

City of Guin
Corridor 'X' Commercial and Industrial Site – Sewer
Engineering Narrative
March 2011

The sanitary waste disposal system for this site will consist of gravity flow sewer lines, a sanitary sewer pump station and a force main to a 20,000 gallon per day package wastewater treatment facility. The effluent from the wastewater plant will be delivered to either a drip disposal field or a spray disposal field. Both the geotechnical report and our local knowledge of the area, indicate to us the area is conducive to either one of these disposal methods. The system will be designed to handle both the commercial and the industrial site wastewater. The system will be operated and maintained by the Guin Water and Sewer Board. A cost estimate and timeline for the project are attached.

Based on several assumptions at this point a drip absorption field for this site would require 10-12 acres. The most probable location for this absorption field is the extreme southeast corner of the site near the Luxapallila Creek but out of the floodplain. Please note 10 acres have been deducted from the developable acreage of this site for this purpose.

W. B. Hankins, PE, PLS
Goodwyn, Mills and Cawood, Inc.

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Preliminary Cost Estimate
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Item No.	Unit	Quantity	Item	Unit Cost	Total Cost
1	5,000	LF	8" SDR 35 Sewer Pipe	\$25.00	\$125,000.00
2	14	Ea.	Manhole w/Ring and Cover	\$2,500.00	\$35,000.00
3	1	Ea.	Drip Irrigation System	\$50,000.00	\$50,000.00
4	1	Ea.	Sanitary Sewer Pump Station	\$102,000.00	\$102,000.00
5	3,000	LF	4" PVC Force Main	\$10.00	\$30,000.00
6	1	Ea.	Package Treatment Plant (20,000 gpd)	\$250,000.00	\$250,000.00
5	320	L.F.	12" Steel Casing (Open Cut)	\$25.00	<u>\$8,000.00</u>
Total Construction					\$600,000.00
Engineering					
				Design	\$60,000.00
				Inspection	<u>\$35,000.00</u>
					<u>\$95,000.00</u>
Total Project Cost					\$695,000.00

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Construction Time Line

<input checked="" type="checkbox"/> Design	-	3 months
<input checked="" type="checkbox"/> Ad for Bids	-	1 month
<input checked="" type="checkbox"/> Award of Contract	-	1 month
<input checked="" type="checkbox"/> Construction	-	6 months
<input checked="" type="checkbox"/> Project Closeout	-	<u>1 month</u>
	Total	12 months