

## TREATMENT PROCESSES

### PRELIMINARY TREATMENT

#### GRIT REMOVAL

#### PHYSICAL PROCESS

After the screening process, wastewater is pumped to grit channel tanks. The velocity of the wastewater in the grit channel is reduced to 1 foot/second. (Design wastewater velocity in the collection system is 2 feet/second.) Detention time in the grit tank is 20 seconds to 1 minute. By slowing the wastewater velocity, heavier inorganic particles (sand, gravel, eggshells, cinders) settle to the bottom of the grit tank. Ploughs move the grit to rakes. The rakes then deposit the grit into dumpsters. The grit is mixed with digested sludge in the sludge drying beds. Approximately 1/2-3/4 cubic yard of grit is generated per day.