APPENDIX C

Sanitary Sewer Standards

Note: The following Standards are those adopted by the City at the time of development of the Comprehensive Sewer Plan. These Standards may have changed after approval and adoption of the Comprehensive Sewer Plan by the City Council.
NOTES FOR CONNECTING TAPS ON EXISTING SEWER MAINS

1. The tee fitting shall be a Romac Industries Style "CB" sewer saddle (or approved equal). Only new saddle and parts shall be installed. Due to pipe size materials or pipe condition, the city engineer may require an alternate method/material be used.

2. The sewer main tap shall be cut with a sewer pipe tapping machine (hole saw) capable of retaining the coupon.

3. The round hole cut into the sewer main shall be no larger than the inside diameter of the saddle gasket. The hole saw cut edges shall be smooth.

4. The coupon shall be retained and surrendered to the inspector. The permit holder will pay all costs associated with the location and retrieval of a lost coupon. Additionally, the permit holder will be held liable for any subsequent damages caused by a lost coupon.

5. Bolts shall be torqued to manufacture specifications, then retorqued after 10 minutes.

6. No taps shall be allowed on existing sewer mains over 18" in diameter. Connections into sewer mains over 18" in diameter shall intersect the sewer main in a manhole. In some cases the city engineer may allow a variance to this requirement.

7. All trenching, bedding, and backfill shall be in accordance with City Standard Detail No. 06.01.01. All asphalt repair shall be in accordance with City Standard No. 01.01.20. All additional utility and right of way repairs shall be in accordance with the "City Standards" manual.

8. The City of Puyallup will conduct a "sewer main video inspection" of the sewer tap. The permit holder will be required to repair any sewer tap construction defects found by the city inspectors. The cost of all repairs and subsequent "sewer main video inspections" will be the responsibility of the permit holder. The damage deposit posted by the builder will be held until problems are corrected. Due to public health and safety, building occupancy will not be allowed until repairs are completed and accepted by the city engineer.
NOTES:
1. NEAT LINE CUTS SHALL BE SEALED AT TOP WITH A HOT PAVING GRADE AND FACE OF CUT TACKED.
2. TOP OF SHELF, SLOPE 1/2" PER FOOT, CONSTRUCT IN FIELD CHANNEL AND SHELF TO THE CROWN OF PIPE.
* WHEN RETRO-FITTING A 48" MANHOLE DROP MUST BE INSTALLED ON LADDER SIDE OF MANHOLE.*

**CONCRETE CHANNEL**

- **1" MAX**
- **30" MIN**
- **60" MAX**

**MANHOLE DIA PER PLAN 54" MIN**

**DROP CONNECTION**

**SEE NOTE 9 CITY STANDARD DETAIL NO. 04.01.03**

**PLAN SCALE: 1:2**

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**PIPE SUPPORT DETAIL SCALE: 1:2**

**SHADED AREA IS SAW CUT**

**SEE PIPE SUPPORT DETAIL THIS SHEET**

**See Note 7 City Standard Detail No. 04.01.03**

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**SECTION A--A SCALE: 1:4**

**ADJUSTING RINGS**

- **4" MIN TO 18" MAX**
- **PLASTER INSIDE FACEING WITH 1/2" MORTAR**
- **12" TYP**
- **SEE NOTE 7 IN CITY STANDARD DETAIL NO. 04.01.03**
- **4" MIN 20" MAX**

**PER PLANS 54" MIN**

**PRECAST ECCENTRIC CONE**

**PRECAST RISER SECTION**

**MANHOLE RUNGS**

- **NOTE 3 CITY STANDARD DETAIL NO. 04.01.03**
- **6" TYP**

**PRECAST BASE WITH INTEGRAL RISER**

**CONCRETE CHANNEL**

- **1 1/2" ASPHALT**
- **24" MIN**
- **9" CONCRETE COLLAR**
- **2 1/8"**

**PER PLANS**

- **5 1/2"**
- **90° SCHED 40 ELBOW W/BELL AND SPIGOT END CUT WITH SAW**

**MORTAR TO SUPPORT RISER**

**TWO 45°'S OR ONE 90°**

**UNDISTURBED OR COMPACTED SUB-GRADE**

**EXISTING ROAD (WHERE SHOWN ON PLANS)**

**Coleen Harris**  
04/01/2009
NOTES FOR: INSIDE DROP SANITARY SEWER MANHOLE

1. NEAT LINE CUTS SHALL BE SEALED AT TOP WITH A HOT PAVING GRADE ASPHALT AND FACE OF CUT TACKED. ASPHALT DEPTH TO MATCH EXISTING.

2. TOP OF SHELF, SLOPE 1/2" PER FOOT MINIMUM, CONSTRUCT IN FIELD CHANNEL AND SHELF TO THE CROWN OF PIPE.

3. MANHOLE RUNG SHALL CONFORM TO SECTION R, ASTM C 478 (AASHTO M–189) AND MEET ALL OSHA REQUIREMENTS. MANHOLE RUNGS SHALL BE PARALLEL OR APPROXIMATELY RADIAL AT THE OPTION OF THE MANUFACTURER, EXCEPT THAT ALL STEPS IN ANY MANHOLE SHALL BE SIMILAR. PENETRATION OF OUTER WALL BY A LEG IS PROHIBITED. SEE CITY STANDARD DETAIL NO. 06.01.04 & 06.01.05

4. PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM. DROP INLET PIPE HOLE MAY BE FIELD CONSTRUCTED.

5. KNOCKOUT OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTER DIAMETER PLUS MANHOLE WALL THICKNESS. MINIMUM DISTANCE BETWEEN HOLES IS 8".

6. PRECAST CONCRETE MANHOLE COMPONENTS SHALL CONFORM TO ASTM C 478.

7. FLEXIBLE JOINTS SHALL BE RUBBER GASKETED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. MORTARED, DRY-PACKED, OR CAST-IN-PLACE JOINTS WILL BE PERMITTED ONLY FOR CONNECTIONS TO OR THROUGH MANHOLES. A FLEXIBLE GASKETED JOINT SHALL BE INSTALLED WITHIN ONE (1) FOOT OF EACH CONNECTION TO MANHOLES. CONNECTIONS TO MANHOLE SHALL UTILIZE A KOR N SEAL CONNECTION MORTARED. CONNECTIONS TO THESE STRUCTURES WITH PVC PIPE SHALL UTILIZE A MANHOLE COUPLING AND RUBBER GASKET.

8. MANHOLE RING AND COVER: THE COVER SHALL BE MARKED WITH "SEWER" IN TWO (2) INCH RAISED LETTERS (SEE CITY STANDARD DETAILS NO. 06.01.02 AND 06.01.03 FOR ADDITIONAL INFORMATION).

9. THE MAXIMUM CHANGE IN FLOW DIRECTION IN MANHOLES SHALL BE 90 DEGREES. FOR ALL CHANGES IN FLOW DIRECTION GREATER THAN 45 DEGREES, A MINIMUM DROP OF 0.10 FEET BETWEEN INVERTS SHALL BE PROVIDED AND CHANNELIZATION PROVIDED.
NOTES:

1. NEAT LINE CUTS SHALL BE SEALED AT TOP WITH A HOT PAVING GRADE AND FACE OF CUT TACKED.

2. TOP OF SHELF, SLOPE 1/2" PER FOOT, CONSTRUCT IN FIELD CHANNEL AND SHELF TO THE CROWN OF PIPE.

3. MANHOLE COVER SHALL BE MARKED WITH "SEWER" IN 2" RAISED LETTERS, SEE CITY STANDARD DETAIL NO. 06.01.02 & 06.01.03 FOR ADDITIONAL INFORMATION.
SIDE SEWER STUB
WHEN A UTILITY EASEMENT EXISTS

NOTES:
1. SIDE SEWER STUBS SHALL BE INSTALLED TO EACH BUILDING LOT DURING PLAT CONSTRUCTION. WHEN LOT IS BUILT ON THE SIDE SEWER CONNECTION SHALL BE COMPLETED AS SHOWN IN CITY STANDARD DETAIL NO. 04.01.09 & 04.01.10.
2. THE TOP ONE (1) FOOT OF THE 2x4x12" LONG PRESSURE TREATED SIDE SEWER MARKER SHALL BE EXPOSED, AND SHALL BE PAINTED TRAFFIC YELLOW AND THE DEPTH PAINTED IN BLACK ON BOTH SIDES OF THE MARKER.
3. NINE (9) GAUGE GALVANIZED WIRE TO BE ATTACHED TO THE 2x4x12 CLEAT AND ATTACHED TO THE MARKER POST ABOVE FINISHED GRADE.
4. IN LOCATION WHERE SIDEWALKS ARE NOT PRESENT NOR REQUIRED THE CONTRACTOR SHALL POUR CONCRETE COLLAR AS DIRECTED BY THE CITY ENGINEER. SEE CITY STANDARD DETAIL NO. 04.01.05 FOR FRAME AND COVER INFORMATION.
5. END OF SIDE SEWER SHALL HAVE A FIVE (5) FOOT MINIMUM OF COVER.
6. SEWER PIPE SHALL CONFORM TO CITY STANDARD NO. 06.01.01.
SIDE SEWER STUB
WHEN A UTILITY EASEMENT DOES NOT EXIST

NOTES:

1. SIDE SEWER STUBS SHALL BE INSTALLED TO EACH BUILDING LOT DURING PLAT CONSTRUCTION, WHEN LOT IS BUILT ON THE SIDE SEWER CONNECTION SHALL BE COMPLETED AS SHOWN IN CITY STANDARD DETAIL NO. 04.01.09 & 04.01.10.

2. THE TOP ONE (1) FOOT OF THE 2X4X4"-0" LONG PRESSURE TREATED SIDE SEWER MARKER SHALL BE EXPOSED, AND SHALL BE PAINTED TRAFFIC YELLOW AND THE DEPTH PAINTED IN BLACK ON BOTH SIDES OF THE MARKER.

3. NINE (9) GAUGE GALVANIZED WIRE TO BE ATTACHED TO THE 2X4X12 CLEAT AND ATTACHED TO THE MARKER POST ABOVE FINISHED GRADE.

4. IN LOCATION WHERE SIDEWALKS ARE NOT PRESENT NOR REQUIRED THE CONTRACTOR SHALL POUR CONCRETE COLLAR AS DIRECTED BY THE CITY ENGINEER. SEE CITY STANDARD DETAIL NO. 04.01.05 FOR FRAME AND COVER INFORMATION.

5. END OF SIDE SEWER SHALL HAVE A FIVE (5) FOOT MINIMUM OF COVER.

6. SEWER PIPE SHALL CONFORM TO CITY STANDARD NO. 06.01.01.
RESIDENTIAL SIDE SEWER CONNECTION

1. PRIOR TO CONNECTING A NEW LATERAL TO AN EXISTING SEWER STUB, THE STUB MUST BE INSPECTED AND APPROVED BY THE CITY ENGINEER.

2. WHEN THE SEWER MAIN IS IN A RIGHT-OF-WAY, A 6" CLEAN OUT IS REQUIRED AT THE EDGE OF THE RIGHT-OF-WAY.

3. WHEN THE SEWER MAIN IS IN AN EASEMENT, A 6" CLEAN OUT IS REQUIRED AT THE EDGE OF THE EASEMENT.

4. EACH CLEAN OUT ASSEMBLY SHALL CONSIST OF: ONE CLEAN OUT ADAPTOR, (HUB X FEMALE INSIDE PIPE THREAD, P.V.C. SLIP IN), AND ONE CLEAN OUT PLUG (MALE OUTSIDE THREAD WITH RAISED NUT, P.V.C. SDR 35).

5. FOR NON-VEHICULAR TRAFFIC INSTALLATIONS USE "CARSON" MODEL 910 GREEN YARD BOX WITH BOLT DOWN LID MARKED SEWER OR APPROVED EQUAL.

6. FOR ASPHALT, GRAVEL, OR TRAFFIC INSTALLATIONS SEE CITY STANDARD DETAIL NO. 04.03.05 FRAME AND COVER SECTION.

7. SEWER PIPE, TRENCHING, BEDDING AND BACKFILL SHALL CONFORM TO CITY STANDARD NO. 06.01.01

PUBLIC R.O.W
FINISHED GRADE
ATTACH CLEANOUT FITTINGS TO EXISTING SIDE SEWER STUB
2% MIN. SLOPE

100' MAX. SPACING BETWEEN CLEANOUTS AND CLEANOUTS INSTALLED AT TIME OF SEWER CONNECTION
15' CITY UTILITY EASEMENT

10' PRIVATE UTILITY EASEMENT

FLOW

1 1/4" MINUS CRUSHED ROCK

4" MIN. RESIDENTIAL AT A 2% MINIMUM SLOPE 6" SEWER PIPE ASTM D3034, SDR35

6" TO 4" REDUCER

FROM BUILDING FIXTURES

CLEAN OUT COVER SEE NOTE 1 AND 2.
NOTES:

1. SAMPLING CONNECTION SHALL BE INSTALLED OUTSIDE WITH UNOBSURCTED ACCESS AT ALL TIMES.

2. EACH CLEANOUT ASSEMBLY SHALL CONSIST OF: ONE CLEANOUT ADAPTER, HUB X FEMALE, FIPT, PVC SI AND ONE CLEANOUT PLUG, MOPT WITH RAISED NUT, PVC SDR35.
NOTES

1. NEAT LINE CUT SHALL BE SEALED AT THE TOP WITH A HOT PAVING GRADE ASPHALT AND FACE OF CUT TACKED.

2. ALL MATERIAL SHALL CONFORM TO THE 1991 STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION PREPARED BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER.

3. MACHINE BEARING FACES OF FRAME AND COVER TO INSURE POSITIVE FIT.

4. EACH CLEAN OUT ASSEMBLY SHALL CONSIST OF: ONE CLEAN OUT ADAPTOR (HUB X FEMALE INSIDE PIPE THREAD, P.V.C. SLIP IN), AND ONE CLEAN OUT PLUG (MALE OUTSIDE PIPE THREAD WITH RAISED NUT, P.V.C. SDR35).
NOTES:

1. VALVE VAULT SHALL BE A 48 INCH INSIDE DIAMETER PRECAST CONCRETE BASE.
2. THE BASE SHALL BE A MINIMUM 6-INCH THICK UNDER THE PIPE INVERT.
3. OPENINGS FOR THE PIPE SHALL BE CIRCULAR, TAPERED TOWARD THE INSIDE OF THE SECTION
   AND SHALL BE OF THE MINIMUM SIZE POSSIBLE TO ACCOMMODATE THE PIPE TO BE INSERTED
   AND TO EFFECTIVELY SEAL THE JOINT.
4. THE OPENINGS FOR PIPES SHALL BE FITTED WITH A RUBBER COUPLING TO EFFECTIVELY
   SEAL THE PIPE TO THE MANHOLE TRANSITION.
5. THE PRECAST BASE SECTION SHALL BE A MINIMUM OF 4 FEET HIGH.
6. PRECAST COMPONENTS SHALL CONFORM TO ASTM C478 REQUIREMENTS.
7. ALL PORTLAND CEMENT USED IN THE MANUFACTURE OF PRECAST SECTIONS SHALL CONFORM TO
   ASTM C150 REQUIREMENTS AND SHALL BE TYPE II OR TYPE IV.
8. THE ACCESS COVER SHALL BE A PRECAST CONCRETE SLAB WITH INTEGRALLY CAST FRAME AND
   COVER REINFORCE TO WITHSTAND H--20 LOADING.
9. ACCESS HATCH SHALL BE 5/16" DIAMOND PLATE HOT DIPPED GALVANIZED STEEL WITH MINIMUM
   INSIDE CLEAR OPENING OF 42" X 42" WITH SPRING LATCH AND LIFT HANDLES.
10. THE VAULT SHALL CONTAIN ONE [1] GIRARD POLY--PIG LAUNCHER OR APPROVED EQUIVALENT,
    INCLUDING ALL ASSOCIATED PIPING AND APPURtenANCES TO COMPLETE THE PIPELINE CLEANING
    STATION PER DETAIL.
11. VALVE SHALL BE A RESILIENT SEATED GATE VALVE AND CONFORM TO THE LATEST REVISION OF
    AWWA STANDARD C--509 AND APPROVED BY ULFM.
12. THE VALVE SHALL BE A RIGHT OPENING, NON--RISING STEM AND PROVIDED WITH A 2" SQUARE
    OPENING NUT WITH OPEN OR AN ARROW CAST IN THE METAL TO INDICATE THE DIRECTION TO OPEN.
13. A T--HANDEDLE VALVE KEY SHALL BE PROVIDED FOR OPERATION.
14. TO PROVIDE ADEQUATE WATER TO OPERATE THE CLEANING STATION, THE VALVE VAULT SHALL BE
    LOCATED NO MORE THAN 60 FEET FROM A FIRE HYDRANT.
SIDE SEWER CLEAN-OUT BOX AND COVERS:
1) IN NON-VEHICULAR TRAFFIC USE "CARSON" MODEL# 910 GREEN YARD BOX WITH BOLT DOWN LID MARKED "SEWER", OR APPROVED EQUAL
2) IN ASPHALT, GRAVEL, OR TRAFFIC SEE CITY STANDARD DETAIL NO. 04.01.05 FRAME AND COVER SECTION.

15' CITY UTILITY EASEMENT
PUBLIC R.O.W
10' PRIVATE UTILITY EASEMENT
FINISHED GRADE
6'
2% MIN. SLOPE
6" SIDE SEWER-PVC SEWER PIPE ASTM 3034
TRACER WIRE INSULATED 12 GAUGE SOLID CORE WIRE FROM PUMP TO CLEAN-OUT
SEE IMAGE OF CONNECTION BELOW

SCALE: 1:4

IMAGE OF CONNECTION FROM ABOVE

1-1/4" FORD PACK JOINT COUPLER MODEL# CB6-55 WITH INSERT STIFFENERS MODEL# INSERT-73, OR APPROVED EQUAL

2 X 1-1/4" MIPT X FIPT THREADED REDUCER BUSHING WATER WORKS BRASS

"ROMAC" EC501-630 MJ CAP WITH 2" THREADED PORT. OR APPROVED EQUAL

1-1/4" SDR 7 "DRISCO 5100 ULTRA LINE" HDPE PIPE. OR APPROVED EQUAL

"*FIPT: FEMALE INSIDE PIPE THREAD
*MOPT: MALE OUTSIDE PIPE THREAD

ALL POLY PIPE SPLICES SHALL BE MADE WITH 1-1/4" FORD PACK JOINT COUPLER MODEL # C66-55 WITH INSERT STIFFENERS MODEL# INSERT-73, OR APPROVED EQUAL

CITY OF PUYALLUP
DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

PRESSURE LINE TO GRAVITY LINE SIDE SEWER CONNECTION AND CLEAN OUT TYPE 1

04.05.01
PRESSURE DISCHARGE LINE:

1. 1-1/4" FORD PACK JOINT COUPLER MODEL # C66-55 WITH INSERT STRIFFENERS.

2. 1-1/4 SDR 7 "DRISCO 5100 ULTRA LINE" HDPE PIPE.

3. ALL POLY PIPE SPLICES SHALL BE MADE WITH 1-1/4" FORD PACK JOINT COUPLER MODEL # C66-55 OR APPROVED EQUALS.

5. A TRACER WIRE SHALL BE INSTALLED FROM PUMP TO GRAVITY CLEAN-OUT INSULATED 12 GAUGE SOLID CORE COPPER WIRE. ALL SPLICES SHALL BE MADE USING WATER PROOF CONNECTORS.

6. THE DISCHARGE PIPE SHALL BE INSTALLED AT A MINIMUM DEPTH OF 24".

GRADE TO MATCH TOP RING

FLOW

1-1/2 SCH 40 PVC CONDUIT

4.5'

2' SEPARATION

FLOW

FOUNDATION DETAIL

FILL TO GRADE WITH 5/8 GRAVEL
POURED IN PLACE CONCRETE ANCHOR TO PREVENT TANK FROM FLOATING
UNIT TO BE INSTALLED LEVEL
6" MIN. GRAVEL BEDDING
UNDISTURBED EARTH

CITY OF PUYALLUP
DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

GRINDER PUMP INSTALLATION DETAIL

04.05.02
RESIDENTIAL GRINDER PUMP STATION NOTES:

1. THE PACKAGED GRINDER PUMP LIFT STATION SHALL BE:
   "ENVIRONMENT ONE" MODEL DH071 (http://www.zone.com) OR AN APPROVED EQUAL.

2. THE PUMP STATION SHALL BE INSTALLED WITHIN 15' OF THE BUILDING. THE PUMP STATION SHALL BE ACCESSIBLE FOR MAINTENANCE AND REPAIR. FINISHED GRADE SHALL SLOPE AWAY FROM THE PUMP STATION. THE PUMP STATION IS NOT TO BE LOCATED WITHIN LOW AREAS THAT MAY POND. FENCES, PLANTS, OR ANY OTHER OBJECT SHALL NOT HINDER IN THE MAINTENANCE OR REPAIR OF THE PUMP STATION.

3. THE CONTROL/ALARM PANEL SHALL BE ATTACHED TO THE BUILDING. WITH CITY APPROVAL THE CONTROL PANEL MAY BE ATTACHED TO A 3 X 8" GALVANIZED POLE WITH TOP CAP, AND SET IN CONCRETE.

4. THE CONTROL/ALARM PANEL SHALL BE:
   A) ACCESSIBLE FOR MAINTENANCE AND REPAIR
   B) IN SIGHT OF THE PUMP STATION
   C) THE ALARM LIGHT SHALL BE VISIBLE FROM 180 DEGREES RADIUS
   D) NO FENCES, PLANTS, OR OTHER OBJECTS SHALL HIDE THE ALARM LIGHT FROM VIEW

5. ALL ELECTRICAL WORK SHALL CONFORM TO NEC STANDARDS, AND SHALL BE INSPECTED BY A WASHINGTON STATE ELECTRICAL INSPECTOR.

6. GRADE MUST SLOPE AWAY FROM THE PUMP STATION. NO PLANTS SHALL BE PLACED WITHIN 5’ OF THE PUMP STATION.

7. EACH BUILDING SITE SHALL HAVE ITS OWN GRINDER PUMP STATION AND DISCHARGE TO ITS OWN GRAVITY SIDE SEWER CONNECTION.

8. THE PROPERTY OWNER SHALL RETAIN OWNERSHIP AND MAINTENANCE OF THE GRINDER PUMP STATION AND ASSOCIATED LINES TO THE PROPERTY LINE GRAVITY SIDE SEWER CLEAN-OUT, OR WHERE THE PRESSURE LINE DISCHARGES TO A CITY OF PUYALLUP OWNED GRAVITY SEWER CLEAN-OUT OR STRUCTURE.

9. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY BACKUPS OR SPILLS DUE TO POWER FAILURE OR PUMP AND ASSOCIATED EQUIPMENT FAILURE.

10. FOLLOW MANUFACTURERS INSTRUCTIONS AND INSTALLATION PROCEDURES.
OPTIONS: □ DH071-61 (HARD WIRED LEVEL CONTROLS)
□ DR071-61 (WIRELESS LEVEL CONTROLS)

GRADE MUST SLOPE AWAY FROM STATION

DISCHARGE: 1-1/4 FEMALE PIPE THREAD

INLET: EPDM GROMMET FOR 4" DWV PIPE (STANDARD)

CONCRETE BALLAST MAY BE REQUIRED
SEE INSTALLATION INSTRUCTIONS FOR DETAILS
OPTIONS:  □ DH071-74 (HARD WIRED LEVEL CONTROLS)
          □ DR071-74 (WIRELESS LEVEL CONTROLS)

GRADE MUST SLOPE AWAY FROM STATION

GRADE

GRADE

27" COVER OVER DISCH

36" INVERT DEPTH

73.0"

41.8"

35.0"

DISCHARGE: 1-1/4 FEMALE PIPE THREAD

Ø 29.5"

INLET: EPDM GROMMET FOR 4" DWV PIPE (STANDARD)

CONCRETE BALLAST MAY BE REQUIRED
SEE INSTALLATION INSTRUCTIONS FOR DETAILS
OPTIONS:  □ DH071-93 (HARD WIRED LEVEL CONTROLS)
□ DR071-93 (WIRELESS LEVEL CONTROLS)

GRADE MUST SLOPE AWAY FROM STATION

GRADE

46° COVER OVER DISCH

55° INVERT DEPTH

91.8"

41.6"

36.0"

DISCHARGE: 1-1/4 FEMALE PIPE THREAD

Ø 29.5"

INLET: EPDM GROMMET FOR 4" DWV PIPE (STANDARD)

CONCRETE BALLAST MAY BE REQUIRED
SEE INSTALLATION INSTRUCTIONS FOR DETAILS

E-ONE MODEL 2010 - 96"
GRINDER PUMP DETAIL
VENT PIPES SHALL EXTEND 10-FT MIN. ABOVE THE SURROUNDING GROUND AND SHALL BE SECURELY SUPPORTED IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE.

SECTION VIEW AA

(Notes)
1. CONCRETE: 28 DAY COMpressive StRENGTH f'c = 4500 psi
2. REBAR: ASTM A-615 GRADE 60
3. MESH: ASTM A-185 GRADE 65
4. DESIGN: ACI-318-83 BUILDING CODE
   ASTM C-857 "MINIMUM STRUCTURAL DESIGN LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES"
5. MINIMUM VAULT DIMENSIONS BASED ON UTILITY VAULT. OTHER MANUFACTURER'S SIZING MAY VARY.
   * SEE CITY STANDARD DETAIL NO. 04.06.02 FOR ADDITIONAL NOTES
NOTES FOR GREASE INTERCEPTORS:

1. THE PLANS & SPECIFICATIONS SHALL ILLUSTRATE PROPERTY BOUNDARIES, PIPING/DRAINAGE DETAILS AND CONNECTIONS TO THE SANITARY SEWER. DETAIL AND ELEVATION DRAWINGS OF THE GREASE INTERCEPTOR SHALL INCLUDE SIZING CALCULATIONS IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE CURRENTLY ADOPTED BY THE CITY OF PUYALLUP.

2. VENTING OF THE INTERCEPTOR SHALL BE IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE CURRENTLY ADOPTED BY THE CITY OF PUYALLUP.

3. EFFLUENT FROM GREASE INTERCEPTORS SHALL NOT EXCEED 100 mg/L FAT, OIL, AND/OR GREASE DISCHARGED TO THE DOWNSTREAM SANITARY SEWER SYSTEM.

4. GREASE INTERCEPTORS INSTALLED IN PAVED AREAS SHALL COMPLY WITH H-20 LOADING CRITERIA.

5. THE GREASE INTERCEPTOR SHALL BE INSTALLED AND CONNECTED SUCH THAT IT SHALL BE EASILY ACCESSIBLE FOR INSPECTION, CLEANING, AND REMOVAL AT ALL TIMES. MANHOLE COVERS SHALL BE GAS TIGHT AND HAVE A MINIMUM OPENING OF 24-INCHES IN DIAMETER.

6. NO SANITARY WASTEWATER SHALL BE CONVEYED TO THE SEPARATOR. A SEPARATE SIDE SEWER SHALL BE REQUIRED TO CARRY SANITARY WASTEWATER TO THE SEWER MAIN AND SHALL BE PLACED AS CLOSE TO THE SERVICE AREA AS PRACTICAL.

7. PLUMBING/PIPING SHALL BE CONSTRUCTED TO ESTABLISH "PARALLEL FLOW" (90-DEGREES TO THE TANK BAFFLE) THROUGH THE GREASE INTERCEPTOR. NO RADIUS, BEND, OR ELBOW SHALL BE ALLOWED IN THE INLET PIPE UPSTREAM OF THE INTERCEPTOR FOR A MINIMUM OF 10-FEET, OR 20-PIPE DIAMETERS, WHICHEVER IS GREATER.

8. A BALLCENTRIC VALVE SHALL BE LOCATED IN THE DISCHARGE PIPING, A MAXIMUM OF 10-FEET FROM THE GREASE INTERCEPTOR. THIS VALVE SHALL BE CLOSED WHEN CLEANING OR SERVICING THE DEVICE. ANY PUMP MECHANISM SHALL BE INSTALLED DOWNSTREAM OF THE INTERCEPTOR TO PREVENT FAT, OIL AND GREASE EMULSIFICATION. A 'TEE' CONNECTION SHALL BE INSTALLED IN THE DISCHARGE PIPING TO PROVIDE FOR SAMPLE COLLECTION.

9. ALL GREASE INTERCEPTORS SHALL BE FILLED WITH CLEAN WATER BEFORE USE.

10. THE DESIGN ENGINEER SHALL PROVIDE ENGINEERING SERVICES STAFF WITH A LETTER OF INSPECTION CERTIFYING THAT THE INSTALLATION WAS PERFORMED IN ACCORDANCE WITH ALL REGULATIONS AND THE APPROVED PLAN.

11. FINAL INSPECTION IS REQUIRED BY ENGINEERING SERVICES STAFF PRIOR TO CONNECTING TO THE SANITARY SEWER.

12. THE PROPERTY OWNER SHALL RETAIN OWNERSHIP OF THE GREASE INTERCEPTOR AND SIDE SEWER LINES AND SHALL BE RESPONSIBLE FOR THEIR OPERATION AND MAINTENANCE. A SERVICE/MAINTENANCE RECORD SHALL BE KEPT ON THE PREMISES AT ALL TIMES AND SHALL BE IMMEDIATELY AVAILABLE TO ENGINEERING SERVICES STAFF, UPON REQUEST.

13. THE PROPERTY OWNER SHALL REPORT IMMEDIATELY TO THE ENGINEERING SERVICES STAFF ANY SPILL, SURCHARGE, BYPASS, OR MECHANICAL FAULT AND/OR FAILURE WHICH INTERRUPTS, OR OTHERWISE REDUCES THE CAPACITY OR REMOVAL EFFICIENCY OF THE GREASE INTERCEPTOR.