

Hamilton County Water & Wastewater
Treatment Authority (WWTA)

Inspection Notification and
Typical Details for
Simplex Grinder Station Installations

Revised July 2, 2008

INSPECTION NOTIFICATION

1st Inspection from WWTA — Call 423-209-7842

After tank is set and discharge line is installed, prior to covering.

2nd Inspection from WWTA — Call 423-209-7842

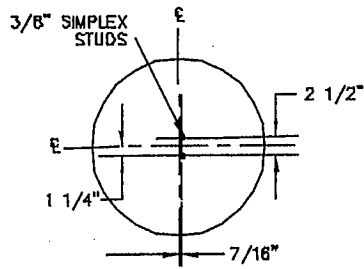
After control panel and pump is completely wired. The contractor's plumber and electrician need to be present when the inspection is performed.

3rd Inspection from Hamilton County Building Inspection — Call 423-209-7860

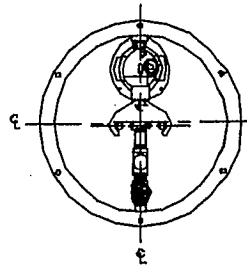
After disconnect has been set and power has been supplied to control panel.

Final Inspection and Approval is from WWTA

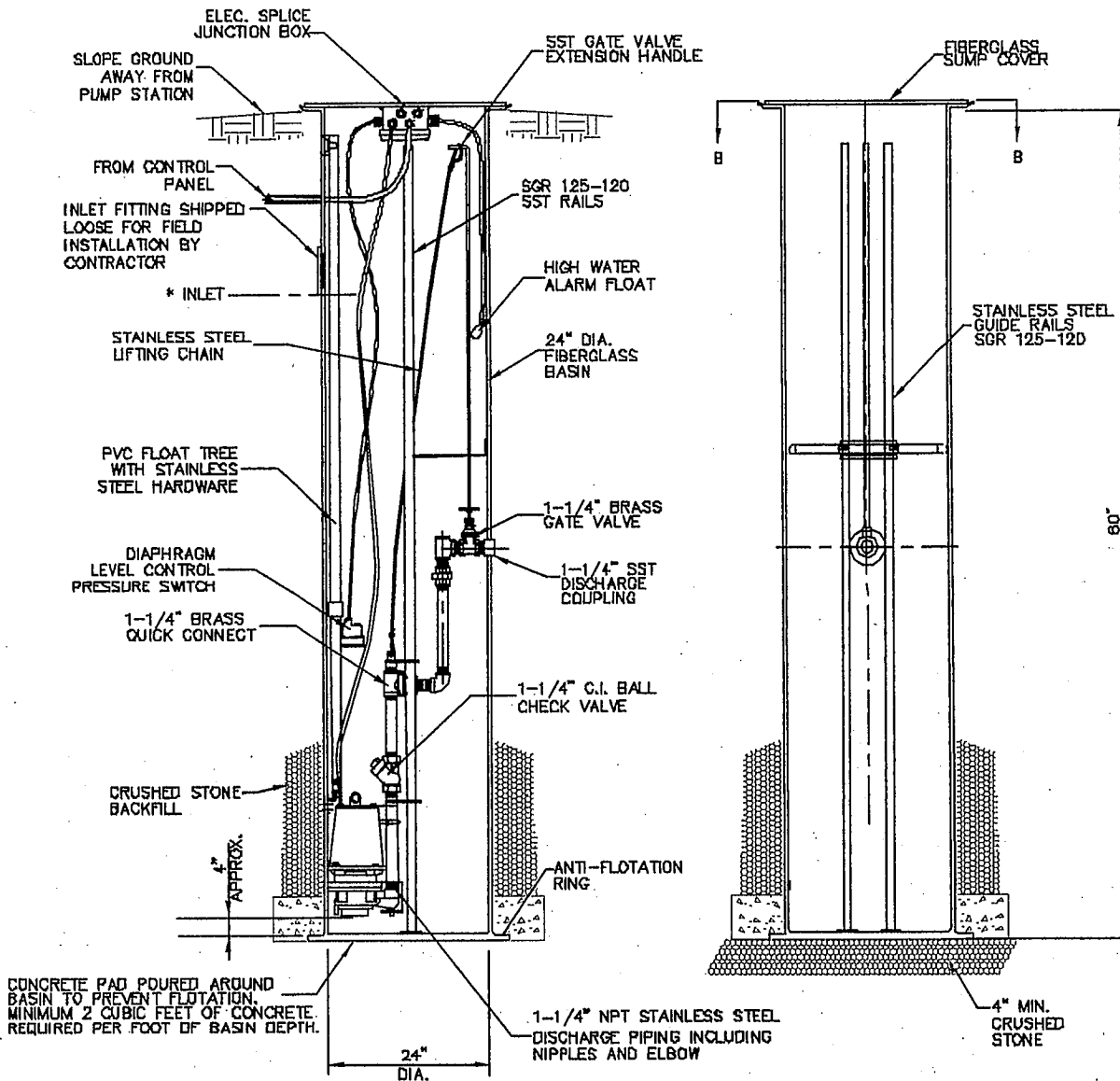
Revised July 2, 2008



TOP VIEW



SECTION B-B



* INLET TO BE MINIMUM OF 36" FROM BOTTOM OF TANK

SIMPLEX GRINDER SEWAGE PUMP STATION

HAMILTON COUNTY WATER & WASTEWATER TREATMENT AUTHORITY

SD-29

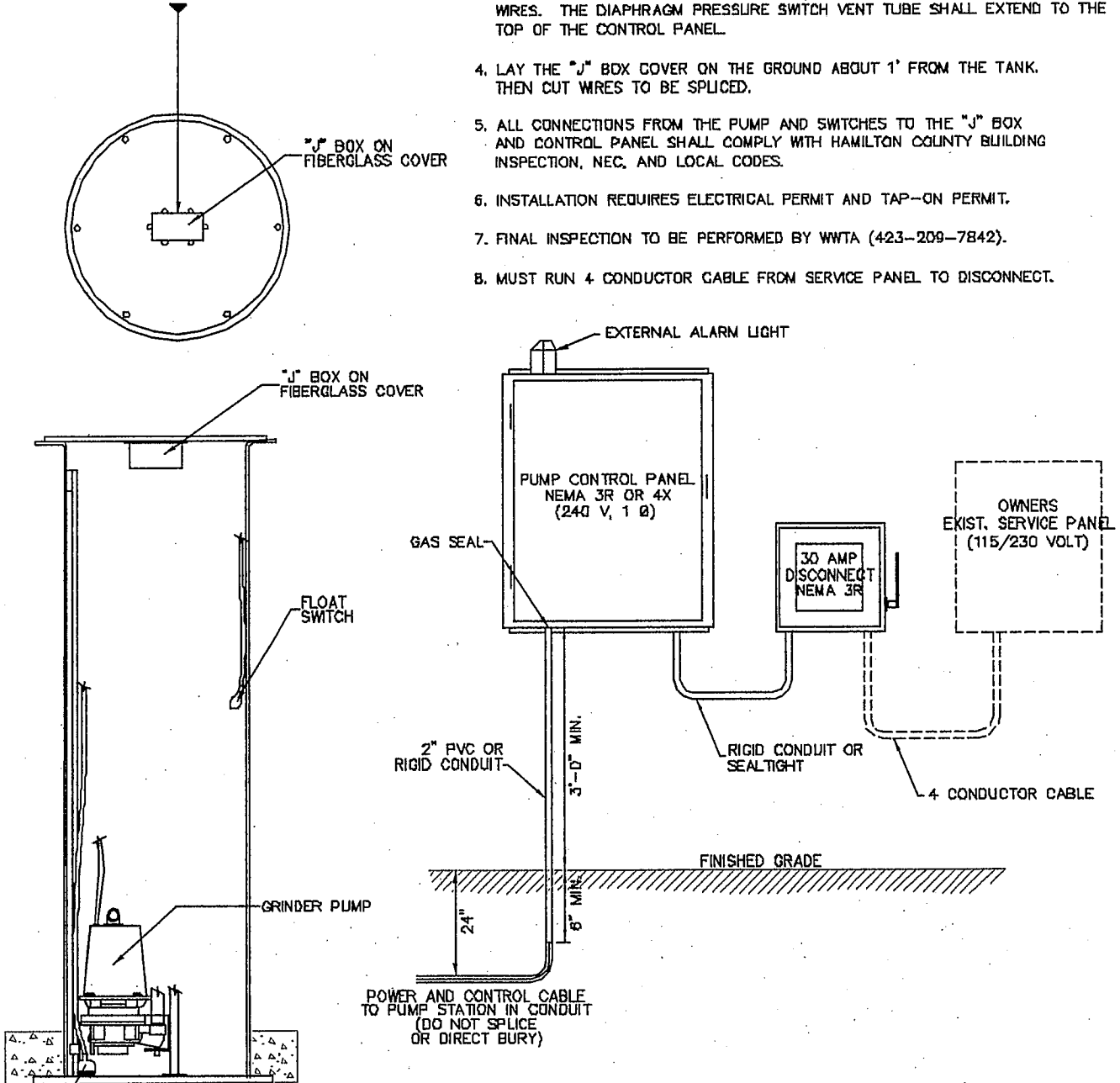
REVISED 08/10/06

NOTES:

1. GRINDER PUMP WIRE
2. DIAPHRAGM PRESSURE SWITCH WIRE
3. FLOAT ALARM WIRE

MUST GO THROUGH "J" BOX ON FIBERGLASS COVER.

1. GRINDER PUMP WIRE, DIAPHRAGM PRESSURE SWITCH WIRE, AND FLOAT SWITCH WIRE SHALL GO THROUGH THE "J" BOX ON THE FIBERGLASS COVER.
2. THE GRINDER PUMP WIRE SHALL BE SPLICED INSIDE THE "J" BOX, BUT IF THE DIAPHRAGM PRESSURE SWITCH WIRE AND FLOAT SWITCH WIRE ARE LONG ENOUGH TO REACH THE CONTROL PANEL, THEY DO NOT HAVE TO BE SPLICED.
3. DIAPHRAGM PRESSURE SWITCH HAS A 1/8" VENT TUBE WITH THE TWO CONTROL WIRES. THE DIAPHRAGM PRESSURE SWITCH VENT TUBE SHALL EXTEND TO THE TOP OF THE CONTROL PANEL.
4. LAY THE "J" BOX COVER ON THE GROUND ABOUT 1' FROM THE TANK. THEN CUT WIRES TO BE SPLICED.
5. ALL CONNECTIONS FROM THE PUMP AND SWITCHES TO THE "J" BOX AND CONTROL PANEL SHALL COMPLY WITH HAMILTON COUNTY BUILDING INSPECTION, NEC, AND LOCAL CODES.
6. INSTALLATION REQUIRES ELECTRICAL PERMIT AND TAP-ON PERMIT.
7. FINAL INSPECTION TO BE PERFORMED BY WWTA (423-209-7842).
8. MUST RUN 4 CONDUCTOR CABLE FROM SERVICE PANEL TO DISCONNECT.



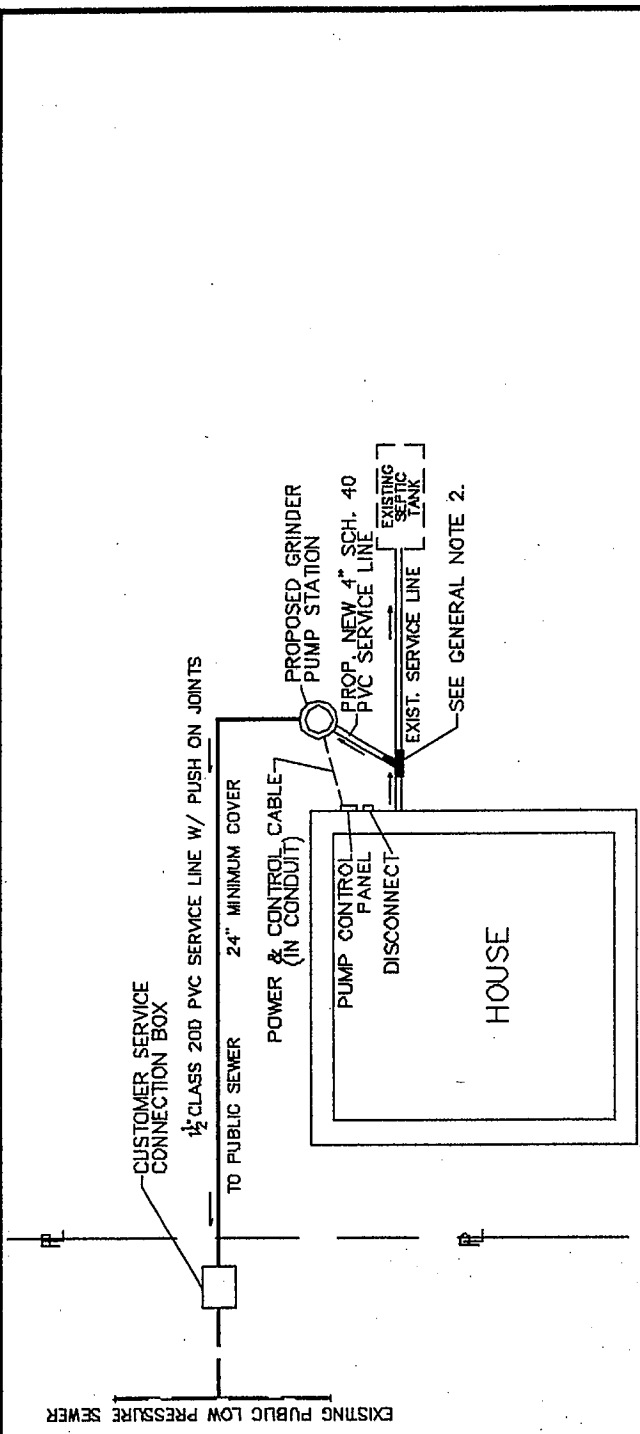
DIAPHRAGM PRESSURE SWITCH
SEE NOTE 3

"J" BOX SPLICE AND CONTROL PANEL INFORMATION

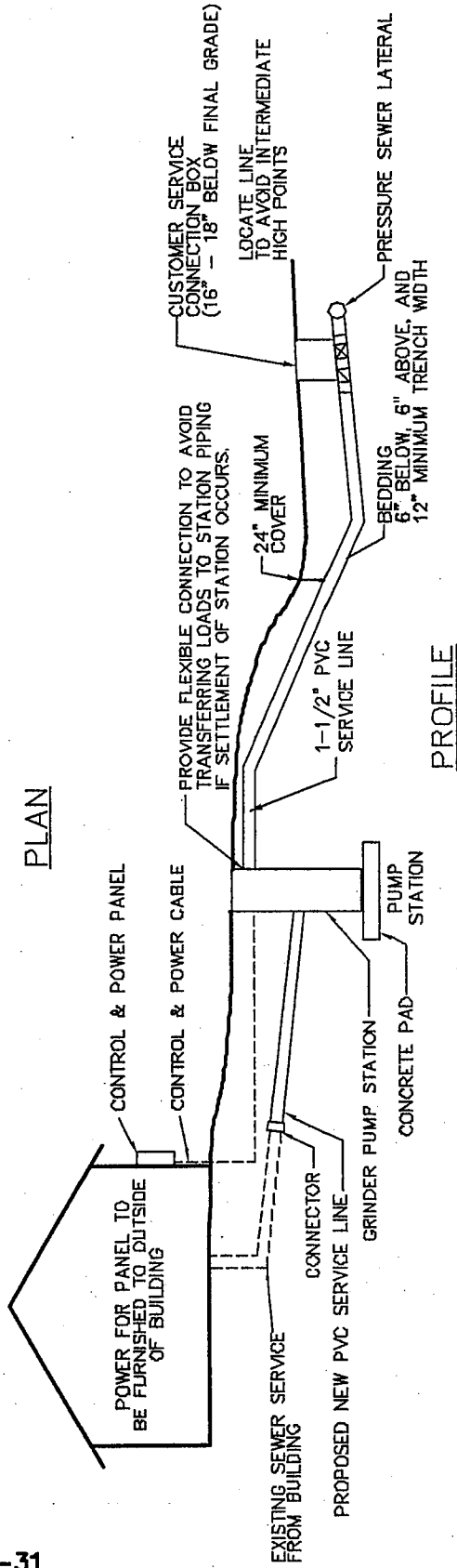
HAMILTON COUNTY WATER & WASTEWATER TREATMENT AUTHORITY

SD-30

REVISED 08/10/06



PLAN



PROFILE

GRINDER PUMP SERVICE INSTALLATION

HAMILTON COUNTY WATER & WASTEWATER TREATMENT AUTHORITY

GENERAL NOTES:

1. INSTALL CONTROL PANEL ON SIDE OF HOUSE IN VIEW OF GRINDER PUMP STATION. INSTALL WITH ELECTRICAL DISCONNECT AND RUN DEDICATED 220 VOLT LINE FROM MAIN BREAKER BOX TO DISCONNECT. INSTALLATION REQUIRES LICENSED ELECTRICIAN AND ELECTRICAL PERMIT.
2. ALTHOUGH NOT RECOMMENDED, IF APPROVED BY WASTEWATER SUPERINTENDENT, HOMEOWNER MAY LEAVE SEPTIC TANK IN SERVICE FOR OVERFLOW DURING POWER OUTAGE OF GRINDER PUMP IN ACCORDANCE WITH WWA RULES. IF SEPTIC TANK IS ABANDONED, IT SHALL BE PUMPED CLEAN, FILLED WITH CRUSHED STONE AND DISCONNECTED.
3. INSTALLATION BY A PLUMBER OR CONTRACTOR APPROVED BY THE WWA.
4. LOCATION OF GRINDER PUMP AND CONTROL PANEL TO BE APPROVED BY THE WWA.
5. PLUMBER SHALL WARRANTY ALL INSTALLATION WORK FOR ONE (1) YEAR AFTER FINAL INSPECTION.

PLUMBING NOTES:

1. INSTALLATION MUST COMPLY, IN GENERAL, WITH THE STANDARD PLUMBING CODE PUBLISHED BY THE SOUTHERN BUILDING CODE CONGRESS INTERNATIONAL, LATEST REVISION, AND WWA REQUIREMENTS.
2. GRINDER PUMP SYSTEM SHALL BE PURCHASED FROM OR APPROVED BY THE WWA.
3. PUMP STATION LOCATION MAY BE RECOMMENDED BY THE HOMEOWNER, BUT FINAL APPROVAL BY THE WWA.
4. PUMP AND BASIN SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION MANUAL.
5. GRAVITY SEWER LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTION MANUAL.
6. PUMP DISCHARGE SERVICE LINES SHALL BE 1 1/2" CLASS 200 SDR 21 PVC WITH PUSH ON JOINTS. SERVICE LINE FITTINGS SHALL BE PUSH ON JOINTS OR SOLVENTS. FITTINGS WILL BE 45° MAXIMUM (NO 90° FITTINGS).
7. DISCHARGE SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF 24" AND VALVES SHALL BE INSTALLED NO MORE THAN 18" BELOW GRADE.
8. CUSTOMER SERVICE CONNECTION BOX MUST BE A MINIMUM OF 4' FROM DRIVEWAY.
9. PLUMBING INSPECTION REQUIRED BY THE WWA PRIOR TO PLACING SYSTEM IN SERVICE.
10. LOW PRESSURE DISCHARGE MUST BE SLEEVED IN 4" SCHEDULE 40 PVC WHEN INSTALLED UNDER DRIVEWAYS.
11. GRINDER PUMP SYSTEM AND DISCHARGE SERVICE LINES SHALL BE TESTED AS FOLLOWS;
 - a) PRIOR TO BACKFILLING;
 1. CLOSE ISOLATION BALL VALVE AT PROPERTY LINE.
 2. FILL PUMP BASIN WITH WATER.
 3. TURN PUMP ON AND OBSERVE OPERATIONS.
 4. OBSERVE DISCHARGE SERVICE LINES FOR LEAKS.
 - b) AFTER BACKFILLING;
 1. CLOSE ISOLATION BALL VALVE AT PROPERTY LINE.
 2. REMOVE CHECK VALVE AT PROPERTY AND INSTALL PRESSURE GAUGE APPARATUS WITH FLUSHING VALVE.
 3. FILL PUMP BASIN AND DISCHARGE LINE WITH WATER.
 4. TURN ON GRINDER PUMP TO PRESSURIZE LINE. CLOSE PUMP STATION ISOLATION VALVE AND TURN PUMP OFF.
 5. OBSERVE PRESSURE GAUGE FOR SIGNS OF LEAKAGE.

GRINDER PUMP SERVICE INSTALLATION NOTES

HAMILTON COUNTY WATER & WASTEWATER TREATMENT AUTHORITY

SD-31A

(SHEET 2 OF 2)

REVISED 09/10/06

DIRECTIONS TO EAST RIDGE WWTa OFFICE

From I-75 South – From the East Ridge exit turn right onto Ringgold Rd. and go approx. 0.6 mile to the 2nd red light. Turn right onto Spring Creek Rd. Go approx. 0.3 mile to Graston Ave. and turn left. Go approx. 0.2 mile and turn right on Yale St. Go through the gate and follow the signs.

Moore Rd. Exit – From the Moore Rd. exit go to the 3rd red light (approx. 1 mile). Turn right onto Spring Creek Rd. Go approx. 0.5 mile to Graston Ave. and turn right. Go approx. 2 miles and turn on Yale St. Go through the gate and follow the signs.

PLEASE CALL 315-3843 OR 315-3835 TO MAKE SURE SOMEONE WILL BE THERE TO GIVE OUT THE GRINDER PUMP.

