



Evaporative Loss Program
Plan Review Overview – Plumbing/Mechanical/Engineering

Plumbing Plan Review: Utility Development Services (512) 974-8228

- Walk-in Hours: Monday–Friday, 9am–11am; Development Assistance Center
- New Customers: preliminary review is encouraged to review plan requirements.

Backflow Inquiries: Special Services Division, (512) 972-1060

FACILITY ENGINEERING:

1. Show proposed/existing facility (ies), meters, site date, etc. on Engineered Drawings. They must be sealed and signed by a Professional Engineer (registered in the STATE OF TEXAS).
 - a. Each drawing shall have a signature and date block as part of the application.
 - b. At final/completion of review process, required copies shall be furnished by applicant to provide required record copies with approved signature and date.
2. Show Water Meter(s) (City of Austin meter) feeding the cooling tower
 - a. Meter number
 - b. Its location on the site/property/plant etc.
 - c. Its size
 - d. Customer's account number for water service
3. Show Proposed Cooling Tower Makeup Sub-meter
 - a. Meter number
 - b. its location
 - c. its size, manufacturer, model number, meter compliance per AWWA Std. C700-95 is required and supported by specification data, such as, meter ratings, manufacturer's flow rating (gpm), pressure rating (psi), materials of construction, and connection type and size. See list of approved meter manufacturers.
 - d. meter installation—note specifically location of meter bypass (if applicable)
4. Show Proposed Cooling Tower Blow-down (Effluent of Discharge) Meter
 - a. Meter number
 - b. its location
 - c. Its size, manufacturer, model number, meter compliance per AWWA Std. WW 29 C700-90 is required and supported by specification data, such as, meter's rating, manufacturer's flow rating (gpm), pressure rating (psi), materials of construction, and connection type and size. See list of approved meter manufactures.
 - d. meter installation—note specifically
 - 1) location of meter bypass (if applicable)
 - 2) meter discharge positive head (elevated discharge piping min, 12")
 - 3) vertical meter installation approved for upward flow only
 - 4) size and location of sanitary sewer inlet utilized for cooling tower drain down
5. Show proposed water level overflow switch and audio-visual alarm
6. The above review is applicable for cold water type (positive displacement type meters up to 3" size. Flow metering greater than 3" shall be review on a case by case basis and shall require Utility Engineering review approval. It is likely other types of flow-meter principle shall be





employed other than the cold water type meter and require remote measure signal output and/or recording, telemetry, etc.

CROSS CONNECTION CONTROL:

1. Show size, type, and location of existing backflow prevention assemblies on cooling tower.
2. If proposing new backflow prevention assemblies, approved backflow protection to the potable water system from the cooling tower must be achieved by installing one of the following to the requirements of the Austin City Code, Chapter 18-5.
 - a. Install an approved 2X-diameter air gap located external to the cooling tower, or
 - b. Install a reduced pressure zone backflow prevention assembly (RPZ), having full lab and field approval from USC FCCC&HR, or other agency testing to full AWWA backflow standards.