



ACCESS BOX:  
 NON-TRAFFIC AREAS - EQUAL TO CARSON  
 MODEL 1419-14B, WITH 1419-2B COVER  
 TRAFFIC AREAS - H-20 RATED CONCRETE  
 BOX EQUAL TO FOGTITE B9 1/2 METER BOX  
 LIDS SHALL BE MARKED ELECTRICAL OR  
 SEWER RESPECTIVELY OR HAVE NO  
 MARKINGS AT ALL

NOTE:  
 TOP CAN BE SET FLUSH WITH  
 GROUND, IF A CONCRETE PAD IS  
 POURED AROUND THE LIFT  
 STATION AND SLOPE AWAY FROM  
 THE STATION. KEEP ROCKS AND  
 DEBRIS OUT OF STATION.

NEMA (6"x6"x4" MIN)  
 NON-METALLIC JUNCTION BOX\*

4" MIN  
 6" MAX

BOTTOM ENTRY WATER TIGHT  
 STRAIN RELIEF CONNECTORS  
 (FOR USE WITH UNDERGROUND  
 CABLES) ATTACH USING  
 LOCK-NUT WITH SEALING FITTING

DEPTH  
 PER CODE

PEA GRAVEL

1 1/4" RIGID  
 CONDUIT

UF DIRECT BURY CABLE\*  
 TO CONTROL PANEL

NO. 10 AWG THWN WIRE FOR  
 PUMP (1 WIRE)

NO. 14 AWG THWN WIRE FOR FLOAT  
 CONTROLS (3 WIRES)

\*NOTE:  
 THE BURY CABLE AND JUNCTION BOX  
 ARE CUSTOMER-OWNED AND MAINTAINED.

JUNCTION BOX MAY BE MOUNTED ON THE HOUSE,  
 PROVIDED: ONLY ONE 90° BEND FROM THE TANK IS  
 USED, CONDUIT FROM THE J-BOX TO THE CONTROL  
 PANEL IS 1" GALV., THE BEND FROM THE J-BOX IS  
 LONG SWEEP, AND "SEAL OFF" IS USED IN THE  
 CONDUIT TO ISOLATE THE CONTROL BOX FROM THE  
 J-BOX

**MATERIALS LIST**

- ① 24" DIA. GALV. COVER
- ② POWER CONDUIT
- ③ 1 1/4" PVC TRUE UNION BALL VALVE (SS) HAYWARD OR EQUAL
- ④ 1 1/4" SS UNION
- ⑤ 1 1/4" SS NIPPLES
- ⑥ CHECK VALVE AND PUMP DISCONNECT HYDROMATIC OR EQUAL
- ⑦ 2 HP GRINDER PUMP - SEE NOTES
- ⑧ 1 1/4" STAINLESS STEEL PIPING, APPROX. 1.2' LENGTH
- ⑨ 3/4" SCHEDULE 40 STAINLESS STEEL RAIL GUIDE SYSTEM
- ⑩ STAINLESS STEEL PUMP TECH SHORT RAIL
- ⑪ 24" x 60" FIBERGLASS TANK
- ⑫ 1 1/4" PVC OR PE
- ⑬ 1 1/4" PE DISCHARGE PIPE TO SERVICE CONNECTION

NOT SHOWN FOR CLARITY: CONTROL FLOATS, SEE NOTES

1. PKG. GRINDER LIFT STA. SHALL BE PUMPTECH "PACKAGE RESIDENTIAL STATION" AS MANUFACTURED BY PUMPTECH INC.
2. PACKAGE STATION TO INCLUDE THE FOLLOWING ITEMS
  - SEWAGE GRINDER PUMP HYDROMATIC HPG200M-2 GRINDER SEWAGE PUMP.
  - PACKAGE CONTROL SYSTEM FOR SIMPLEX STATIONS CONSISTING OF: HYDROMATIC SIMPLEX SPC CONTROL PANEL AND 3 MERCURY LEVEL FLOAT SWITCHES. ALL ELECTRICAL SHALL BE COMPLETED AND READY FOR HOOKUP TO OWNER SUPPLIED POWER. ALL J BOXES, AND CONTROL ENCLOSURES SHALL BE NEMA 4X.
  - FILAMENT WOUND 24"x60" FIBERGLASS BASIN WITH #11 GAUGE GALV. STEEL COVER, VENT AND SUPPLIED WITH STAINLESS STEEL HOLD-DOWN BOLTS.
  - PUMP GUIDE RAIL SYSTEM FOR REMOVAL OF PUMP UNIT SHALL BE AS MANUFACTURED BY PUMPTECH. ALL EXPOSED SURFACES ON GUIDE RAIL SYSTEM SHALL BE STAINLESS STEEL INCLUDING LIFTING CHAIN.
  - VALVES AND PIPING CONSISTING OF 1 1/4" HYDROMATIC BALL CHECK VALVE W/ HYDRAULICALLY SEALED DISCHARGE FLANGE.
3. THE SYSTEM SHALL OPERATE BY THREE CONTROL FLOATS. ON SUMP LEVEL RISE, THE FIRST FLOAT SHALL BE ACTIVATED BUT WILL NOT TURN ON THE PUMP. AS THE LEVEL CONTINUES TO RISE, THE SECOND FLOAT WILL BE ACTIVATED AND WILL START THE PUMP SEQUENCE. WHEN THE LEVEL FALLS TO THE FIRST FLOAT, THE PUMP WILL TURN OFF. IF THE LEVEL CONTINUES TO RISE ABOVE THE SECOND FLOAT, THE THIRD FLOAT SHALL BE ACTIVATED, ENERGIZING THE AUDIO AND VISUAL ALARMS.
4. THE PACKAGE SYSTEM SHALL MEET THE REQUIREMENTS OF THE DEPT. OF L&I, ELECT. INSPECTION DIVISION FOR RESIDENTIAL, SEWAGE GRINDER SYSTEMS.
5. OWNER SUPPLIED ELECTRICAL SERVICE:  
 230 VOLT SINGLE PHASE POWER WITH A 30 AMP BREAKER FOR THE PUMP, AND 110 VOLT ELECTRICAL POWER WITH A 20 AMP BREAKER FOR THE ALARM SYSTEM. MOUNT 40" - 60" ABOVE GRADE, AND PROTECT AGAINST SPLASHING WATER FROM THE HOUSE GUTTER OR EAVE. ALARM SYSTEM AND PUMP MUST BE ON SEPARATE CIRCUITS.

**GRINDER PUMP LIFT STATION**

**SEWER STANDARD DETAIL  
 NORTHEAST SAMMAMISH  
 SEWER AND WATER DISTRICT**

FILE	SCALE	DATE
SAMDTS13	NTS	9/04/25