

## Crystal L. Arnold Engineer

### Education

- Tennessee State University, B.S., Civil Engineering, 2007

### General Experience

Ms. Arnold's professional experience brings a unique perspective and set of skills to the area of construction claims consulting. Utilizing her strong engineering and analytical background, her responsibilities include engineering analysis and documentation, schedule analysis, data analysis, and timelines. She has worked on a variety of construction consulting projects including HVAC, roadways, residential construction and facilities. Ms. Arnold is proficient in C++, AutoCAD, Architectural Desktop Autodesk 2007, Revit Building 9.1, Microsoft Office, P-spice, SAP 2000, and TimeMap.

### Project Experience

#### **Formaldehyde Emissions, Lancaster**

Worked with a Professional Engineer in creating a proficient assessment and expert report for improper sizing of a HVAC system for a 20,000 sq. ft. facility that contained over 80% of hardwood plywood in its interior. Researched the amount of formaldehyde emission from the plywood used in the facility by laboratory reports and other sources. Examined the building permits. Created a graphical picture of the high and lows of the plywood emissions. Also, explored the idea of "microwaving" the facility and how "air-ing" out the facility would reduce the emissions.

#### **Route I-78 Rock Claim, New Jersey**

Assisting a team of experts and lawyers in compilation of data for the I-78 weigh station. Compiling information on elevations and borings to determine rock placement and quantity. Creating Excel spreadsheets that reflect on the differences in existing, boring, and rock elevations that are found within files provided to the company. Working with AutoCAD on placement of borings onto electronic contour maps.

#### **Residential Construction, New Jersey**

Visited the site that alleged improper usage of an I-joist, weep hole placement, and other

structural and non-structural concerns. Researched the uses of I joists, including the use for HVAC ducting. Also, researched weep hole standards for placement and the minimum and maximum number to be placed within the masonry of a home.

**SSA Mid-Atlantic Operations Center, Philadelphia**

Providing engineering consulting assistance to the SSA's facility management team in support of renovation projects in the facility. Projects include the development of a multi-room, CCTV training center and renovations to the telecom services center.