

## **CONSTRUCTION RESEARCH**

From the PACE roundtable I was able to see how implanting BIM on a project was a huge task for many contractors. I understand many of the benefits of BIM and would like to be able to communicate these benefits to the industry members. I feel the best way to communicate these benefits is to show examples of how it has effectively been used on past projects and show how it could positively affect current projects. By showing these success stories hopefully members of the industry will buy into the fact that the BIM model is worth the time and money it cost to be developed and maintained.

For this I would like to take the BIM model Holder Construction Company has developed for the Aquarium Hilton Garden Inn project and use to further communicate the benefits of BIM to the industry. With the model I would be able to show the different uses of the model and get real world. The main tasks I would like to do include:

- Showing a comparison of takeoffs between a BIM and traditional plans and the time associated with each.
  - This would be accomplished by aquiring takeoffs from the contractors who did the takeoffs. I personally will also be doing takeoffs from the standard construction documents issued on this project. These takeoffs would then be compared to the takeoffs I will do from the BIM model to compare both accuracy and the time it takes me to do each.
- Show how it can be used by a Superintendent to communicate with the subcontractors in meetings.
  - This will be accomplished by speaking with different superintendents with Holder construction on how they have affectively used a BIM model to communicate/coordinate with their subcontractors.

- Save time in the construction process by using collision detection catching collisions early to keep delays from happening.
  - This will be done by looking at many projects that have used BIM modeling and analyzing the number of collisions detected using the collision detection tool offered in Navisworks.

Through these task I can show how affective a BIM model can be and give an idea of the value it brings to a project.