SECTION 15400

GREASE INTERCEPTORS

PART I. GENERAL

1.01 SECTION INCLUDES

- A. Furnish all labor, materials and equipment to install grease interceptor(s) as shown on the Drawings and as specified herein. Work shall include but not be limited to:
 - 1. Excavation
 - 2. Installation
 - 3. Internal and external piping with required supports and concrete encasement
 - 4. Backfill

1.02 RELATED SECTIONS

- A. Section 01010 Summary of Work
- B. Section 01039 Coordination and Meetings
- C. Section 01300 Submittals
- D. Section 01400 Quality Control
- E. Section 01600 Material and Equipment
- F. Section 02225 Excavating, Backfilling and Compacting for Utilities
- G. Section 02600 Utility Piping
- H. Section 03300 Cast-In-Place Concrete
- I. Appendix A Standard and Special Construction Detailed Drawings

1.03 <u>REFERENCES</u>

- A. Pennsylvania Department of Transportation Publication 408, Latest Edition
- B. ASTM C-478 Specifications for Pre-Cast Reinforced Concrete Manhole Sections

1.04 JOB CONDITIONS

- A. Job Conditions shall generally meet those of the related Sections.
- G. Specific conditions will be included with each project as may be required.

1.05 SUBMITTALS

A. Submit shop drawings/product data from manufacturers' descriptive literature and specifications for all materials used in this Section. Submit in accordance with Section 01300.

PART 2. PRODUCTS

2.01 GENERAL

- A. Grease interceptors shall normally be designed using components as specified herein with no approved equals. This is done to improve equipment familiarization and use of proven equipment, etc.
- B. Products listed are not all inclusive. Refer to applicable project Drawings and Specifications.

2.02 GREASE INTERCEPTORS

A. Design

- Hydromechanical grease traps may be used for application using less than 35 gallons per minute.
- 2. For flow rate up to 100 gallons per minute, the grease interceptor shall be rated for 150 gallons per minute, grease capacity of 300 pounds, and water capacity of 195 gallons.
- 3. For flow rate between 101 and 200 gallons per minute, the grease interceptor shall be rated for 300 gallons per minute, grease capacity of 600 pounds, and water capacity of 665 gallons.
- 4. For flow rate over 200 gallons per minute, the grease interceptor shall be rated for 1.5 times the flow rate.

All proposed grease traps and interceptors shall be sized and designed in general conformance with the guidelines of the Plumbing and Drainage Institute standard PDI – G 101. All applications must provide a minimum of thirty (30) minutes retention time at maximum flow.

B. Manufacturer

1. Zurn Model Z-1172

2.03 PIPE

- A. Ductile Iron Pipe Section 02600, Sub-Section 2.01 A.3.
- B. PVC Pipe Section 02600, Sub-Section 2.01 A.1.b.

2.04 <u>CEMENT CONCRETE</u>

A. Concrete shall meet the requirements of Section 03300, Cast-In-Place Concrete for Class AA.

2.05 MONITORING

A. In all interceptor applications, an inspection manhole shall be installed for monitoring of the waste.

2.06 OTHER MATERIALS

A. All other materials, not specifically described but required for proper and complete installation of the work of this Section, shall be selected by the Contractor subject to the approval of the Authority.

PART 3. EXECUTION

3.01 INSPECTION

A. Examine the areas and conditions under which Work of this Section will be installed. Correct conditions detrimental to proper and timely completion of the Work. Do not proceed until unsatisfactory conditions of site have been corrected.

3.02 INSTALLATION

- A. Install equipment with skilled labor in accordance with manufacturer's instructions and details as shown on the Drawings.
- B. All products, pre-cast or cast-in-place sections/pads shall be placed on a minimum six (6) inch depth of AASHTO No. 57 aggregate. The subgrade for the aggregate shall be properly compacted to requirements of Section 02225.
- C. Install internal/external piping using specified materials.
- D. Equipment installed shall be inspected, adjusted, approved and certified satisfactory by the manufacturer. Provide certification(s) that equipment is ready for operation.

3.03 BACKFILL AND COMPACTION

- A. Backfill around grease interceptor shall be as detailed in Section 02225 or as specifically shown on project Drawings.
- B. Compaction shall meet the requirements of Section 02225.

3.04 TESTING

A. All piping shall be tested in accordance with Section 02651 and/or as may be directed by the Authority.

PART 4. MAINTENANCE

- 4.01 A. The use of chemical or biological additives or emulsifiers for the cleaning of traps or interceptors are strictly prohibited.
 - B. Maintenance of grease traps and interceptors shall be the sole responsibility of the owner or operator to ensure proper operation in preventing any obstruction, interference or damage to the public collection system.
 - C. It is the responsibility of the owner to ensure the grease trap/interceptor is, at a minimum, inspected/cleaned annually. Written inspection records must be maintained and available to the Authority for review. Records must contain the name, address, and phone number of the inspection/disposal company with date and description of the inspection.

- D. A more frequent cleaning/inspection schedule may be ordered to be performed by the facility when it is determined by the Authority that the facility is discharging excessive amounts of grease to the public sewer system. Excessive grease shall be considered to be discharge of greater than 200 parts per million grease/oil.
- E. The Authority will charge the owner, lessee or agent of any facility a fee to reimburse the Authority for the cost of sampling and testing.
- F. All grease traps/interceptors shall be cleaned and pumped entirely when the accumulated solids, both grease and settled, reach 25% of the total liquid capacity of the unit.
- G. All content removed from any grease vessel shall be hauled or disposed of off-site in accordance with all Local, County and State regulations that may apply.