

## VI. Geographical Information System (GIS) (Geodatabase CDs Under Separate Cover)

### A. *Utilities Mapped*

ESC, as part of this contract, mapped all pertinent utilities and various other items crucial to University of Wyoming operations. Listed below is a report about each item mapped:

- Domestic Water was mapped using a multitude of information sources including, existing maps, Key UW staff Forrest Selmer and Richard Allen, Water department crews, and locating devices. A rough map set was turned into Forrest Selmer and Rich Allen for QC analysis. Edits were made and map set is complete. Complete map set was then forwarded to Coffey Engineering for modeling. The final map set will be delivered to UW.
- Storm and Sanitary systems were mapped using a multitude of information sources including, existing maps, Forrest Selmer and Rich Allen. A rough map set was turned into Forrest Selmer and Rich Allen for QC analysis. Edits were made and map set is complete. This project was a dual effort between Coffey Engineering and ESC Engineering and information was shared between the two firms. The final map set will be delivered to UW.
- Telecommunications system was mapped primarily during the tunnel mapping phase. This was a simple map set, as little information was recorded and only pathways were shown. The final map set will be delivered to UW.
- Compressed air system was mapped during the tunnel mapping phase and was mapped using a multitude of information sources including, existing maps, Forrest Selmer, and Rich Allen. Rich Allen and Forrest Selmer were consulted throughout this mapping phase to insure quality. Rich Allen attended on a few occasions and confidence in the accuracy of this map set is good. Edits were made during the process and the map set is complete. The final map set will be delivered to UW.
- Chilled Water system was mapped during the tunnel mapping phase and was mapped using a multitude of information sources including, existing maps, Forrest Selmer, and Rich Allen. Rich Allen and Forrest Selmer were consulted throughout this mapping phase to insure quality. Rich Allen attended on a few occasions and confidence in the accuracy of this map set is good. Edits were made along the way and the map set is complete. The final map set will be delivered to UW.

- Steam system was mapped during the tunnel mapping phase and was mapped using a multitude of information sources including, existing maps, Forrest Selmer, and Rich Allen. Rich Allen and Forrest Selmer were consulted throughout this mapping phase to insure quality. Rich Allen attended on a few occasions and confidence in the accuracy of this map set is good. Edits were made along the way and the map set is complete. The final map set will be delivered to University of Wyoming.
- Condensate Collection system was mapped during the tunnel mapping phase and was mapped using a multitude of information sources including, existing maps, Forrest Selmer, and Rich Allen. Rich Allen and Forrest Selmer were consulted throughout this mapping phase to insure quality. Rich Allen attended on a few occasions and confidence in the accuracy of this map set is good. Edits were made along the way and the map set is complete. The final map set will be delivered to University of Wyoming.
- Irrigation Water was mapped using a multitude of information sources including, existing maps, Forrest Selmer, Rich Allen, Water department crews, and locating devices. A rough map set was turned into Forrest Selmer and Rich Allen for QC analysis. Edits were made and map set is complete. Complete map set was then forwarded to Coffey Engineering for modeling. The final map set will be delivered to University of Wyoming.
- Natural Gas was mapped using a multitude of information sources including, existing maps, Forrest Selmer, Rich Allen, Source Gas maps, and locating devices. This was a simple map set, as little information was recorded and only pathways, meters, and regulators were shown. A rough map set was shown to Forrest Selmer and Rich Allen for QC analysis. Edits were made and map set is complete. The final map set will be delivered to University of Wyoming.
- Electrical updates were made to University of Wyoming's existing map set using a multitude of information sources including, existing maps, Forrest Selmer, Rich Allen, and locating devices. The final map set will be delivered to University of Wyoming.
- A camps aerial photo and thermal imaging was performed in November of 2008 to include as part of the GIS database. It was recognized that there were alignment and quality issues within the photo and thermal images taken. The Aerial sub consultant has agreed to revise the photo and thermal imaging as required to meet the Universities expectations. The new photos are anticipated to occur during the first part to mid May of 2009.