

SECTION ### - OIL AND SEDIMENT WASTE INTERCEPTORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Oil interceptors.

1.3 DEFINITIONS

- A. FRP: Fiberglass-reinforced plastic.
- B. OIL AND SEDIMENT WASTE INTERCEPTOR: Elliptical fiberglass (FRP) tank system designed with built-in inlet piping and baffle penetration that introduces wastewater in a tangential laminar flow to reduce disruption of collected hydrocarbon oil, sediment, ~~automotive fluids~~ and solids. Tank system is designed to capture and hold waste fluids and solids to maximize waste retention and optimize Stokes Law separation. System backed by 30 year manufacturer warranty.
 - 1. OIL AND SEDIMENT INTERCEPTOR OR SEPARATOR: Elliptical fiberglass (FRP) interceptor that is certified to meet IAPMO PS 80-2008 and applicable sections of the latest editions of the Uniform Plumbing Code or the International Plumbing Code. Interceptor is designed to deliver 10 PPM non-emulsified free-floating oil and 350 PPM Total Suspended Solids effluent quality based on inlet peak fixture flow.
 - 2. CLARIFIER: Elliptical fiberglass (FRP) interceptor that is certified to meet IAPMO PS 80-2008 and applicable sections of the latest editions of the Uniform Plumbing Code or the International Plumbing Code. Interceptor is designed to deliver 10 PPM non-emulsified free-floating oil and 350 PPM Total Suspended Solids effluent quality based on inlet peak fixture flow
 - 3. FLAMMABLE OIL AND SOLIDS INTERCEPETOR OR SEPARATOR: Elliptical fiberglass (FRP) interceptor that is certified to meet IAPMO PS 80-2008 and applicable sections of the latest editions of the Uniform Plumbing Code or the International Plumbing Code. Interceptor is designed to deliver 10 PPM non-emulsified free-floating oil and 350 PPM Total Suspended Solids effluent quality based on inlet peak fixture flow

1.4 ACTION SUBMITTALS

- A. Product Data: Include materials of fabrication, dimensions, rated capacities, retention capacities, operating characteristics, size and location of each pipe connection, furnished specialties, and accessories.
- B. Shop Drawings: For each type and size of interceptor indicated.
 - 1. Include materials of construction, dimensions, rated capacities, retention capacities, location and size of each pipe connection, furnished specialties, and accessories.

1.5 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Interceptors, drawn to scale, on which the following items are shown and coordinated with each other, based on input from Installers of the items involved:
 - 1. Interceptors.
 - 2. Piping connections. Include size, location, and elevation of each.
 - 3. Interface with underground structures and utility services.

1.6 PROJECT CONDITIONS

- A. Interruption of Existing Sewer Services: Do not interrupt services to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary sewer services according to requirements indicated:
 - 1. Notify [**Architect**] [**Construction Manager**] [**Owner**] no fewer than [**seven**] <Insert number> days in advance of proposed interruption of service.
 - 2. Do not proceed with interruption of sewer services without [**Architect's**] [**Construction Manager's**] [**Owner's**] written permission.

PART 2 - PRODUCTS

2.1 OIL INTERCEPTORS

- A. Basis of Design: Elliptical Fiberglass (FRP) oil interceptor construction, as supplied by Green Turtle Americas Ltd. or Green Turtle Technologies Ltd., with inlet piping and baffle penetration designed to introduce wastewater in a tangential laminar flow pattern, to be appropriately sized based on anticipated usage and flow rates to meet applicable sanitary sewer discharge limits, incl. municipal by-laws.
 - 1. Include accessways, cells or baffles, and piping or openings to retain grease hydrocarbon and solids and to permit wastewater flow.
 - 2. Factory installed Schedule 40 PVC cement welded type socket ports, or straight pipe, fitted into interceptor walls for each pipe connection.
 - 3. Accessway Extension Collar:
 - a. Fiberglass risers (EC2), **24-inch (610-mm)**. **36-inch (915-mm)** optional alternate.

4. Accessway Frames and Covers: Round cover with non slip cover finish, gasketed and non vented top design with "Proceptor" lettering cast into cover.
 - a. Cast Iron: AASHTO M306 Traffic load rated. **24 inch- (610-mm-)** diameter cover with 0.25" (**6-mm-**) gasket. Two closed pickholes. Non Bolted or Bolted option. Weight 249 lbs. ASTM A48 CL35B. **36-inch (915-mm)** optional alternate is acceptable to match fiberglass risers.
 - b. Fiberglass: Pedestrian loading 24" diameter bolted and gasketed.
5. Watertight Flexible Caulking: Sikaflex 255 or Sikaflex 221 or approved alternate to provide watertight seal at extension collar joints.

B. Capacities and Characteristics:

1. Number of Compartments: <x cells>
2. Oil Retention Capacity: <xxx USG>.
3. Solids Retention Capacity: <xxx USG >.
4. Inlet and Outlet Pipe Size: <4"/6">.
 - a. Centerline of Inlet to Floor: <Insert inches (mm)>.
 - b. Centerline of Outlet to Floor: <Insert inches (mm)>.
5. Vent Pipe Size: <3">.
6. Installation Position: Above grade or **Underground with accessway collar riser to grade.**
7. OPTIONS as required:
 - a. 4" Side or Top Suction port for remote pump-out.
 - b. Alarm for high oil accumulation. Includes alarm probe to be installed in top of tank accessway and alarm panel ~~with buzzer and light~~ for indoor wall mount.
8. Green Turtle Proceptor Model: : <OMC XXX>.

2.2 FIBERGLASS ACCESSWAY RISERS

A. Fiberglass accessway extensions: Fiberglass wound pipe.

1. Length: From top of underground tank to underside of access frame at grade.
2. Extension Sections: **0.25-inch (6-mm)** minimum thickness and [**24-inch (610-mm) or 36-inch (915-mm) I.D.**] as a single continuous piece, without joints unless approved by the manufacturer.
3. Sealant: Watertight Flexible Caulking, Sikaflex 255 or Sikaflex 221 or approved alternate to provide watertight seal at extension collar joining to tank on bottom and access frame at top.

PART 3 - EXECUTION

3.1 EARTHWORK

- A. Excavating, trenching, and backfilling are specified in Section ### "Earth Moving."

3.2 INSTALLATION

- A. Install fiberglass interceptors according to manufacturer's installation instructions.

3.3 CONNECTIONS

- A. Piping installation requirements are specified in Section ### "Sanitary Waste and Vent Piping." Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Make piping connections between interceptors and piping systems.

3.4 IDENTIFICATION

- A. Identification materials and installation are specified in Section ### "Earth Moving." Arrange for installation of green warning tapes directly over piping and at outside edges of underground interceptors.
 - 1. Use warning tapes or detectable warning tape over ferrous piping.
 - 2. Use detectable warning tape over nonferrous piping and over edges of underground structures.

END OF SECTION ###