

Kingsland Municipal Utility District

CHECK LIST FOR PLUMBER'S INSTALLATION

The following list of requirements must be completed for all grinder systems and this document must be signed by the plumbing contractor before a final inspection will be performed by the District. Failure to comply with the stated standards listed below will result in system rejection and re-inspection fee(s).

All check boxes must be checked before District will schedule inspection.

- GRINDER TANK MUST BE INSTALLED IN AN ACCESSABLE LOCATION TO BE MAINTAINED BY THE DISTRICT. NO TANKS MAY BE INSTALLED INSIDE OF A BUILDING. IF OBTAINING THE PROPER DEPTH IS AN ISSUE CONTACT THE DISTRICT OFFICE AT 325-388-4559. NO BASIN WILL BE ALLOWED TO BE INSTALLED UNDER ANY STRUCTURE OR ON TOP OF THE GROUND. TANKS SHALL HAVE AN 18 INCH CLEARANCE FROM THE TANK TO ANY OTHER STRUCTURE. (SEE DIAGRAM A)
- ALL BASINS WILL BE INSTALLED TO MAINTAIN A MINIMUM 3" OR A MAXIMUM 6" CLEARANCE ABOVE THE FINAL GRADE. IF THIS CANNOT BE ACHIEVED, CONTACT THE DISTRICT FOR A POSSIBLE VARIANCE. AN EXTENSION CAN BE PURCHASED THRU THE DISTRICT IF IT IS REQUIRED.
- VENTING OF THE BASINS IS REQUIRED TO BE PERFORMED THROUGH THE PROPER VENTILATION OF HOUSE PLUMBING VENTS.
- DISCHARGE LINES SHALL BE 1-1/4" PVC SCHEDULE 40 PIPE SIZED FOR A SINGLE PUMP UNIT, OR 2" FOR A DUPLEX UNIT. THE DISCHARGE LINE LEAVING THE BASIN MUST HAVE A MINIMUM DEPTH OF 6" OF COVER AT THE FIRST 45-DEGREE BEND AND THE REMAINDER OF THE LINE SHALL MAINTAIN A MINIMUM 18" AND A 36" MAXIMUM LINE COVER TO THE PROPERTY LINE CONNECTION LOCATION. ALL DISCHARGE LINES THAT WILL BE UNDER A DRIVEWAY OR OTHER BARRIER MUST BE SLEEVED WITH A PIPE SIZED NO LESS THAN 2" IN DIAMETER, OR LARGER.
- ALL DISCHARGE LINES MUST HAVE A MINIMUM OF 4" OF SAND OR GRANITE GRAVEL BEDDING SURROUNDING THE PIPE. NO ROCKS LARGER THAN 3" IN THE BACKFILL PLACED OVER THE DISCHARGE LINE. METAL LOCATOR TAPE SHALL BE PLACED AT LEAST 6 INCHES ABOVE THE DISCHARGE PIPE AND NO MORE THAN 9 INCHES ABOVE THE DISCHARGE PIPE ON TOP OF SAND OR GRANITE GRAVEL BEDDING FROM THE BASIN TO THE PROPERTY LINE CONNECTION POINT.
- ALL HUBS AND RUBBER BOOTS USED FOR PIPE INSTALLATION MUST BE SEALED WITH SILICONE CAULKING FOR WATER TIGHT PROTECTION.
- THE INLET HUB, CONNECTING THE HOUSE DRAIN LINE TO THE BASIN, MUST BE INSTALLED LOWER THAN 20 INCHES FROM THE TOP OF THE BASIN TO THE TOP OF THE INLET HUB. NO LOWER THAN 20 INCHES FROM THE BOTTOM OF THE BASIN TO THE BOTTOM OF THE INLET HUB.
- THE GENERAL MANAGER OR THE O&M SUPERVISOR MUST APPROVE ANY VARIATIONS FROM THE ABOVE REQUIREMENTS PRIOR TO INSTALLATION.
- THERE MUST BE AN ACCESSABLE AND ACTIVE HOSE BIB NO FUTHER THAN 35' FROM THE GRINDER PUMP TO PROVIDE THE DISTRICT A MEANS OF FILLING THE GRINDER PUMP TANK FOR INSPECTION AND FOR FUTURE CLEANING WHEN NEEDED.
- A WARRANTY OF 1 YEAR, FROM KMUD ACCEPTANCE DATE SHALL BE PROVIDED ON ALL MATERIALS AND WORKMANSHIP ON PLUMBING WORK PERFORMED BY THE PLUMBER. (Defective grinder components, not caused by faulty workmanship, will be warranted by KMUD).

Before an inspection is requested by the contractor, it is imperative that water is available within 35 feet of the basin. If the District is contacted to perform an inspection and the items above are checked but not performed the builder/owner employing the contractor is subject to a re-inspection fee by the District. Final inspection and acceptance of the grinder by KMUD will not be performed until all fees are paid in full.

Once the above guidelines have been met and checked off by the plumbing contractor, this form must be signed and returned to the District office. Inspections will be performed within two District working days of receipt of this and the electrician's checklist form.

Name & Company	Texas Plumbing License #	Daytime Phone	Date
Sewer Customer Name	Customer Address	Inspected By	Date

SIMPLEX GRINDER INSTALLATION INSTRUCTIONS

(PLUMBER)

1. Excavate hole in which sump basin is to be installed.
2. Set sump basin with top flange a minimum of three (3) inches but no more than six (6) inches above ground level.
3. Install 4 bolt inlet hub by cutting a 5 ½” diameter hole in side wall of sump basin at proper location. Drill six small holes and attach inlet hub with ty-seal gasket.
4. Make sure the pump will rotate by turning the cutter blade by hand. Be sure to wear protective gear to prevent cuts by blade.
5. Bolt on discharge flange on pump.
(MAKE SURE ALL HUB FITTINGS ARE CAULKED.)
6. Assemble the discharge manifold according to model on display in supply room. (Picture included in package.)
7. Mount discharge hub at proper height.
8. Thread a stainless steel nipple into the discharge hub, then thread a Female thread adapter. Glue the 1 ¼” discharge pipe to the female thread adapter leaving the sump basin. Discharge pipe must be a minimum depth of six inches until the first 45 degree bend. The remainder of the pipe must be a minimum of sixteen (16”) inches and no more than 36” (thirty-six inches). All lines must have a minimum of four (4) inches of sand for bedding. After bedding is installed place a metal locating tape eight (8) inches above the pipe.
9. **BEFORE** ditches are completely back-filled return Plumber’s Checklist form back to office.
10. Make sure all gate valves are open.
11. Place sump basin cover in sump basin.

KMUD's Policy and Procedures for Grinder Pump and Yard Line Installations

Applicant will request service and complete District's application available at the District office. Applications must be returned to District office to be processed during normal office hours of operation. Clerk will review application for completeness of information and required property plat, easement conveyed by the property owner, warranty deed and if required a building permit. Clerk will certify and notarize appropriate forms and provide copies of application to applicant.

Applicant will pay for a KMUD connection fee upon certification of proper documentation. Fees charged will be based on the District's currently adopted Schedule of Wastewater Rates, Fees and Charges. Connections to KMUD will be performed within approximately two weeks. The District will provide the connection to the sewer mainline and the service line to the property boundary where it will be marked by a piece of green PVC pipe. It will be the applicant's responsibility to bring the grinder assembly unit discharge line (yard line) to the point of connection at the applicants property line. The applicant's plumbing contractor will be responsible to make the connection between the sewer main service line to the discharge line (yard line). The valve at the property line must remain closed and will be opened by District personnel at the time the grinder is green tagged.

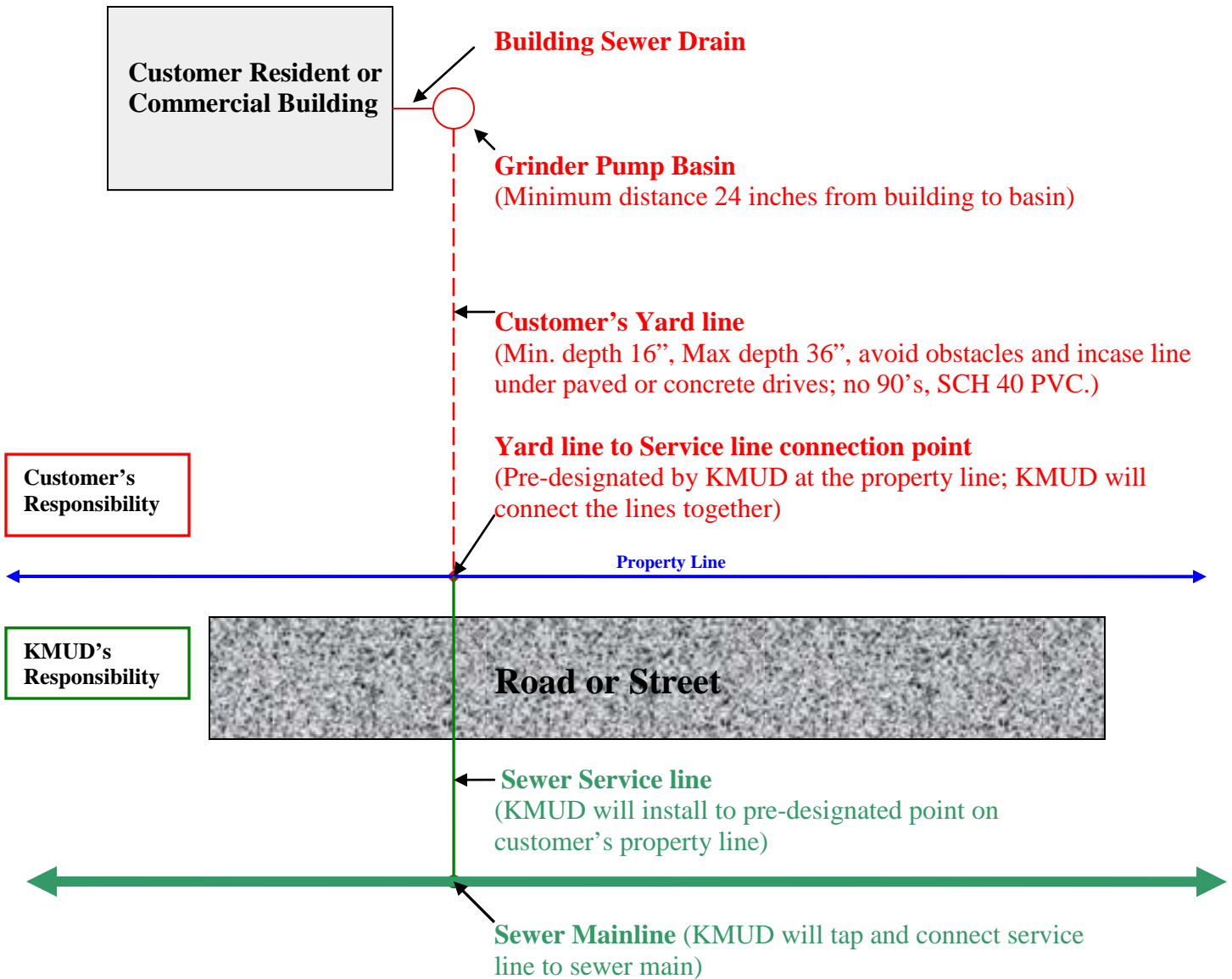
The applicant pays for the grinder assembly unit when paying the connection fee. The licensed plumber may pick up the grinder unit from the District office when they are ready to install the unit. **A copy of the current plumber's license must be made available, or on file at KMUD, to be able to pickup any grinder assembly.**

Only licensed plumbers and electricians registered in the State of Texas may contract with applicants to install grinder assembly units. All installations must comply with KMUD's specifications and instructions. Both the Electrician and the Plumber must fully complete, sign and return to KMUD the required inspection checklist prior to the District inspecting the grinder unit and discharge line (yard line). The grinder unit and discharge line (yard line) excavations must be left open for inspection by District personnel for proper installation and bedding. If excavations are covered up, pipe must be uncovered by contractor to provide proper inspection.

The District will inspect the grinder assembly and discharge line installations for compliance with specifications and checklist items. If it meets requirements the unit will be given a green tag and will be finalized for operation by District personnel. If the unit does not pass inspection it will be red-tagged and the applicant will be notified of the reason for not passing inspection. The applicant will be responsible for ensuring resolution of the issues causing failure of the first inspection. If more than two inspections are required for the same unit a re-inspection fee will be charged to cover KMUD's expenses for additional inspection(s).

After a unit is green-tagged it becomes the property of the District and will be maintained as a part of the applicant's sewer monthly rate. The applicant will be responsible to enforce their contracted plumbing and electrical materials and workmanship warranty for a one year period. This warranty is not required to cover the grinder assembly components provided from the District.

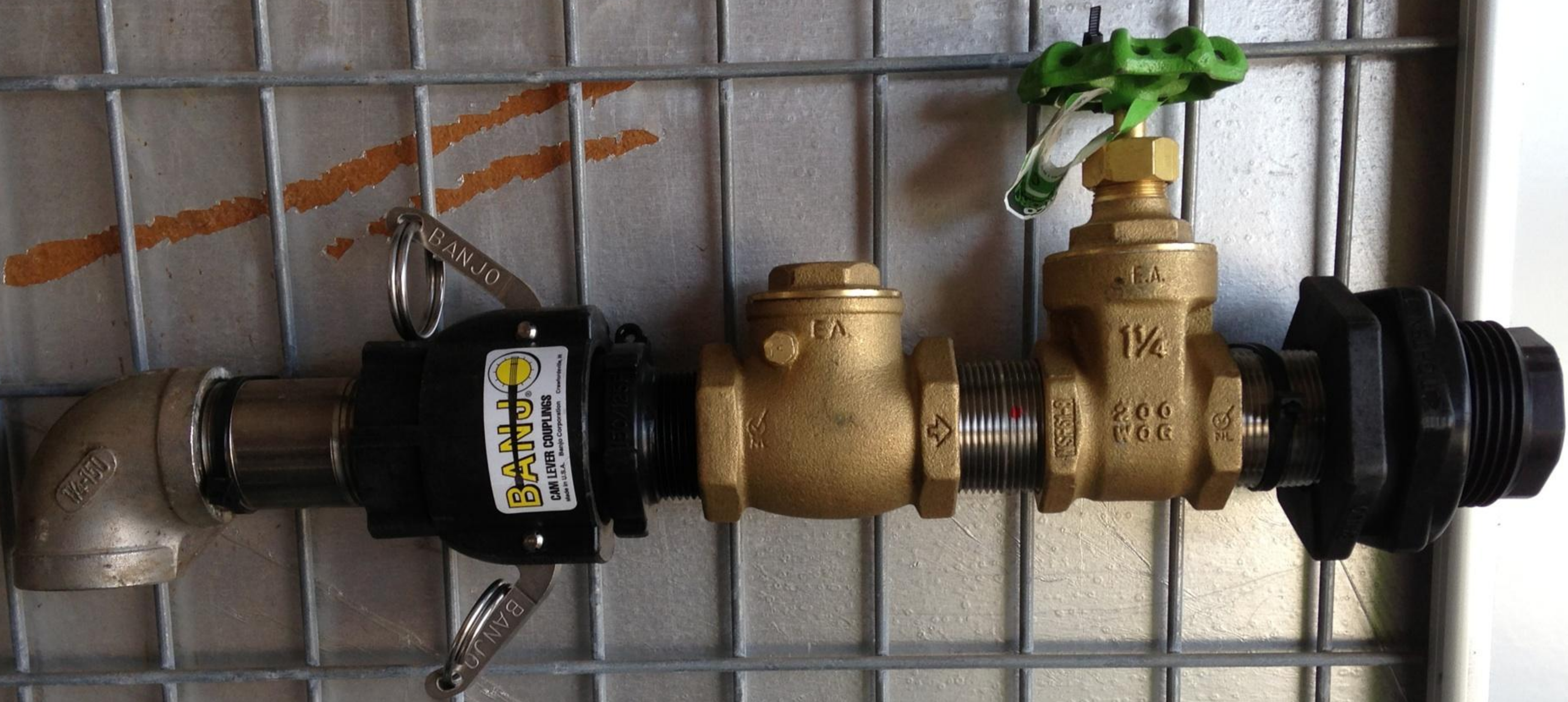
Kingsland MUD Service Connection Diagram "A"



Items above the property line are the responsibility of customer or his designated contractor to install.

Items below the property line are the responsibility of KMUD to install.

The grinder assembly will be maintained by KMUD after inspection and approval of installation in accordance with instructions.



BANJO

BANJO
CAM LEVER COUPLINGS
made in U.S.A. Banjo Corporation

BANJO

EA

EA

1/4

200
WOG

NSF61