

## GREASE TRAP FORMULA

**Design** – The following dosing equations are taken from the Manual for On-Site Sewage Management Systems published by the Georgia Department of Human Resources Division of Public Health and is used by GCDWR.

### Restaurants

$(S) \times (GS) \times (HR) \times (LF) \div 12 =$  Grease interceptor capacity in gallons, where:

- S = Number of seats in dining area
- GS = Gallons of wastewater per seat (use 25)
- HR = Number of hours open for business
- LF = Load Factor (use 1)
- 12 = Number of months in a year

Gwinnett County allows only 1500-gallon grease interceptors. For projects requiring more than 1500-gallon capacity, interceptors will be installed in multiples of 1500-gallon tanks in a series.

Example: For a restaurant with a 75 seat dining are, a 12 hour day operation, a typical discharge of 25 gallons per seat, and located on a main highway, the size of the grease interceptor is calculated as follows:

$(75) \times (25) \times (12) \times (1.0) \div 12$  months per year = 1875 gallon capacity ; use two (2) 1500 gallon grease interceptors installed in series.

### Hospitals, Nursing Homes, other type commercial kitchens with varied seating capacity:

$(M) \times (GM) \times (LF) \times (SC) =$  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 sewer  
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:

$(300) \times (5) \times (1) \times (1) = 1500$  gallon capacity.

## **GREASE TRAP REQUIREMENTS**

**ANY ESTABLISHMENT THAT HAS FOOD PREPARATION OF ANY TYPE IS REQUIRED TO HAVE AT LEAST ONE 1500 GALLON EXTERIOR GREASE INTERCEPTOR – SEE DETAIL.**

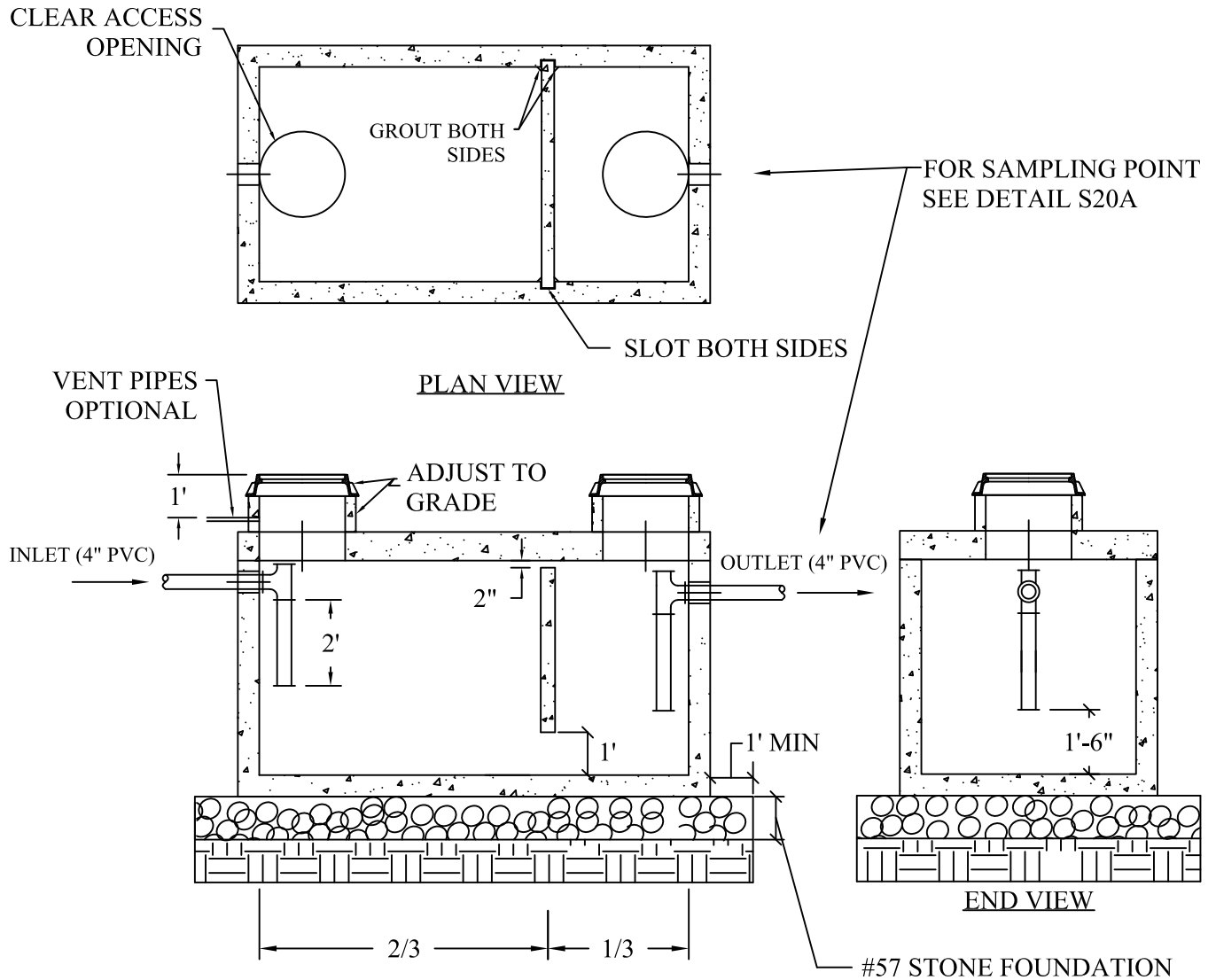
These establishments include, but are not limited to:

Restaurants, Ice Cream Shops, Coffee Shops, Cafeterias, Deli's, Butcher Shops, Bakeries, Convenience Stores, Motels, Hotels, Churches, Schools, Day Cares, Etc.

For Water/Sewer Plan Review please provide the following:

- Site Plan showing the connection to the sewer system, including test manhole
- Interior layout plan showing square footage and all equipment, tables, plumbing fixtures, number of seats, etc.
- A manifest from the cleaning company, if there is an existing grease trap.

REVISION: NO. 1 - ADD NOTE FOR SAMPLING POINT  
 ORIGINAL ISSUE: 4-05-16  
 DATE: 10/24/19  
 BY: MFW  
 REVISION: DATE: 10/24/19  
 BY: MFW  
 DATE: DATE:  
 BY: BY:



**NOTES:**

**ELEVATION**

1. MUST MEET ASTM C 1613 STANDARD SPECIFICATIONS FOR PRECAST CONCRETE GREASE INTERCEPTOR TANKS.
2. TANK LENGTH TO BE GREATER THAN WIDTH. MINIMUM LIQUID DEPTH OF 30" AND MAXIMUM OF 72".
3. MINIMUM GREASE INTERCEPTOR CAPACITY - 1500 GALLONS.
4. WHEN A LARGER CAPACITY GREASE INTERCEPTOR IS REQUIRED, SHOW 1500 GALLON CAPACITY GREASE INTERCEPTORS IN A SERIES.
5. GRADE ADJUSTMENTS GREATER THAN ONE FOOT REQUIRE FOUR FOOT DIAMETER MANHOLE RISERS.
6. GRADE RISERS SHALL BE STACKABLE AND WATERTIGHT.
7. EJ 1357 OR APPROVED EQUAL TRAFFIC MANHOLE FRAME AND COVER.
8. BEDDING SHALL BE A MINIMUM OF 12" THICK #57 STONE.

**GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES**

DESIGN BY: STD. COMMITTEE  
 DRAWN BY: GCDWR  
 CHECKED BY: PSB  
 APPROVED BY: ARS  
 SCALE: NONE

DRAWING NO.

**GREASE TRAP**

**S20**

DATE:  
DATE:

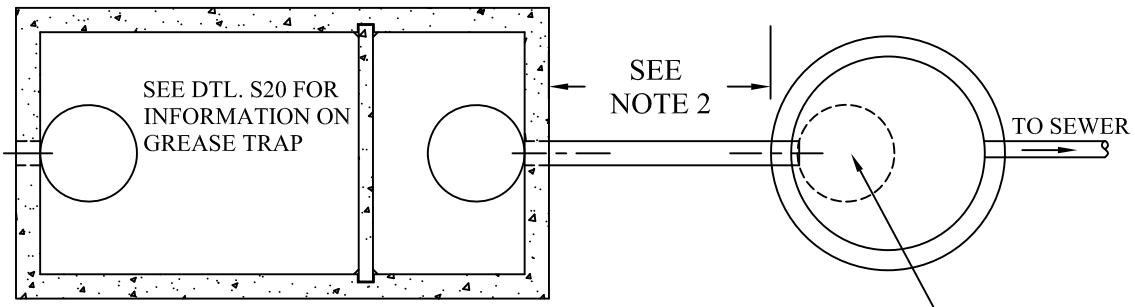
BY:  
BY:

REVISION:  
REVISION:

DATE:

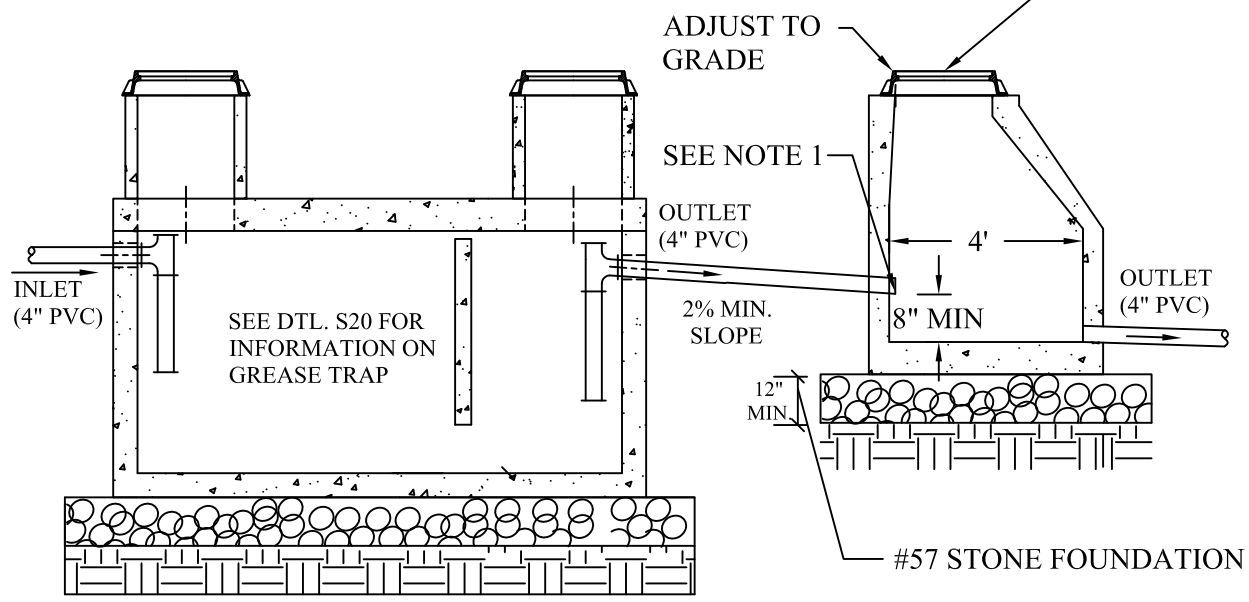
BY:  
BY:

REVISION:  
ORIGINAL ISSUE: 10/24/19



PLAN VIEW

SAMPLING POINT



ELEVATION

NOTES:

1. OUTLET FROM GREASE TRAP MUST NOT PENETRATE INTO SAMPLING POINT SUCH THAT IT INTERFERES WITH SAMPLE COLLECTION.
2. SAMPLING POINT MUST BE PRIOR TO ANY OTHER SITE SEWER CONNECTIONS LEADING TO PUBLIC SEWER
3. THE SAMPLING POINT MUST BE ASSOCIATED TO DISCHARGE OF A SINGLE CONNECTION TO THE PUBLIC SEWER. IF BUILDING HAS MULTIPLE GREASE TRAP LOCATIONS, THEN A SEPARATE SAMPLING POINT IS REQUIRED FOR EACH SET OF GREASE TRAPS.

GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES

DESIGN BY: GCDWR
DRAWN BY: MW
CHECKED BY: SS
APPROVED BY:
SCALE: NONE

**GREASE TRAP  
SAMPLING POINT**

DRAWING NO.
<b>S20A</b>