

### Memorandum

To: Martindale City Council

The City of Martindale

From: Bobcat Planning

Subject: Development of Updated Digital Maps and GIS Data

**Date:** March 26, 2008

This memo describes the progress of the proposal presented to the City of Martindale for the spring 2008 semester. Included are details regarding our work completed, current work, and scheduled work. This memo also includes some obstacles encountered and some foreseeable obstacles. Finally, we will give the overall assessment of how the project is going. As stated in the proposal, upon completion Bobcat Planning will provide the City of Martindale with updated maps that were stated as their highest priority. Those include; proposed Extra Territorial Jurisdiction, current city limits, wastewater system map, zoning map, and land parcel map with ownership and property information. With the work we have already completed, we fully expect to have the final report and deliverables stated above completed by the determined deadline.

# **Purpose**

The purpose of this project is to update Martindale's maps to reflect their current situation as a growing city in Central Texas. The GIS data and updated maps that Bobcat Planning will provide for the City of Martindale, will enhance the their ability to update and monitor changes that come with the future expansion of a city. Maps that will be made available to the city upon completion of Bobcat Planning's work are current zoning, wastewater system, proposed extra territorial jurisdiction, current city limits, and property parcels with property information. Bobcat planning will provide maps in both paper and digital format to accommodate current needs of the city and any future modifications that will inevitably occur.

# Scope

Bobcat Planning's study area is the City of Martindale, located in Central Texas, its Extra Territorial Jurisdiction (ETJ) and land parcels within Caldwell County and Guadalupe County. The study area specific to the city limits include the wastewater system and zoning information. The City of Martindale lies within the counties of Caldwell and Guadalupe, and within the Capital Area Council of Government and Alamo Area Council of Government.

### **Completed Work**

Bobcat Planning has finished updating the current city limits and ETJ boundaries. We have also finished a preliminary zoning map based off the paper copy that the city provided. We are currently trying to acquire a finalized copy of a zoning map to insure its accuracy. Bobcat Planning has also collected GPS points based on the locations of current stop signs and manhole covers. Our group has also obtained the parcel data for Caldwell county.

- Obtained secondary parcel data of Caldwell County parcel
- Updated City Limits in GIS format
- Updating zoning into GIS format
- Digitized location of manholes in relation to wastewater system
- Collected stop sign locations via GPS
- Proposed ETJ based on city limits

### **Current Work**

Bobcat planning is currently working on a few different tasks. We have been digitizing the wastewater system map that was received in a .pdf file from Heijl, Lee, & Associates and are expecting to wrap that up in the next week or two. We are also in the process of obtaining parcel information from Guadalupe County; we were finally able to get in contact with them March 24, 2008 and are waiting on a conformation from them to receive the data at no cost. We are also working creating a relevant attribute table for the stop sign locations map that was collected by GPS; we should be completing that in the next week or two as well. The last thing that we are currently working on is obtaining all of the property information for the parcel data that we have acquired. This will give the parcel data some depth and make it more useful for The City of Martindale.

- Digitizing wastewater system
- Obtain parcel information from Guadalupe County
- Creating relevant attribute table for stop sign location
- Obtaining property information for parcel data

#### **Scheduled Work**

Bobcat Planning has a few things scheduled for the upcoming weeks that will bring the project closer to completion. One of the more important tasks that we still need to complete is to digitized the rest of the wastewater system and create appropriate attributes for it. Once we receive the wastewater CAD file from the engineering firm this process will not take long to complete. We are also still working on contacting Guadalupe County to obtain the parcel data that lies within the proposed ETJ for the city. We have made several phone calls/emails to try and obtain the data but have yet to be successful on that. We would also like to venture out beyond our original scope of work and include files that will work with Google Earth. This particular work would be done more to satisfy our classroom needs but at the same time would give The City of Martindale an interactive platform to view the files that have been created for them.

- Digitize wastewater system; create appropriate attributes
- Obtain needed Guadalupe County parcel information
- Convert GIS data into format to use with Google Earth

### Issues

Bobcat Planning has identified four issues related to the collection and processing of the data necessary to produce the final deliverables. We have obtained a PDF image of the Martindale Wastewater System from Hejl, Lee, & Associates, Inc. This image can be geo-referenced to produce a map showing the approximate locations of existing wastewater lines. However, the locations are an approximation and could not be used to identify the specific location of a line to dig for repairs or expansion. An alternative solution is to scan the engineered drawings provided to Martindale by Hejl, Lee & Associates, Inc. This would produce a more accurate representation of line location but still not accurate enough to use for specific pipe location. Bobcat Planning is in contact with Sergio Gomez to set up an appointment to get copies of these maps. The best solution is to receive a copy of the CAD files Hejl, Lee & Associates, Inc used to create the engineered drawings. Hejl, Lee & Associates, Inc has stated they will provide these files and we expect to receive them by March 27, 2008.

Caldwell County parcel data for 2005 has been collected and is being analyzed for map production. Bobcat Planning has contacted Caldwell County Appraisal District and requested 2007 parcel data. The request has been accepted but the data has not yet been delivered. Upon receipt of the updated parcel data, the maps created will be updated. Guadalupe County parcel data has not been collected. Bobcat Planning has contacted Guadalupe County Appraisal District and requested 2007 parcel data. The request has been accepted but the data has not yet been delivered. Expected delivery data for data from both Guadalupe and Caldwell Counties is on or before March 31, 2008. Zoning information can not be released by Caldwell County until Martindale finalizes the changes being made to current zoning and notifies Caldwell County. A solution to this issue is to the current map received from Martindale to identify zoning for each parcel. A second solution is to ask Mayor Peterson to request the data from Caldwell County. This option will be discussed with Martindale representatives at the Progress Report presentation.

- Obtaining wastewater CAD files
- Obtaining 2007 Caldwell County parcel data
- Guadalupe County data
- Releasing of Caldwell County zoning data

### **Updates**

Two primary changes to the final deliverables presented in the original proposal have been made expanding the final deliverables Bobcat Planning will provide to Martindale. Final deliverables will now include, in addition to those listed in the initial proposal, a map locating all

stop signs within the Martindale city limits. Bobcat planning will also provide instructions on the deliverables CD describing how Martindale City staff can download and install Google Earth on their computers to view the map files provided. These changes will not affect delivery date or budgeted costs.

- Stop Sign locations map
- Google Earth integration

# Conclusion

The purpose of this project is to produce city planning related maps of the City of Martindale. Bobcat Planning has been working on collecting and analyzing data from various sources, including Caldwell County Appraisal District, Guadalupe County Appraisal District and Hejl, Lee and Associates, Inc while using ArcGIS and other software to produce maps that will be given to the City of Martindale. The data provided will help the leaders of Martindale in proactive city planning and directing future growth. As of now, the project is proceeding well; the foundations for many of the final deliverables have been established and just require fine tuning. We have enjoyed working with the City of Martindale thus far and are looking forward to the completion of this project.