**Highland Tank\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1510 Stoystown Road • Friedens, PA 15541

GreaseStopper® Automatic Grease Interceptor

Re:

Provide and install \_\_\_\_\_\_Highland Tank, Model GS – 400 GreaseStopper®

Automatic Grease Interceptor(s).

Interceptor shall be constructed of stainless steel.

Interceptor shall be rated at 400 GPM. Flow direction shall be as required by contract specifications.

Nominal dimensions shall be 13’-0” long, X 2’-6” wide X 5’-2” high.

Static water capacity shall be 468.7 gallons and the maximum rated flow shall comply with the code requirements of the facility. Grease holding capacity shall be 2,844 lbs. An interceptor of smaller volume is not permissible.

Interceptor shall be furnished with electrically powered, direct driven Diskimmer

grease skimmer to remove fats, oil, and grease automatically from tank without any

operator assistance.

1.0 Application

The interceptor shall be designed for gravity separation of fats, oils, and grease along with food scraps and solids from wastewater discharged from institutional and commercial kitchens. The interceptor shall be designed to remove grease automatically, collecting it neatly in a disposal container from which it can be disposed and recycled with other grease by a rendering firm. The interceptor shall be designed to recover nearly 100% of free-floating FOG discharged from the facilities kitchen with effluent levels at or below 100ppm per EPA guidance document.

Unit shall have flat bottom design for floor mounting or partially recessed installations. Standard installation requires connection to the drain between the sewer and the pre-rinse sink (prior to the dishwasher) or a small two-compartment pot sink.

2.0 Design Criteria

Interceptor shall be a UL Listed 1D42 Waste Disposer. Provide certification documentation showing criteria under which the system was tested.

Description

2.1 Interceptor shall be a rectangular Automatic Grease Interceptor with fully removable and vapor-tight, stainless steel lids with gaskets and quick release stainless steel clamps, to allow access for inspection and maintenance.

2.2 The interceptor shall be a pre-packaged, pre-engineered, ready to install unit

consisting of:

2.3 A high inlet connection\_\_\_\_\_ plain end for no hub connection to prevent inlet lines from becoming clogged with grease buildup. Inlet shall contain an internal flow control device.

2.4 A pre-settling chamber with easily removable internal stainless steel screen basket to separate and contains food scraps and solids. Internal capacity of screen basket shall be \_\_\_ cu. ft. Screen basket shall be fully removable with stainless steel lid with quick release clamps for proper dispensing of collected solids.

2.5 A non-clogging stationary under flow baffle to:

 2.5.1 Reduce horizontal velocity and flow turbulence.

 2.5.2 Distribute the flow equally over the interceptors cross sectional area.

 2.5.3 Completely isolates all inlet turbulence from the grease separation/storage compartment.

2.6 A grease separation/storage chamber containing:

 2.6.1 Thermostatically controlled electric immersion heater(s), with 1500 watt, 115 volt, 60 HZ AC heating element, to elevate the temperature in the interceptor to an average 120 F for maintaining the contained grease in a liquid state for skimming purposes.

 2.6.2 An electrically powered, direct driven, Diskimmer(s) grease skimmer to remove fats, oil, and grease automatically from tank without any operator assistance. Diskimmer shall have \_\_\_\_\_ \_\_\_\_\_inch oleophilic and hydrophobic, stress-relieved HDPE skimming wheel to operate at a minimum skimming rate of 20 lbs./hour. Grease is skimmed to discharge sump tube to discharge to an exterior, plastic graduated grease collection container.

2.7 Diskimmer shall be equipped with a:

 2.7.1 Removable stainless steel scraper bar(s) with two HDPE scraper blades with stainless steel nuts, bolts, and washers.

 2.7.2 3/4” stainless steel disc shaft(s) and bracket(s) with two (2) bronze bearings per shaft.

 2.7.3 Stainless steel shaft.

2.8 Diskimmer shall be powered by \_\_\_\_\_\_completely enclosed, heavy-duty gear motor, 115 volt, 60 HZ AC.

2.9 A multi-event digital timer/controller shall be supplied for heater(s) and Diskimmer(s) operation. Controller shall contain two (2) digital 24-hour clock timer, with multiple on/off cycles and multiple day cycles, 115 volt, 60 HZ, AC in a NEMA 3R splash-proof enclosure. Controller shall be mounted to the unit and hard wired by the installation contractor. An internal effluent downcomer at the outlet end of the interceptor, to allow for discharge from the bottom of the grease separation/storage chamber only.

2.10 An outlet connection \_\_\_\_\_\_\_ plain end for no hub connection.

Identification plates: Plates to be affixed in prominent location and be durable and legible throughout equipment life.

Quality Assurance

Submittals:

Shop Drawings: shop drawings for GreaseStopper® Automatic Grease Interceptors shall show principal dimensions and location of all fittings.

Instructions: provide three complete sets of installation, operation, and maintenance instructions with grease interceptor.

Warranty:

The manufacturer shall warrant its products to be free from defects in material and workmanship for a period of one year from the date of shipment. The warranty shall be limited to repair or replacement of the defective part(s).

Approved Manufacturers

The GreaseStopper® Automatic Grease Interceptor shall be manufactured by Highland Tank, 1510 Stoystown Road, Friedens, PA 15541, Phone 814-443-6800,

FAX: 814-444-8662, www.greasestopper.com.