

## **AAPG Foundation Progress Report: Grant to Indiana University for Computer Infrastructure (10/25/2011)**

While waiting for the construction of the new classroom and geotechnology center at the Judson Mead Geologic Field Station (Tobacco Root Mountains, MT) to be completed progress has been made on determining the optimal selection of the various components necessary for the various components necessary to set up the computational facility. We have been engaged with vendors and the IU Information and Technology Service (UITS) to determine the optimal package of hardware and software for the new classroom and geotechnology center. Below is a list of the various steps that have been completed to date.

1. Ground was broken on the construction of the classroom and geotechnology building on September 15, 2011. The structure has two functional floors, an upper level that has a lecture hall and computer center and a lower level (with a walk out access) that will house laboratory space and additional small classrooms. Included below are a series of photographs that document the building progress. It is anticipated that the building will be completed on schedule (120 days from the start) and will be available for use during the first courses of the 2012 field season.
2. Development of a plan for providing a high speed and large volume internet connection for the classroom. We were disappointed to learn that, after working with QWEST for over a year, they do not have the actual wires (in the valley) necessary to provide the service that they promised in their quote. We have determined that we can upgrade our present satellite hardware to provide comparable speed and bandwidth to meet our needs at a comparable cost we had budgeted for. To date we have not experienced any difficulties with the reliability of the satellite based connection and the upgraded hardware will provide an even stronger connection to the satellite. It is anticipated that a contract for this service will be signed shortly.
3. A plan for the interior configuration of the hardware and distribution network for the internet connection has been completed by the UITS staff and this plan has been given to the architect and general contractor and the electrical subcontractor. Specialized hardware will be designed and assembled by the UITS staff so that it can be easily installed in the new facility and connected to the local wired and wireless networks planned for the building. The design includes specialized provisions to facility remote access to the system to allow for regular maintenance/service and troubleshooting/repair remotely by the UITS staff. We anticipate that the wiring for this will be part of the next building phase.
4. We have been working with members of the oil and gas community as well as with the UITS staff to select the hardware necessary to create the work stations we need to satisfy the range of users anticipated for this facility. We have arrived at a tentative package of computer specifications as well as the minimum software/graphics requirements and monitors, keyboards, and other devices. We are presently getting input from the potential users of the system to make sure that the package design is one that will meet their needs.
5. We have continued to refine the kind of operating system(s) that we will be using and the specialized software that will be loaded as the standard configuration. We will be taking advantage

of the special agreements that Indiana University has reached with a number of vendors and are also working with companies that provide service to the oil and gas and mining communities. We have had a number of productive and encouraging discussions with these geo-specific companies for specialized software packages.

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