

# MECHANICAL BREADTH PROPOSAL



## DEFENSE INFORMATION SYSTEMS AGENCY HEADQUARTERS FACILITY

FT. GEORGE G. MEADE, MD.

GEORGE SLAVIK III

MECHANICAL OPTION

ADVISOR: DR. TREADO

**ACOUSTICS: ROOF TOP UNITS**

After speaking with the Mechanical project manager on the DISA HQ, I learned that they are currently having acoustical problems with the roof top units. This problem was not found until the units were set, and began running. Therefore, first off I would like to look into a acoustical solution to this problem. This is especially important in office space, as the employees who work on the top floors may be distracted by this unwanted noise. I will look into the construction of the roof, along with the roof top unit details to find a solution to this problem.

**ARCHITECTURAL: RAINWATER COLLECTION SYSTEM**

I will also be looking into water collection system on the roof for rainwater. The DISA HQ has an enormous amount of rooftop square footage. This could be used to collect rainwater, and there is ample site space to place a water collection tank. The fact that it will rain is inevitable, you might as well collect it. This will lead to water savings as you could use this collected water for irrigation, or other creative uses. The installation of a rainwater collection system could also possibly add more LEED credits to the project.

I will be designing the method of collection, sizing the collection tank and main piping. I also will be finding a place to locate the tank on site which will not disrupt the plan/use of the DISA HQ.