shear coupling, 4" clay to 4" PVC part DFW02-44NS. (These are available at the District Office.) Under the coupling, the builder will construct a concrete bench using one 80# bag of properly prepared concrete mix.

J. When a non-glued transition is required for PVC to PVC, a DFW/HPI 4" non-shear coupling must be used. This is part #DFW56-4496. (These are available at the District Office.) Under the coupling, the builder will construct a concrete bench using one 80# bag of properly prepared concrete mix.

K. After the District's 4" clay or PVC service is found, and before making the tie-in, the builder shall run a rodder cable into the service to detect any problems in the service. This rodder cable shall run all the way to the main. Problems detected shall be brought to the attention of the District. After the tie-in is complete, the District will televise the service tap to the main.

L. The District prohibits the use of 90-degree bends. If that severe of a bend is needed, two Schedule 40 45 degree bends with minimum of 6" of pipe showing between the bend fittings are required.

M. The clean-out stack shall be straight and plumb with no angles and extend 6" above finished grade.

N. All wastewater service line clean-outs will have an approved pressure relief valve. This applies to clean-outs near the house and near the street or main line, that are not subject to inundation by surface water and that are below finished floor grade at least 6". They must be installed 6" above finished dirt grade.

O. All PVC pipe fittings shall be Schedule 40 socket weld fittings. Absolutely no rubber adapters or couplings are allowed, except as specified in "H" above.

P. A District inspector shall be called to inspect wastewater tie-in. This inspection is a separate inspection item from yard lines or rough plumbing.

Q. If the wastewater tie-in is not completely exposed for inspection, tie-in will be failed.

R. All pipes connected to the wastewater main shall be Schedule 40 minimum. Any openings, either temporary or permanent, shall be capped with either rubber or PVC. Tape is unacceptable.

III. EXISTING GRAVITY WASTEWATER CONNECTION POINTS AND WASTEWATER SERVICE LINES

A. Definition. A wastewater service line is the line from a dwelling unit (whether single family, townhouse, or condominium unit), or a commercial structure, to the District's collection main. The collection main may be in a street right-of-way, in an easement, or within property owned by a condominium or townhouse association.

B. Inspection. The District may inspect the wastewater connection points and wastewater service lines which are connected to the District's collection mains. The inspection may be made internally or externally. When inspection reveals a leak, a break, a stoppage, roots or any other problem in a wastewater service line, the problem shall be repaired, as set forth below.

C. Repairs. The District will be responsible for repairs to the following parts of the wastewater service lines:

1. District Collection Main in the Right-of-Way - Where the District's collection main is in the right-of-way, the District will be responsible for that part of the wastewater service line that is in the right-of-way.

2. District Collection Line not in the Right-of-Way - Where the District's collection line is not in the right-of-way, the District will be responsible as follows:

(a) Where there is a cleanout within five (5) feet of the collection main, the District will be responsible for repair of that part of the service line between the connection to the cleanout and the collection main.

(b) Where there is no cleanout within five (5) feet of the service line connection to the District's collection main, the District will be responsible for repair of that part of the service line that is within two (2) feet of the service line connection to the collection main.

(c) The District has no responsibility to locate or install a missing cleanout.

The customer shall be responsible for repair of all of the service line except for the part that is the responsibility of the District, as set forth above in this paragraph 2. All other portions of the service line are designated "private wastewater service line". The owner will be notified of the nature of the problem and be required to cause it to be repaired at the owner's expense.

D. 1. Owner Maintenance Required

The owner of property containing a private wastewater service line shall maintain the private wastewater service line. Maintenance under this section includes:

(a) clearing obstructions from the private wastewater service line;

(b) repairing a defect in the private wastewater service line that allows the introduction of extraneous water flow or debris into the wastewater system;

(c) repairing a defect in the private wastewater service line that allows the discharge of wastewater on the property; and

(d) keeping a clean out cap or pressure relief valve tight and in place.

2. Inspection and notice of defective private wastewater service line

(a) The District may periodically perform special tests to confirm the integrity of the wastewater system, including smoke testing, dyed water testing, air testing, hydraulic testing, closed circuit television inspection, and other testing and inspection techniques approved by the District.

(b) The District may enter private property to inspect or test a private wastewater service line.

(c) The District shall give the property owner not less than 24 hours written notice before utility personnel enter private property to conduct an inspection or test, unless wastewater is exposed on the property in a manner that creates a potential public health hazard.

(d) The District may identify defects in a private wastewater service line that allow extraneous water flow or debris to enter the private wastewater service line, defects in a private wastewater service line that allow the discharge of wastewater on the property, or a condition that may interfere with the proper operation of the private wastewater service line.

(e) A defect under this section may include:

- (i) evidence of pipe or joint deterioration;
- (ii) root intrusion into a pipe that separates a pipe joint or enlarges an existing crack;
- (iii) a misaligned pipe segment, sag, or lack of positive gradient;
- (iv) a lack of a necessary cleanout cap or pressure relief valve;
- (v) a downspout, drain, or other connection that allows storm water or other extraneous water to enter the wastewater system; or

(vi) a flaw that allows the discharge of wastewater on the property or the introduction of extraneous water into the wastewater system.

(f) Except as provided in Subsection (C), if the District identifies a defective private wastewater service line, the District shall send the property owner written notice of the defect, including a statement that the private wastewater service line must be replaced or repaired not later than the 60th day after the date of the notice.

3. Repair or replacement required; standards

(a) A property owner shall repair or replace a defective private wastewater service line from the property line to the building. The property owner shall pay the appropriate fee and obtain a permit from the District before performing the repair or replacement of a defective private wastewater service line.

(b) If wastewater is exposed on the property in a manner that makes it a potential public health hazard, a property owner shall stop the discharge of wastewater and remediate the site not later than 24 hours after the owner has notice of the exposed wastewater.

(c) If wastewater is exposed, a property owner must complete all necessary repairs or replacement of a private wastewater service line immediately, but not later than the 30th day after the owner has notice of the exposed wastewater.

(d) A person who repairs an existing private wastewater service line or installs a new or rehabilitated private wastewater service line shall perform the repair or installation as prescribed by the District's wastewater service connection standards and the Uniform Plumbing Code.

4. Post-repair and post-replacement inspection and testing requirements.

(a) After a property owner has repaired or replaced a defective private wastewater service line, the District shall inspect or test the private wastewater service line as approved by the District.

(b) If a private wastewater service line fails the post-repair or post-replacement test, the property owner shall perform additional repairs as required by the District to correct the defect and pay an additional inspection fee for the subsequent repairs.

5. Offense.

(a) A property owner commits an offense if the owner fails to repair or replace a defective private wastewater service line in compliance with the Uniform Plumbing Code on or before the date specified by the District in the District's written notice of the defect.

(b) Each day or part of a day during which non-compliance occurs constitutes a separate offense.

6. Termination and restoration of water or wastewater service.

(a) If the District determines that a person has failed to repair or replace a defective private wastewater service line as required by this order, the District may terminate water or wastewater service to the affected property.

(b) If water or wastewater service is terminated under this section, the District may not restore service until the District has conducted an inspection and test of the private wastewater service line and the District has determined that the private wastewater service line is free from defects.

E. Penalties. Failure to begin and complete repairs within the specified time will be cause for termination of District services.

IV. SAFETY

- A. No personnel shall enter an unsafe trench.
- B. Safe trench practice shall be under the OSHA Safety Guidelines of Trench Safety. Whether a trench is safe to enter will be determined solely by the District Competent Person.
- C. It is the builder's responsibility to provide a safe trench, for all personnel who enter an excavation. If this is not provided, the District will issue a stop work order until the excavation site is deemed safe.

V. ACCESSIBILITY

- A. Numerous facilities and appurtenances, including, but not limited to meter boxes, cleanouts, manholes, valves, valve boxes and hydrants, are found throughout the District. These appurtenances must be accessible and unobstructed at all times to District personnel. Many of these are in right-of-ways and easement, while some are not.
- B. When District personnel observe these appurtenances obstructed, whether in easements and/or in private property, the owner of record will be notified to comply with specific instructions to improve accessibility. The owner will be given a deadline to comply.
- C. If the owner does not comply with the instruction notice in a timely matter, the District will issue a Notification of Failure to Comply and Pending Service Termination.
- D. If the owner fails to comply by the specified date, service will be terminated.
- E. Customers have the right to a hearing regarding termination. The District's Hearing Officers are its Finance/Administration Manager and General Manager. If a customer desires a hearing, they must contact a Hearing Officer in person or by telephone. Decisions of the Hearing Officer may be appealed to the Board of Directors.

VI. PENALTIES

- A. When a main line is damaged by a person or company, the District must be informed immediately. A District crew will make the repairs and the person or company shall be responsible for parts, labor, machinery, vehicles and having main line jet rodded.
- B. Discovering a wastewater main this way will not be used as an opportunity to install a connection point. The original connection point must still be found.
- C. After repairs have been made the builder will be required to put a two sack concrete bench under the repair which shall be approved by District representative.
- D. A \$200 fine shall be instituted if a connection point is made without District permission.

E. A \$200 fine shall be instituted if construction/installation begins without an approved District plumbing permit.

E. Open pipes, which are connected to the wastewater main and discovered by the District, will be capped at the expense of the owner and subject to \$200 fine.

F. Water in trenches shall be pumped out. If ground water is present during excavation this water will absolutely not be allowed into the wastewater service as a way of removing the water to make connection. If the District determines that this has occurred, a \$200 fine will be instituted.

G. Safe access for inspection will be provided to the District. In the event access is withheld, the District may refuse new service or terminate existing service.

EXHIBIT E

*Pressure Wastewater Collection System and Residential Grinder Pump Guidelines
adopted February 12, 2003.*

EXHIBIT F

GREASE INTERCEPTOR REQUIREMENTS

Grease interceptors are required to separate out Fats, Oils and Greases (FOGs) and solids normally found in food preparation waste from the rest of the wastewater being discharged. By intercepting the FOG and solids normally found in food preparation operations, the grease interceptor protects the wastewater system from potential blockages, overflows and ensuing fallout.

All establishments which have commercial kitchen facilities, except residential customers, are required to have a properly sized and functioning grease interceptor (also referred to as a grease trap). The following types of facilities will be required to have grease interceptors: restaurants, schools, hospitals, nursing homes, and any other facility that handles grease. Under-counter or other grease capture devices internal to the facility are not acceptable.

Location Requirements

All interceptors shall be located outside of the building in such a manner that personnel from the District can inspect the interceptors at any time, except as provided by agreement by the General Manager.

Interceptor Sizing

All interceptors shall be sized to ensure that the District's sanitary sewer system is protected from excessive grease which may cause clogging or damage and that the facility is capable of meeting all discharge requirements. In no case will interceptors of less than 100 gallons be acceptable.

All fixtures with a potential to carry grease-bearing waste shall be plumbed to the grease interceptor. Associated fixture units to be used for sizing purposes shall be as noted below in Table 1.

Table 1. Fixture Units.

Type of Fixture	Contributing Pipe Size	Fixture Units
3 compartment sink	1-1/2", 2"	3, 4
2 compartment sink	1-1/2"	2
Dishwasher	2"	4
Wok stove	2"	4
Hand Sink	--	0
Mop Sink	2", 3", 4"	2, 3, 4
Floor Drains (2", 3", 4")	2", 3", 4"	2, 3, 4
Floor sinks (3", 4")	3", 4"	3, 4
Garbage grinder	<i>Prohibited*</i>	
Notes: Hand sinks are not required to be plumbed to the grease interceptor. For indirect waste systems where hub drains and floor sinks are used as receptors for dishwashers, 2- and 3-compartment sinks, etc., the fixture unit count shall be twice (2x) the floor sink or hub drain fixture unit count. In such cases the fixture count for the indirect waste source is not counted. Garbage grinders and disposals are prohibited in commercial kitchens and other industrial users of the sanitary sewer system.		

The District has adapted a grease interceptor sizing procedure similar to neighboring City of Austin, based on the following three steps.

Step 1. Calculate the total number of fixture units connected to the interceptor. The fixture unit counts that shall be assigned to each different kind of fixture are listed in Table 1 of these interceptor requirements.

Step 2. Determine the minimum flow rating of the grease interceptor by multiplying the total fixture unit count times three gallons/minute:

$$\text{Flow rating} = \text{Total fixture unit count} \times 3 \text{ gallons/minute}$$

Step 3. The interceptor must accommodate the required liquid holding capacity, defined by the available volume within the interceptor below the static water level. The minimum liquid holding capacity of the interceptor is calculated by multiplying the grease interceptor flow rating from Step 2 (in gallons per minutes) by a minimum 12-minute retention time:

$$\text{Minimum liquid holding capacity (gallons)} = \text{Flow rating} \times 12 \text{ minutes}$$

Note that the actual capacity of the interceptor will be greater than the calculated minimum liquid holding capacity value in order to accommodate venting and freeboard requirements.

Upon approval from the District, fixtures receiving non-grease-bearing wastes may be drained through a grease interceptor, but shall not be included for grease interceptor sizing (i.e., condensate from coolers).

Interceptor Design Criteria

The approved design for grease interceptors shall be as follows:

1. The grease interceptor must be constructed in accordance with the current plumbing codes and installed in a manner acceptable to the District to ensure watershed protection.
2. The grease interceptor shall have two compartments.
3. While operating at the interceptor's rated flow capacity, the first compartment must provide a retention time of no less than seven minutes, and the second compartment must provide a retention time of no less than five minutes.
4. Interceptor inverts and vents shall be external to the compartments.
5. The flowline to the interceptor (upstream of inlet invert) must be at least 3 inches above the static water level of the tank.
6. Similarly, the interceptor vent must be at least 3 inches above the static water level of the tank.
7. The interceptor inlet must be near an elevation that is one half of the height of the tank's static water level, and the interceptor outlet must be at least 12 inches above the floor of the tank.
8. Adequate flow diffusion features must be provided to evenly distribute flow throughout the grease interceptor. Examples of such features would include a flow diverter plate in the primary compartment, "tee" piping between the two interceptor compartments and "tee" piping on the tank outlet.
9. Each interceptor compartment shall be accessible for cleaning and inspection purposes (no exceptions).

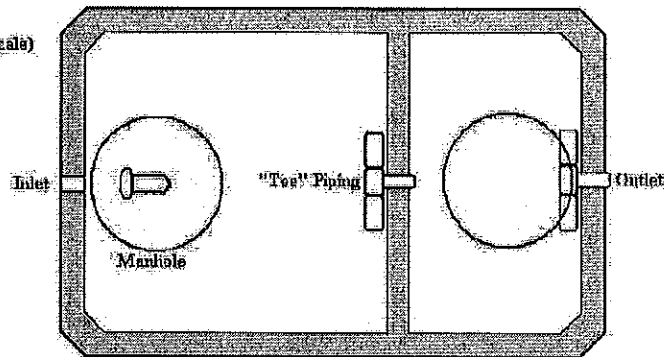
Exceptions to certain of these criteria may be considered for approval in conjunction with the review process. In such cases, engineering drawings and supporting performance data must be submitted to and approved by the District prior to grease interceptor installation.

Below is conceptual drawing of a typical grease interceptor design.

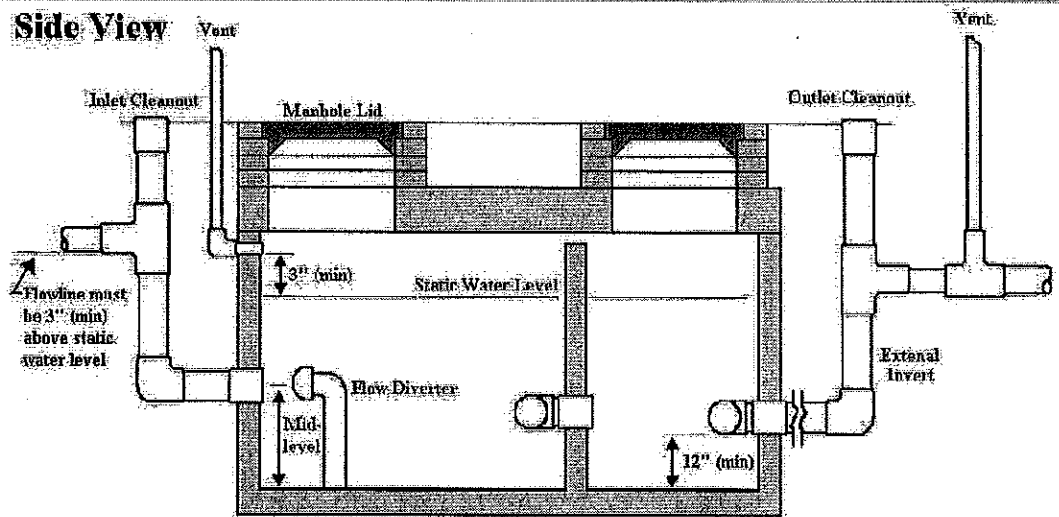
(Source: City of Austin Pretreatment Special Services Division,

http://www.ci.austin.tx.us/water/downloads/wwwssd_iw_gt_concept_drwg.pdf.)

Top View
(conceptual-not to scale)



Side View



General Specifications

The following specifications may provide general guidance for acceptable grease interceptor design.

Materials:

1. Concrete – The interceptor shall be constructed of precast concrete having a minimum 20-day compressive strength of 4500 psi, utilizing ASTM A615 or A706 Grade 60 reinforcing steel designed for traffic loading.
2. Steel (more commonly for freestanding, not buried) – Hot rolled, all welded steel and enamel or epoxy-coated inside and out with removable sealed cover.
3. Fiberglass/HDPE (where lightweight construction is required)

4. Manhole Access – Grease interceptor shall have adequate manhole access to permit cleaning of all areas of the interceptor. Each manhole access shall be minimum 20-inch diameter clear opening and be water-tight. Cast-iron frame/covers shall conform to ASTM A48 and be traffic-duty.
5. Piping –Material compatible with sanitary sewer design, such as solvent welded PVC.

Installation:

1. Interceptor and associated inlet/outlet/vent piping shall be installed per the manufacturer's recommendations and project specifications.
2. All joints shall be made water-tight.

District Approval

The following must be submitted to the District for review and approval prior to issuance of a permit for installation of an interceptor.

- A site plan showing the location of the interceptor, lines and cleanout or manhole;
- Details of the interceptor, lines and cleanout or manhole;
- Interceptor manufacturer's shop drawings, certified by an engineer;
- Copies of manufacturer's specifications including interceptor, manhole frame/cover and joint sealant/coating details; and
- Formula and calculations used to determine the interceptor capacity.

Any subsequent changes to the approved plan shall be resubmitted for approval prior to the changes being implemented. Inspection and approval of the installation will be required. Do not purchase any grease interceptor without first receiving approval for installation of that the specific model.

Maintenance Requirements

The FOGs and solids captured in the interceptors have to be removed on a regular basis in order for grease interceptors to work properly. All waste, liquid, semi-solid, solid and residue must be removed from the interceptor when cleaned. A person cleaning a grease interceptor shall dispose of the waste removed in accordance with federal, state, and local regulations. All grease interceptors must be cleaned per the established schedule with the District and no less frequent than annually.

If an interceptor is not cleaned out regularly, destructive acids may form as the grease turns septic compromising the integrity of the interceptor. The use of enzymes, bacteria and/or other agents that would liquefy the contents normally captured by a grease interceptor is prohibited.

Copies of the waste hauler's manifest records documenting that the grease interceptor is being cleaned according to the required schedule must be available on the premises. A single grab wastewater sample may be used by the District to determine FOG concentration. Since wastewater charges are determined based on the quality discharged, appropriate design and maintenance of an interceptor can help alleviate unnecessary wastewater charges.

The failure to meet any one of these grease interceptor maintenance or documentation requirements would be considered a violation, subject to resultant penalties.

For those grease interceptors that must be taken out of service, the procedures for interceptor abandonment must be followed.

Interceptor Abandonment

Prior to abandonment, notification via application must be given to the District. Once the application is accepted, the interceptor may be prepared for inspection as follows:

1. Existing grease interceptor to be abandoned must be pumped to remove any and all waste. Pumping must be performed by a licensed waste hauler, and documentation shall be posted on site or made available for verification during the abandonment inspection.
2. The top cover or arch over the grease interceptor shall be crushed into the empty tank or removed.
3. The grease interceptor shall be back filled no higher than the top vertical edges of the tank with fill material less than 3 inches in diameter and free of organic and construction debris. Examples: sand, sandy loam, pea gravel, crushed limestone base, clean class III soils. Clay soils should be avoided due to their high shrink/swell characteristics.

Once the above conditions have been met, an inspection can be scheduled with McComis Inspections at (512) 301-7801. Once inspection is passed, you may continue to finish covering as desired. It is recommended that finish cover be mounded slightly higher than adjacent grade to allow for settling.