

LAGRANGE COUNTY REGIONAL UTILITY DISTRICT

GUIDELINES FOR INSTALLATION OF BUILDING SEWER TO GRINDER PUMP UNITS

The following guidelines shall apply for all residential, commercial, industrial, and institutional users connecting to the LaGrange County Regional Utility District (LCRUD) sanitary sewer system. These Guidelines cover construction of sewer laterals from serviced structures to the grinder pump units.

1. Before building sewer, excavation or construction begins, the property owner and/or LCRUD qualified contractor must apply for and receive a sewer connection permit.
2. Sewer connection application/permits can be obtained at LCRUD at 116 E Wayne Street, LaGrange, Indiana 46761
3. Before building sewer excavation or construction begins, it shall be the responsibility of the property owner and/or contractor to have all underground utilities located. A toll-free service is provided for utility locations at 1-800-382-5544 or 811. There is a 48-hour advance notice prior to the commencement of any excavation. This is required by Indiana Code.
4. The Property owner may do their own lateral work from inside the structure to the sanitary sewer connection at the grinder unit.
5. Prior to final connection to the collection system, it shall be required to disconnect all non-waste producing units from the sewer line (i.e. sump pumps, foundation drains, roof down spouts, etc.).
 - a. Under no circumstances may groundwater or rainwater be discharged into the sanitary sewer system. Excess groundwater and/or rainwater getting into the system either through leaky joints or direct connections greatly reduces the design capacity of the treatment plant for the sanitary wastes. Further, it uses up the future capacity of the treatment plant so that other dwellings or business cannot hook on to the collection system.
 - b. For these reasons all building sewers shall be constructed new from within three (3) feet of the building structure to the sanitary grinder pump. The inspector will check specifically for this before

approving the installation of the building sewer, which may require the inspector's entrance into the building and/or basement.

6. Also, under no circumstances may sand, grit, grease, oils, solvents, gasoline or any other such substances be discharged into the sanitary sewer system. Grease traps may be required for some installations.
7. Property owners will be responsible for the maintenance of the building sewer from the building to the grinder unit. Strict adherence to these guidelines is essential in order to prevent costly future maintenance problems and higher sewer fees.
8. Property owner and/or qualified contractor must comply with the LaGrange County Regional Utility District Sewer Use Ordinance and Sewer Rate Ordinance. Violations of the Ordinances and/or these Guidelines can result in the imposition of a fine.
9. Any modifications to plumbing shall be performed in accordance with Local and State Code.

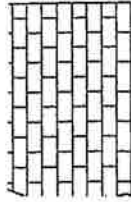
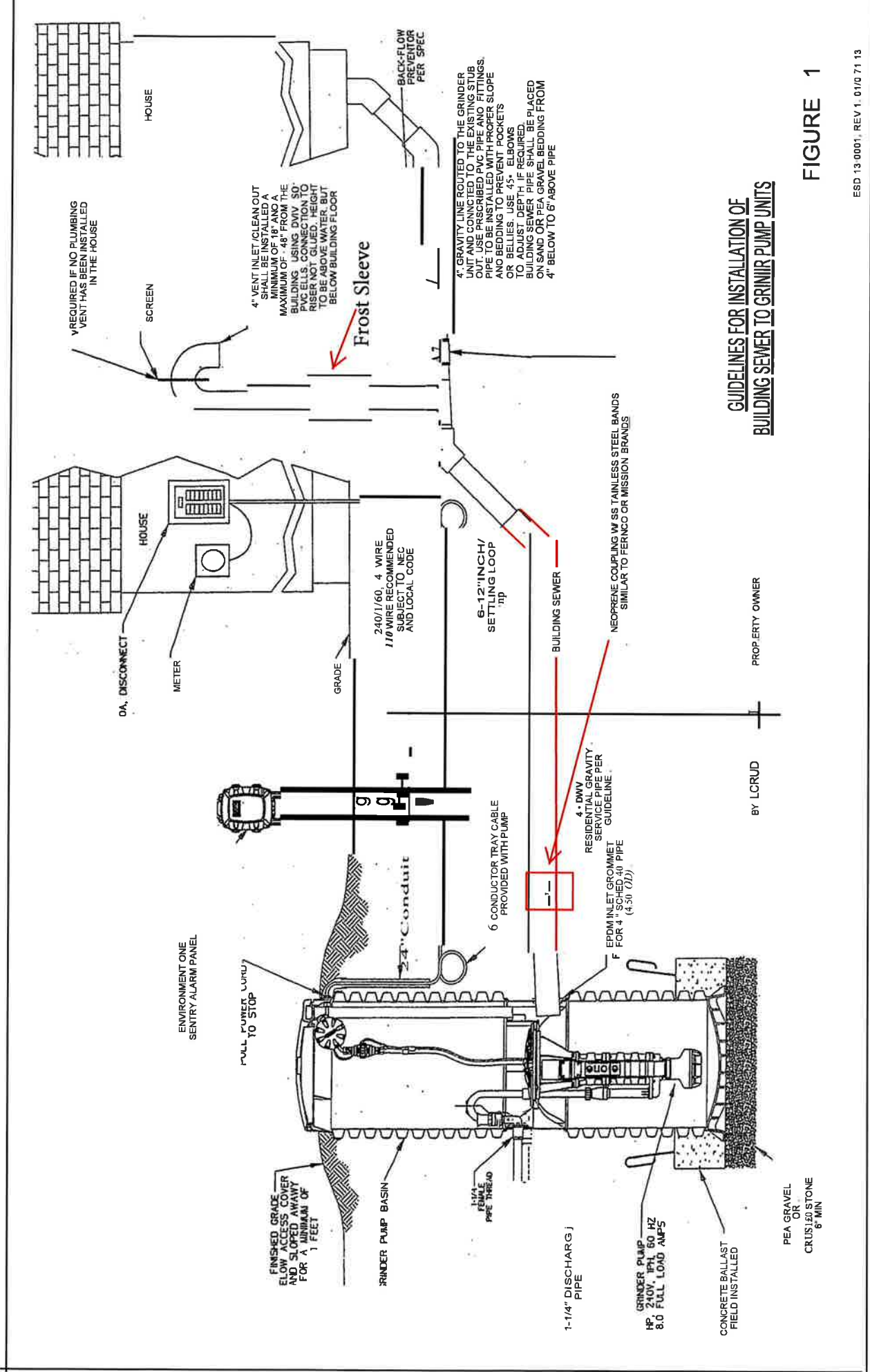
MATERIALS

1. Building sewers shall be PVC pipe and fittings may be glue joints if water well is not within 50'.
2. Glued joints are permissible.
3. All joints shall be watertight.
4. PVC pipe shall be either schedule 40, SDR-21, or greater quality.
5. Bedding the pipe with sand or pea gravel is required from **4" below the pipe to 6" above the top of the pipe.**
6. Pipe must be bedded for inspection however inspectors will require inspection of pipe material and joints. **Clay and rock backfill is unacceptable.**

INSTALLATION

1. Building sewers shall be installed using the shortest and most direct route to the grinder pump.
2. Interior plumbing modifications are recommended rather than excessive changes of directions in building sewer.
3. A 4" vent is required if no plumbing vent has been installed in the house.
 - a. The vent shall be located within 4' of the building on the building sewer and should extend approximately 2' above grade.
 - b. The vent must incorporate a stainless steel screen and removable top section (see Figure 1). Note, this vent can also be utilized as a clean out.
4. A cleanout will be installed in conjunction therewith for routine maintenance.
5. Sewer clean outs shall be installed a maximum of every 100 feet along the building sewer. Accessible clean outs shall be installed at every change of direction.
6. Clean outs shall extend to grade, pipe liners (frost sleeves) are recommended to be placed around the clean out grade extension.
7. The clean out shall be a full size tee fitting installed with proper riser directed to above grade and fitted with accessible/removable lid/cap.
8. Clean outs shall be the same diameter as the lateral sewer pipe, with a minimum size of 4 inches in diameter.
9. Clean outs shall be covered with a removable type plug or cap.
10. A back-flow prevention valve will be installed where two or more building structures are connected to the same grinder unit.
 - a. The backflow prevention valve shall be installed on each lateral on "double-hookup" connections.
 - b. The back flow prevention valve shall be installed between structure and cleanout wherever possible.
11. All fittings shall be installed to guide sewage in the direction of flow. There shall be no:
 - a. Elbows greater than 45 degrees. If a change in direction greater than 45 degrees is required, two (2) 45-degree elbows shall be used.

- b. It is suggested that a clean out be installed between the 45-degree elbows.
 - c. The riser may be used to connect but you must use a sweep tee to connect to vertical riser
12. The building sewer piping shall be 30 inches below grade whenever possible, and shall be placed with a uniform slope of at least $\frac{1}{8}$ inch per foot.
 13. All septic tanks must be abandoned per local and state code requirements.
 14. Under no circumstances shall connection to building sewer be made through septic tanks.
 15. The homeowner and/or qualified contractor is to cut and remove the existing solvent weld cap from the end of the existing grinder unit gravity line stub and connect the new building sewer to it, using a suitable watertight coupling as required and compatible with the new pipe materials. Note, only a Fernco coupling, or a Mission coupling is allowed on the building sewer.
 16. **Prior to backfilling** over the building sewer installation, all construction shall be:
 - a. Inspected and approved by an inspector from LCRUD for verification of compliance of minimum standards for design, material, and workmanship. Any building sewer back-filled prior to inspection approval shall be required to be re-excavated for proper inspection and approval. Contact LCRUD at (260-499-6349) at least 24 hours before connection will be complete and a LCRUD inspector will be sent to complete the inspection.



REQUIRED IF NO PLUMBING VENT HAS BEEN INSTALLED IN THE HOUSE

SCREEN

4" VENT INLET/CLEAN OUT SHALL BE INSTALLED A MINIMUM OF 18" ABOVE MAXIMUM OF 48" FROM THE BUILDING USING DWV 50' PVC ELLS. CONNECTION TO RISER NOT GLUED. HEIGHT TO BE ABOVE WATER, BUT BELOW BUILDING FLOOR

Frost Sleeve



BACK-FLOW PREVENTOR PER SPEC

4" GRAVITY LINE ROUTED TO THE GRINDER UNIT AND CONNECTED TO THE EXISTING STUB OUT. USE PRESCRIBED PVC PIPE AND FITTINGS. PIPE TO BE INSTALLED WITH PROPER SLOPE AND BEDDING TO PREVENT POCKETS OR BELLIES. USE 45° ELBOWS TO ADJUST DEPTH IF REQUIRED. BENDING OF PIPE SHALL BE PLACED ON EXISTING OR NEW GRAVEL BEDDING FROM 4" BELOW TO 6" ABOVE PIPE



DISCONNECT

METER

ENVIRONMENT ONE SENTRY ALARM PANEL

GRADE

240/1/60, 4 WIRE 110 WIRE RECOMMENDED SUBJECT TO NEC AND LOCAL CODE

6-12" INCH/ SETTling LOOP

BUILDING SEWER

NEOPRENE COUPLING W/ SS TAINLESS STEEL BANDS SIMILAR TO FERNCO OR MISSION BRANDS

PROPERTY OWNER



24" Conduit

6 CONDUCTOR TRAY CABLE PROVIDED WITH PUMP

4" DWV RESIDENTIAL GRAVITY SERVICE PIPE PER GUIDELINE

EPDM INLET GROMMET FOR 4" SCHED 40 PIPE (4.30 (1))

BY LCRUD

FINISHED GRADE BELOW ACCESS COVER AND SLOPED AWAY FOR A MINIMUM OF 1 FEET

GRINDER PUMP BASIN

1/4" FEMALE PIPE THREAD

1-1/4" DISCHARGE PIPE

GRINDER PUMP HP 240V, 1PH, 60 HZ 8.0 FULL LOAD AMPS

CONCRETE BALLAST FIELD INSTALLED

PEA GRAVEL OR CRUISADO STONE 6" MIN

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FIGURE 1