



## **MELISSA AN, E.I.T.**

CONSTRUCTION DESIGN ENGINEER



### **EDUCATION**

**B.S. Engineering – Civil Specialty**  
Colorado School of Mines, Golden, CO

### **PROFESSIONAL CERTIFICATION**

Engineer-in-Training (EIT) Certified

### **PROFESSIONAL EXPERIENCE**

Ms. An has over 7 years of experience in civil engineering, including: drafting reports and plan sets, basic design calculation, calculation checks, and as well as performing field work. She has knowledge of soils, materials and testing standards and procedures. She is familiar with design standards and construction specifications. Ms. An responsibilities include roadway and utility construction design and data processing utilizing AutoCAD, Civil 3D and ArcGIS. She also provides inspection and construction administration for the company. She is proficient in the use of AutoCAD, ArcGIS, SolidWorks, Bentley's gINT, MathCAD and Microsoft Office.

### **KEY PROJECT EXPERIENCE**

- *DCIP Water Main Replacement Projects, Littleton, Colorado.* Drafted capital improvement plan sets using AutoCAD for several utility districts. Drafted and organized contract documents and other bidding documents and advertised. Processed plan sets and comments through Denver Water for approval. Provided construction administration assistance to the construction observer and as-built with GIS data at project completion.
- *Applewood Sanitation District, Golden, Colorado.* Drafted plans using AutoCAD. Drafted and organized contract documents and other bidding documents, and reviewed contractor documentation. Responsible as the call center to receive and filter all calls from the Applewood Sanitation District phone line. Process drainlayer applications and renewals for the District. Perform sanitary sewer main utility locates when requested.
- *3-Mile Plan, Buena Vista, Colorado.* Reviewed existing 3-Mile Plan and its corresponding data to provide updated documents for the Town of Buena Vista. Drafted a new 3-Mile plan, along with transportation, address, ownership, and area of grown exhibits using ArcGIS. Actively addressing GIS needs of the town.
- *Paint Brush Hills Metropolitan District Administration Building, Peyton, Colorado.* Drafted architectural plans using AutoCAD, drafted and organized contract documents and other bidding documents, reviewed contractor documentation, understood and followed County and Region standards and submittal procedures for the site and building plan approval.

- *West Oxford Avenue Reconstruction Project, City of Sheridan, Colorado.* Project was administered through CDOT Region1, so clearances and cost estimates were prepared in CDOT format. Prepared contract documents, cost estimates and verified quantities. Utility coordination to obtain clearance utility companies.
- *2013 Flood Damage Repair Project, Estes Park, Colorado.* Drafted cost estimates and verified quantities using AutoCAD, drafted and organized contract documents and other bidding documents, utility coordination and review for clearance, reviewed contractor documentation, understood and followed FEMA, FHWA, and CDOT standards, drafted reports, obtained temporary construction easements from Estes Park residents, assisted contractor in completing official forms and permit applications, drafted pay applications and completed a site visit to document the existing conditions of each site, attended construction progress meetings, and completed construction inspections for road and drainage work, and conducted employee interviews.
- *Sanitary Sewer and Water Rate Studies, Colorado.* Completed sanitary sewer, water, and overall utility rate studies for districts and towns to obtain an overall financial understanding of their operations and expenses per single family household and commercial users. Developed water, raw water, sewer and drainage rate study models and simulations for Fremont Sanitation District, the Town of Florence, and the Southern Ute Reservation. Prepared yearly rate study model updates for Todd Creek Village Metropolitan District.
- *Grant Applications, Colorado.* Completed federal applications for districts and towns to obtain funding for proposed projects from preliminary engineering reports prepared by RGA, drafted memorandums for additional supplemental information. Assisted entities in completing and obtaining grant funding for proposed projects.
- *Blue Lake Development, Town of Lochbuie, Colorado.* Conducted construction inspection, observations, and construction progress meetings; inspections and observations of sewer and water utility installations, subgrade preparation for concrete curb, gutter, sidewalk, and asphalt roads, subgrade and road base testing, backfill testing, and general materials testing. Created summarized daily observation reports, reviewed material reports and understood and utilized Town of Lochbuie standards.