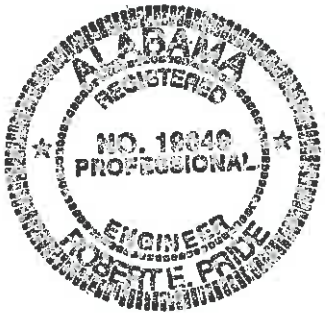
WASTEWATER FACILITY PLAN
for

THE FORD CITY COMMUNITY AREAS
COLBERT COUNTY, ALABAMA

August 2005 Supplement for the:

Colbert County Commission
P.R. (Rex) Burleson, District 1
Troy Woodis - District 2
Charles E. (Duck) Douthit - District 3
Emmitt Jimmar - District 4
James C. Bingham - District 5
Howard Keeton - District 6



Prepared by:

Municipal Consultants, Inc.
327 S. Walnut St.
Florence, Alabama 35630
Phone: (256) 767-4054
Fax: (256) 767-0219
mciflo@bellsouth.net

WASTEWATER FACILITY PLAN
FOR
THE FORD CITY COMMUNITY AREAS
COLBERT COUNTY, ALABAMA

August 2005 Supplement

TABLE OF CONTENTS

FIGURES AND TABLES

Preface

At the request of the Colbert County Commission, Municipal Consultants, Inc. has expanded the previously completed *Wastewater Facility Plan for the Ford City Community Areas* (September 2003) and Supplemental Report (May 2005). Additional cost estimates were sought for the option of pumping flows from the planning area (current commercial and residential areas in Ford City with the option of treating flows from the future RSA related private developments) to Leighton's existing wastewater collection and treatment facilities.

Under this Supplemental Report, preliminary engineering cost estimates were developed for the following:

1. Providing sewer service to the existing Ford City commercial and residential areas and pumping these flows to Leighton's system.

2. Providing sewer service for the existing Ford City commercial and residential areas sized large enough to also handle flows from the RSA related private developments and pumping these flows to Leighton's system.

This report is organized to serve as a supplement to the previous two reports. Most of the previous report sections describing physical characteristics, population trends, economy, housing, land uses, funding sources, etc. would still be applicable to the revised planning area. For this reason, these sections were not supplemented or revised in complete detail. The additions provided herein will follow the same outline as the September 2003 report, noting significant differences or additional options as appropriate. It was hoped this format would provide the ability to include this new information with the original bound document for easy cross referencing.

WASTEWATER FACILITY PLAN
for
THE FORD CITY COMMUNITY AREAS
COLBERT COUNTY, ALABAMA

August 2005 Supplement

1.0 GENERAL SCOPE OF THE WORK

The scope of this additional supplemental report is similar to the original study and May 2005 Supplement. In general, the planning areas are the same including the commercial and residential areas of Ford City with allowances for potential growth from the planned private developments around the new RSA golf courses. In addition to the previous alternatives considered, cost estimates for the following two new approaches were developed:

1. Providing sewer service to the existing Ford City commercial and residential areas and pumping these flows to Leighton's system for treatment and disposal.

2. Providing sewer service for the existing Ford City commercial and residential areas sized sufficiently to also handle flows from the planned RSA related private developments. These combined flows would then be pumped to Leighton's system for treatment and disposal.

Similar to the previous reports, preliminary locations were developed for the sewer collection and pumping facilities. The required improvements to Leighton's treatment system were evaluated by Price and Rider Engineering (P&RE). Several of our assumptions related to the 6th Street Lift Station location and required capacity are also based upon information provided by P&RE.

2.0 SUMMARY OF RESULTS

Consistent with the May 2005 Supplemental Report, projected design flows for the collection system and Ford City Lift Station are as follows:

	Design	Peak
Ford City Commercial Areas (Alone)	18,000 gpd	48,000 gpd
RSA Related Developments		
Phase I (180 units)	81,000 gpd	216,000 gpd
Phase II (180 units)	81,000 gpd	216,000 gpd
Total	180,000 gpd	480,000 gpd

Figure 1 shows the proposed gravity sewers, forcemain route and lift station locations (shown in red). Consistent with the previous reports, the Ford City Lift Station location would allow for future gravity sewer expansions north, east and southeast of Ford City. Other areas could be served by pumped, low pressure sewer systems. The forcemain would follow County Line Rd. south to 6th Street. Per P&RE, a lift station located at this intersection would be capable of receiving flows from both Leighton (100,000 gpd average and 300,000 gpd peak) and the Ford City Lift Station. The 6th Street Lift Station would pump the combined flow to Leighton's existing wastewater treatment plant (WWTP).

The "near term" potential flows from the RSA related development appear to be much greater than the flows from Ford City. The previous *Wastewater Facility Plan for the Ford City Community Areas* recommended pumping these flows to Wise Alloys or constructing a lagoon type system with effluent spray irrigation. Issues that appear to have prohibited pursuit of these options include:

Pumping to Wise Alloys:	Developing the Necessary Public/Private Partnership
Lagoon/Spray Irrigation:	The Large Amount of Land Required and High Property Values Resulting from the RSA Golf Course Developments

A third alternative, evaluated in the May 2005 Supplemental Report, included the construction of a wastewater treatment plant sized for both areas that is capable of producing an effluent suitable for discharge or reuse. Ideally, the treated effluent could have been used by their irrigation systems and the new treatment plant could have been located between Ford City and the RSA developments. To date, this alternative has not been pursed with any of the land owners or private developers. For the approach of utilizing Leighton's WWTP, private developments north of Ford City would have to pump and/or extend gravity sewers to the collection system shown in Figure 1.

The cost estimates in Table 1 would serve only the Ford City Area. It includes the collection system in Ford City, the Ford City Lift Station, a 4" forcemain to 6th Street, and the 6th Street Lift Station sized for a peak flow of 348,000 gpd (300,000 gpd from Leighton and 48,000 gpd from Ford City).

The cost estimates in Table 2 would provide capacity for both the Ford City Area and the planned private developments near the RSA golf course. It includes the collection system in Ford City, a larger Ford City Lift Station, an 8" forcemain to 6th Street, and the 6th Street Lift Station sized for a peak flow of 780,000 gpd (300,000 gpd from Leighton and 480,000 gpd from Ford City Lift Station). We have assumed the cost of subsequent expansions could borne by the developers or recovered through impact fees, and/or sewer revenues.

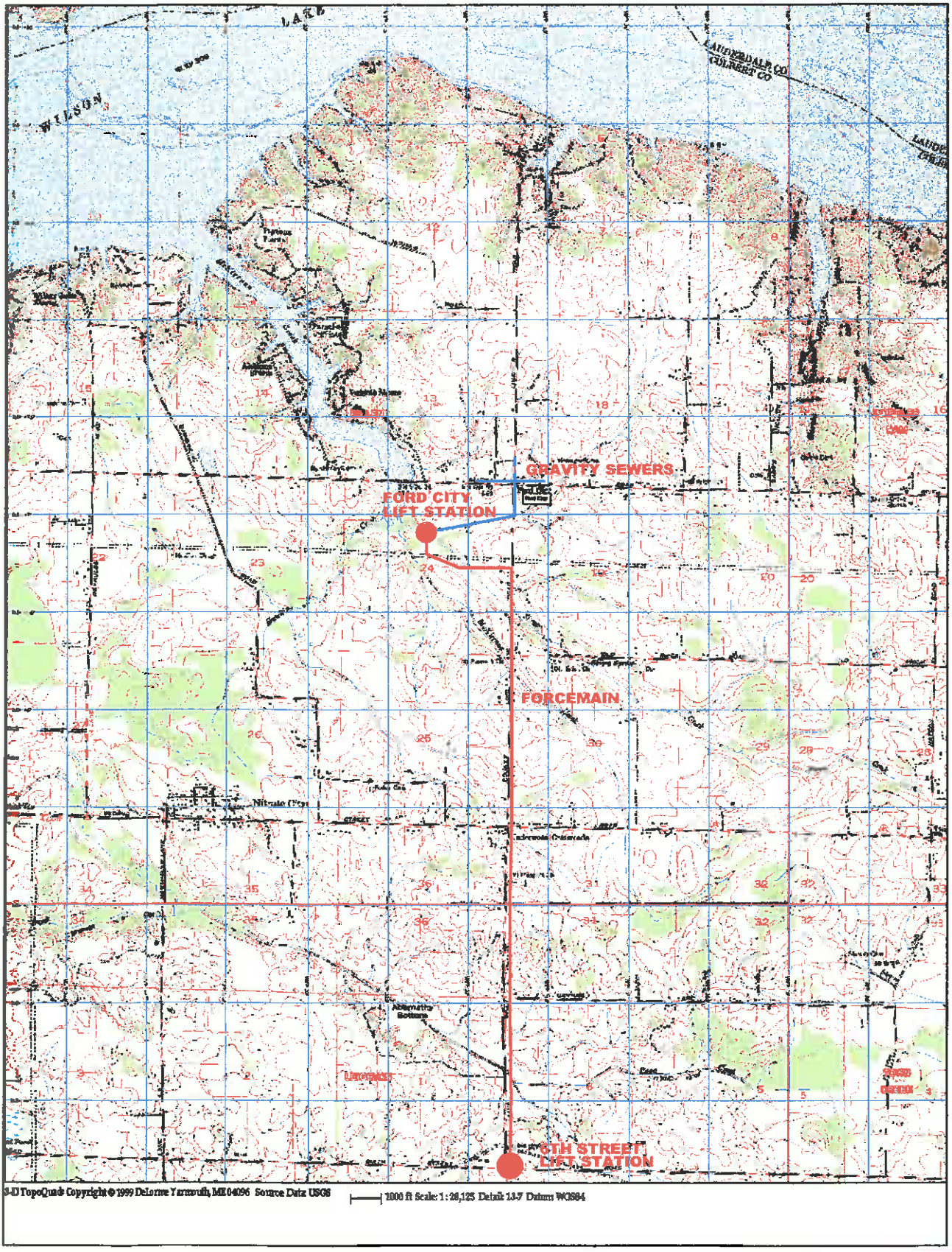


FIGURE 1

Municipal Consultants, Inc.

Table 1
Preliminary Cost Estimates
Sewer Service with Capacity for Ford City Areas Alone

Mobilization, Bonds, Etc.	1	LS	$ 20,000	$ 20,000
8" Gravity Sewers	6,000	LF	$ 45	270,000
Manholes	16	EA	$ 3,500	56,000
Watertight Frames & Covers	7	EA	$ 300	2,100
Asphalt Paving Repairs	2,800	SY	$ 13	36,400
Service Connections	20	EA	$ 500	10,000
Ford City Lift Station	1	LS	$ 80,000	80,000
6th Street Lift Station	1	LS	$100,000	100,000
4" Forcemain	23,760	LF	$ 9	213,800
Air Relief Valve Assemblies	5	EA	$ 4,000	20,000
Cleanup, Grassing, Etc.	5	AC	$ 3,000	$ 15,000
Subtotal				$ 823,300
Contingencies (10%)				82,300
Engineering (9%)				81,500
Estimated Total Project Cost				$ 987,100

Table 2
Preliminary Cost Estimates
Sewer Service with Capacity for the Ford City Areas and RSA Related Developments

Mobilization, Bonds, Etc.	1	LS	$ 27,400	$ 27,400
8" Gravity Sewers	6,000	LF	$ 45	270,000
Manholes	16	EA	$ 3,500	56,000
Watertight Frames & Covers	7	EA	$ 300	2,100
Asphalt Paving Repairs	2,800	SY	$ 13	36,400
Service Connections	20	EA	$ 500	10,000
Ford City Lift Station	1	LS	$110,000	110,000
6th Street Lift Station	1	LS	$220,000	220,000
8" Forcemain	23,760	LF	$ 15	356,400
Air Relief Valve Assemblies	5	EA	$ 4,000	20,000
Cleanup, Grassing, Etc.	5	AC	$ 3,000	$ 15,000
Subtotal				$1,123,300
Contingencies (10%)				112,300
Engineering (9%)				111,200
Estimated Total Project Cost				$ 1,346,800

3.0 PLANNING AREA PHYSICAL CHARACTERISTICS

As described in the original report, the revised planning area includes the "cluster of residences and commercial buildings .. located at the intersection of CR40 and CR48, forming the core of the community known as Ford City" and the areas north of there surrounding the RSA golf courses. The option of pumping to Leighton would provide the potential for new sewer services south of Ford City along County Line Road to 6th Street. Capacity for these areas would be available since a 50% growth allowance was made in the original flow projections for Ford City. No additional supplement information is required.

4.0 PLANNING AREA POPULATION

In the May 2005 Supplemental Report, the planning area population was greatly reduced from the original study. The approach evaluated herein would increase the potential service area population from the May 2005 report slightly due to the extension of sewer service along County Line Road as described above. With this exception, no additional supplemental information is required.

5.0 ECONOMY

No significant supplemental information required.

6.0 HOUSING

No significant supplemental information required.

7.0 LAND USE

No significant supplemental information required.

8.0 WASTEWATER FLOWRATES

Consistent with the May 2005 Supplemental Report, the potential Ford City wastewater flows were estimated as follows:

Average Flow	=	239,400 gallons / 30 days	=	7,980 gpd
Maximum Monthly Average Flow	=	7,980 gpd x 1.5 peaking factor	=	11,970 gpd
Design Flow	=	11,970 gpd x 1.5 for growth	=	17,955 gpd

Ford City = 18,000 gpd (Design)
48,000 gpd (Peak)

Projected design flowrates for the RSA related development areas were estimated as follows:

Phase I	180 units	x 450 gpd/unit	=	81,000 gpd
Phase II	180 units	x 450 gpd/unit	=	81,000 gpd

New Developments = 162,000 gpd (Design)
432,000 gpd (Peak)

The average and peak flows from Leighton to the 6th Street Lift Station (100,000 gpd average, 300,000 gpd peak) were provided by P&RE. Peaking factors assumed to estimate the required lift station capacities were as follow:

Average Day to Design	1.5
Average Day to Peak	4.0

9.0 WASTEWATER COLLECTION, TREATMENT AND DISPOSAL ALTERNATIVES

The original *Wastewater Facility Plan for the Ford City Community Areas* recommended pumping wastewater flows from the planning areas to Wise Alloys or constructing a lagoon type system with effluent spray irrigation. Issues that appear to have prohibited pursuit of these options include:

Pumping to Wise:	Developing the Necessary Public/Private Partnership
Lagoon/Spray Irrigation:	The Large Amount of Land Required and High Property Values Resulting from the RSA Golf Course Developments

The May 2005 Supplemental Report evaluated several more options for a smaller planning area. Options included the following:

Constructing a mechanical type WWTP with effluent reuse for both the Ford City area and RSA related developments

Constructing a "cluster type" treatment system with a subsurface discharge for the Ford City Areas alone

The individual components of this new option (pumping flows from Ford City to Leighton's sewer system) are described in the following sections:

9.1 Collection Alternatives

The topography of the Ford City area lends itself well to the use of gravity collector sewers. A preliminary layout for these sewers and manholes is shown in blue on Figure 1. Minimum 8" diameter sewers on minimum slopes were assumed. Similar to the previous study, the lift station location would allow for future gravity sewer expansions north, east and southeast of Ford City.

Additional future service areas could be served by gravity or low pressure sewer systems. Preliminary engineering and cost estimates were not developed for collection systems throughout the RSA related private developments. It was assumed the design and construction of these facilities would be the responsibility of private developers.

9.2 Treatment Alternatives

For this new option, treatment would be provided by the existing Leighton WWTP. P&RE has made recommendations and cost estimates for expanding this facility under a separate study.

9.3 Disposal Alternatives

For this new option, effluent disposal would be provided through Leighton's existing outfall. P&RE has made recommendations and cost estimates for expanding these facilities under a separate study.

9.4 Alternatives Evaluated

The alternatives presented herein are supplemental to the ones considered in the original report and May 2005 supplement. They are independent and should not be compared directly to the original options for serving a much larger planning area.

9.5 Alternative Cost Comparisons

Completing alternative costs comparisons will require combining costs from P&RE's study with these estimates. Determining the type and terms of the cooperative arrangement needed between the County and Leighton would be required before accurate comparisons can be made.

10.0 RECOMMENDATIONS

No additional recommendations can be made at this time.

11.0 POTENTIAL FUNDING

No significant supplemental information is required.