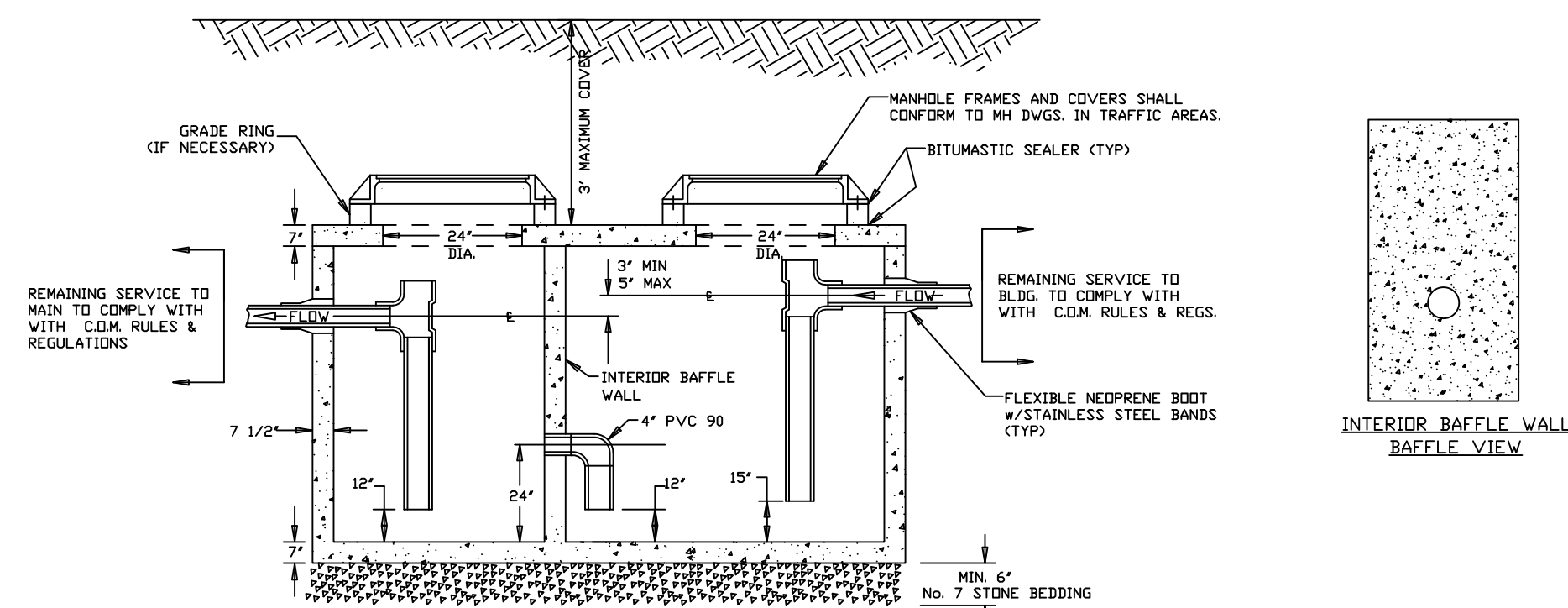


SPECIFICATIONS:

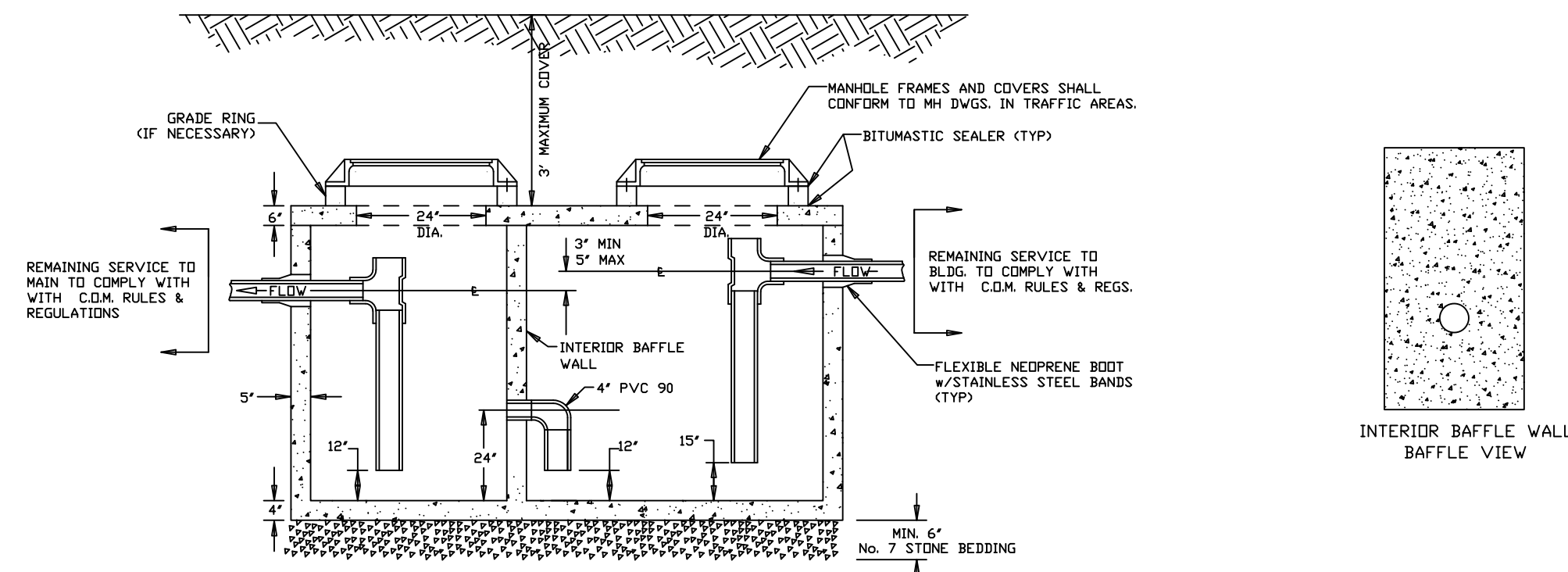
- STRUCTURAL DESIGN:** The pre-cast grease trap shall be designed to remain watertight and structurally sound without cracking under the maximum cover height of eight (8) feet of cover on a traffic rated trap. Also the traps baffle shall be poured monolithically with the bottom of the trap. Grease traps shall be top sealed unless otherwise approved by the control authority. The design must show that watertight integrity is achieved through the use of quality concrete rather than through an impervious barrier. Use of interior or exterior coatings is not acceptable as a primary water tightness system.
- INTERNAL PLUMBING:** Neoprene boots with stainless steel locking bands shall be used on all inlet and outlet pipes to ensure a watertight seal between the tank wall and the inlet and outlet pipes. Minimum pipe size and tees shall be four (4) inch schedule 40 (ASTM D-2665).
- GRADE RINGS, MANHOLE FRAME, AND LIDS:** When the elevation of the top of the grease trap manhole frames and lids needs to be raised, concrete grade rings shall be used and sealed with bitumastic sealer between them. Also all grade rings shall be coated with bituminous roofing material. All lids shall be non vented and be labeled grease.
- MINIMUM REQUIREMENTS:** Pre-cast grease traps shall have a minimum wall thickness of seven (7) inches at the top and seven (7) inches at the bottom and minimum thickness of seven and half (7 1/2) inches for the wall thickness. The cement shall be Portland cement conforming to the current ASTM specification C-150, type I Portland, normal, grey color; type III Portland, grey color shall be used where high early strength concrete is specified. Pre-cast grease traps shall be cured for a minimum of 24 hours. The maximum water-to-cement ratio shall be 0.45. Minimum pre-cast grease trap size shall be 1000 gallons.
- TEST FOR WATERTIGHT INTEGRITY:** The Control Authority shall vacuum test the grease trap for water-tightness, at the contractor's expense. Tests shall be performed upon installation prior to final backfilling. The intent of the test is to ensure a watertight grease trap under groundwater conditions. The vacuum test will consist of testing trap, and grade rings if attached, to the top of the manhole ring and lid at the time of testing. Testing pressure will be 4 psi for 5 minutes.
- INSTALLATION REQUIREMENTS:** Grease traps shall be buried no more than eight (8) feet deep unless prior approval is given by the Control Authority. The Control Authority shall inspect the trap to insure that trap is level before it is backfilled. The grease trap shall have a minimum fall of three (3) inches and maximum fall of five (5) inches through the trap. Bitumastic sealer shall be used to seal all tank joints. The trap shall be bedded with a minimum of 6-inches of No. 57 crushed stone. Traps located in traffic areas shall be completely backfilled with No. 57 crushed stone.



GREASE TRAP DETAIL (TRAFFIC RATED)

SPECIFICATIONS:

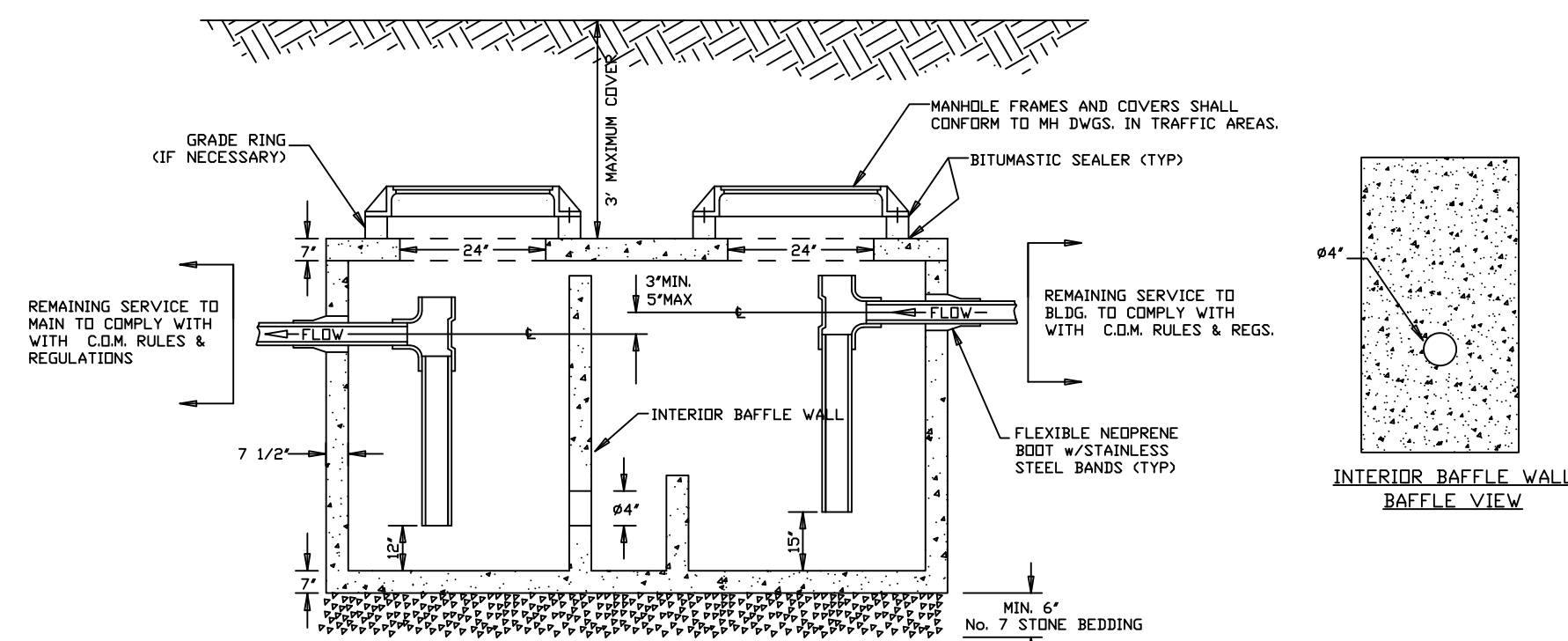
- STRUCTURAL DESIGN:** The pre-cast grease trap shall be designed to remain watertight and structurally sound without cracking under the maximum cover height of three (3) feet of cover on a non traffic rated trap, or eight (8) feet of cover on a traffic rated trap. Also the traps baffle shall be poured monolithically with the bottom of the trap. Grease traps shall be top sealed unless otherwise approved by the control authority. The design must show that watertight integrity is achieved through the use of quality concrete rather than through an impervious barrier. Use of interior or exterior coatings is not acceptable as a primary water tightness system.
- INTERNAL PLUMBING:** Neoprene boots with stainless steel locking bands shall be used on all inlet and outlet pipes to ensure a watertight seal between the tank wall and the inlet and outlet pipes. Minimum pipe size and tees shall be four (4) inch schedule 40 (ASTM D-2665).
- GRADE RINGS, MANHOLE FRAME, AND LIDS:** When the elevation of the top of the grease trap manhole frames and lids needs to be raised, concrete grade rings shall be used and sealed with bitumastic sealer between them. Also all grade rings shall be coated with bituminous roofing material. All lids shall be non vented and be labeled grease.
- MINIMUM REQUIREMENTS:** Pre-cast grease traps shall have a minimum wall thickness of five (5) inches and minimum thickness of six (6) inches for the top and four (4) inches for the bottom. The cement shall be Portland cement conforming to the current ASTM specification C-150, type I Portland, normal, grey color; type III Portland, grey color shall be used where high early strength concrete is specified. Pre-cast grease traps shall be cured for a minimum of 24 hours. The maximum water-to-cement ratio shall be 0.45. Minimum pre-cast grease trap size shall be 1000 gallons.
- TEST FOR WATERTIGHT INTEGRITY:** The Control Authority shall vacuum test the grease trap for water-tightness, at the contractor's expense. Tests shall be performed upon installation prior to final backfilling. The intent of the test is to ensure a watertight grease trap under groundwater conditions. The vacuum test will consist of testing trap, and grade rings if attached, to the top of the manhole ring and lid at the time of testing. Testing pressure will be 4 psi for 5 minutes.
- INSTALLATION REQUIREMENTS:** Grease traps shall be buried no more than three (3) feet deep unless prior approval is given by the Control Authority. The Control Authority shall inspect the trap to insure that trap is level before it is backfilled. The grease trap shall have a minimum fall of three (3) inches and maximum fall of five (5) inches through the trap. Bitumastic sealer shall be used to seal all tank joints. The trap shall be bedded with a minimum of 6-inches of No.7 crushed stone. Traps located in traffic areas shall be completely backfilled with clean crushed stone.



GREASE TRAP DETAIL (NON TRAFFIC)

SPECIFICATIONS:

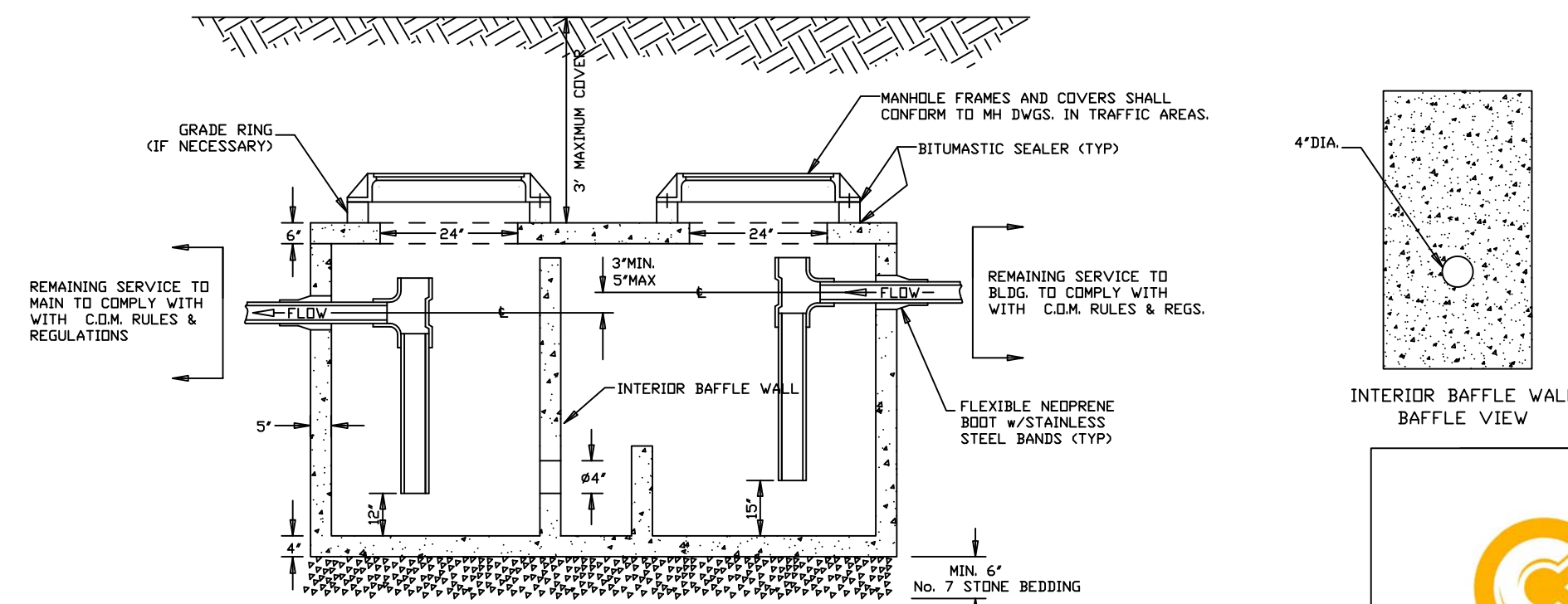
- STRUCTURAL DESIGN:** The pre-cast oil/grit separator shall be designed to remain watertight and structurally sound without cracking under the maximum cover height of eight (8) feet of cover on a traffic rated trap. Also the traps baffle shall be poured monolithically with the bottom of the trap. Oil/grit separators shall be top sealed unless otherwise approved by Control Authority. The design must show that watertight integrity is achieved through the use of quality concrete rather than through an impervious barrier. Use of interior or exterior coatings is not acceptable as a primary watertightness system.
- INTERNAL PLUMBING:** Neoprene boots with stainless steel locking bands shall be used on all inlet and outlet pipes to ensure a watertight seal between the tank wall and the inlet and outlet pipes. Minimum pipe size and tees shall be four (4) inch schedule 40 (ASTM D-2665).
- GRADE RINGS, MANHOLE FRAME, AND LIDS:** When the elevation of the top of the oil/grit separator manhole frames and lids needs to be raised, concrete grade rings shall be used and sealed with bitumastic sealer between them. Also all grade rings shall be coated with bituminous roofing material. All lids shall be non vented and be labeled grit.
- MINIMUM REQUIREMENTS:** Pre-cast oil/grit separators shall have a minimum wall thickness of seven (7) inches at the top and seven (7) inches for the bottom and a minimum thickness of seven and a half (7.5) inches and a half (7.5) inches for the wall thickness. The cement shall be Portland cement conforming to the current ASTM specification C-150, type I Portland, normal, grey color; Type III Portland, Grey color shall be used where high early strength concrete is specified. Pre-cast oil/grit separator shall be cured for a minimum of 24 hrs. The maximum water-to-cement ratio shall be 0.45. Minimum pre-cast oil/grit separator size shall be 1000 gallons.
- TEST FOR WATERTIGHT INTEGRITY:** The Control Authority shall vacuum test the oil/grit separator for water-tightness at the contractor's expense. Tests shall be performed upon installation prior to final backfilling. The intent of the test is to ensure a watertight oil/grit separator under groundwater conditions. The vacuum test will consist of testing the separator, and grade rings if attached, to the top of the manhole ring and lid at the time of testing. Testing pressure will be 4 psi for 5 minutes.
- INSTALLATION REQUIREMENTS:** Oil/grit separators shall be buried no more than eight (8) feet deep unless prior approval is given by the Control Authority. The Control Authority shall inspect the separator to insure that separator is level before it is backfilled. The oil/grit separator shall have a minimum fall of three (3) inches and maximum fall of five (5) inches through the separator. Bitumastic sealer shall be used to seal all tank joints. The separator shall be bedded with a minimum of 6-inches of No.7 crushed stone. Separator located in traffic areas shall be completely backfilled with clean crushed stone.



OIL/GRIT SEPERATOR DETAIL (TRAFFIC RATED)

SPECIFICATIONS:

- STRUCTURAL DESIGN:** The pre-cast oil/grit separator shall be designed to remain watertight and structurally sound without cracking under the maximum cover height of three (3) feet of cover on a non traffic rated trap, or eight (8) feet of cover on a traffic rated trap. Also the traps baffle shall be poured monolithically with the bottom of the trap. Oil/grit separators shall be top sealed unless otherwise approved by Control Authority. The design must show that watertight integrity is achieved through the use of quality concrete rather than through an impervious barrier. Use of interior or exterior coatings is not acceptable as a primary watertightness system.
- INTERNAL PLUMBING:** Neoprene boots with stainless steel locking bands shall be used on all inlet and outlet pipes to ensure a watertight seal between the tank wall and the inlet and outlet pipes. Minimum pipe size and tees shall be four (4) inch schedule 40 (ASTM D-2665).
- GRADE RINGS, MANHOLE FRAME, AND LIDS:** When the elevation of the top of the oil/grit separator manhole frames and lids needs to be raised, concrete grade rings shall be used and sealed with bitumastic sealer between them. Also all grade rings shall be coated with bituminous roofing material. All lids shall be non vented and be labeled grit.
- MINIMUM REQUIREMENTS:** Pre-cast oil/grit separators shall have a minimum wall thickness of five (5) inches and a minimum thickness of six (6) inches for the top and four (4) inches for the bottom. The cement shall be Portland cement conforming to the current ASTM specification C-150, type I Portland, normal, grey color; Type III Portland, Grey color shall be used where high early strength concrete is specified. Pre-cast oil/grit separator shall be cured for a minimum of 24 hrs. The maximum water-to-cement ratio shall be 0.45. Minimum pre-cast oil/grit separator size shall be 1000 gallons.
- TEST FOR WATERTIGHT INTEGRITY:** The Control Authority shall vacuum test the oil/grit separator for water-tightness, at the contractor's expense. Tests shall be performed upon installation prior to final backfilling. The intent of the test is to ensure a watertight oil/grit separator under groundwater conditions. The vacuum test will consist of testing the separator, and grade rings if attached, to the top of the manhole ring and lid at the time of testing. Testing pressure will be 4 psi for 5 minutes.
- INSTALLATION REQUIREMENTS:** Oil/grit separators shall be buried no more than three (3) feet deep unless prior approval is given by the Control Authority. The Control Authority shall inspect the separator to insure that separator is level before it is backfilled. The oil/grit separator shall have a minimum fall of three (3) inches and maximum fall of five (5) inches through the separator. Bitumastic sealer shall be used to seal all tank joints. The separator shall be bedded with a minimum of 6-inches of No.7 crushed stone. Separator located in traffic areas shall be completely backfilled with clean crushed stone.



OIL/GRIT SEPERATOR DETAIL (NON-TRAFFIC RATED)



WATER QUALITY CONTROL  
CITY OF MARYVILLE  
MARYVILLE, TENNESSEE

DRAWN BY: GEF	TITLE	SCALE: NONE
APP'D BY:	STANDARD DETAIL DWGS.	SHEET 2 of 2
DATE:	SEWER	
REVISION:		
DESCRIPTION:		W.O.