GREASE TRAP

**Design** – The following dosing equations are taken from the Manual for On-Site Sewage Management Systems:


**Restaurants**

\[(S) \times (GS) \times (66\% \text{ kitchen waste only}) \times (HR) \times (LF) \div 12 = \text{Grease interceptor capacity in gallons:}\]

- **S** = Number of seats in dining area
- **GS** = Gallons of wastewater per seat (use 20 gallons per seat)
- **HR** = Number of hours open for business
- **LF** = Loading Factor:
  - 2.0 interstate highway
  - 1.5 other freeway
  - 1.25 recreational areas
  - 1.0 main highways
  - 0.75 other highways

- 12 = Number of months in a year

1000-gallon underground minimum size tank. Some projects may require multiple tanks in a series.

Example: For a restaurant with a 75 seat dining area, a 12 hour day operation, a typical discharge of 20 gallons per seat, and located on a main highway, the size of the grease interceptor is calculated as follows:

\[(75) \times (20) \times (66\%) \times (12) \times (1.0) \div 12 \text{ months per year} = 990 \text{ gallon capacity; use 1,000 gallon tank}\]

**Hospitals, Nursing Homes, restaurants with drive-through, other type commercial kitchens with varied seating capacity:**

\[(M) \times (GM) \times (LF) \times (SC) - \text{Grease Interceptor capacity in gallons, where:}\]

- **M** = Meals per day
- **GM** = Gallons of wastewater per meal (Use 5 gallons per meal)
- **LF** = Loading factor - 1.0 with dishwashing 0.5 without dishwashing
- **SC** = Storage capacity factor – 1.0 for public, 2.5 for on-site disposal

Example: A nursing home with 100 beds, a dishwasher, serving 3 meals per day, discharging to the public sewer is calculated as follows:

\[(300) \times (5) \times (1) \times (1) = 1500 \text{ gallon capacity}.\]
GREASE TRAP REQUIREMENTS

ANY ESTABLISHMENT THAT HAS FOOD PREPARATION OF ANY TYPE IS REQUIRED TO HAVE AT LEAST ONE 1000 GALLON EXTERIOR GREASE INTERCEPTOR – SEE DETAIL.

These establishments include, but are not limited: Restaurants, Ice Cream Shops, Coffee Shops, Cafeterias, Deli’s, Butcher Shops, Bakeries, Convenience Stores, Motels, Hotels, Churches, Schools, Day Cares, etc.

For existing buildings converted to one of the above:

1. Grease interceptor will be considered upon submittal of plans and calculations by designer or manufacturer (include building site plan).
2. Approval will be based on available space for City Standard Grease Trap, grease interceptors will not be approved if a Grease Trap can be installed.
3. Grease interceptor will require City Engineer’s approval.

FOR PLAN REVIEW PLEASE PROVIDE THE FOLLOWING:

- Site Plan showing the connection to the sewer system, including manhole
- Interior layout plan showing square footage and all equipment, tables, plumbing fixtures, number of seats, meals served, etc.
- Written maintenance plan/cleaning contract