

JOB PURPOSE:

Under limited supervision of the Director of Construction, employee manages the development, implementation, operation, and maintenance of statewide Information Technology (IT) based Management Systems related to the highway construction program. Duties of this position include, but are not limited to: management of the SiteManager* Construction Management System; assisting in the training of district and headquarters personnel in the operation of IT based management systems; development of reporting systems required by upper management; acting as liaison between construction division, hardware/software vendors, and IT Services.

ESSENTIAL AND MARGINAL FUNCTIONS:

1. Management of the SiteManager* Construction Management System. The Department will license the AASHTO/Trns*port SiteManager* construction management system which will computerize the collection of all highway construction data, provide for automatic production of construction related reports, and provide a means to retrieve program wide management information necessary to assist upper management in directing the construction program. Employee will provide technical management of this system, aiding in Department wide implementation, training of users, and maintenance of the system to include participation in AASHTO Trns*port Users Group which governs enhancements to Trns*port products. (50 %)
2. Development, Implementation, and Maintenance of additional IT based Management Systems. The Department currently licenses AASHTO/Trns*port BAMS/DSS Module, Plus 3/Terramodel, and is preparing to implement Bid Express, an Internet based system which will initially be used to provide contractors with bid documents. Bid Express will eventually be used to receive bids on-line. This will require the solution of many technical issues, which require a high level of knowledge and experience in programming, networking, and hardware technology. (25%)
3. Development of in-house applications, and development of ad-hoc queries of data from existing management systems to support construction division in providing necessary management and public information. (15%)
4. Investigation of commercially produced hardware and software products to determine suitability in meeting needs of construction division (10%)

COMMENTS: Employee will be provided with objectives and engineering related assistance. However, employee's skills will be unique to this area, and employee should exercise independent initiative and sound professional judgement in the accomplishment of assigned tasks and objectives. Coordination with many areas of the SCDOT will be required.

What knowledge, skills, and abilities are needed by an employee upon entry to this job? Where / how would an individual normally acquire these knowledge, skills and abilities?

Employee needs a strong foundation in Computer Science with extensive experience in planning, developing, programming, and implementing job-specific applications. While engineering training and experience is not required, employee should be able to obtain a general understanding of engineering practices in order to develop applications suited to those areas. Employee should be able to communicate effectively, both orally and

in writing. Employee should be able to communicate ideas to various levels of employees, from district engineers and headquarters management to skilled laborers. Ability to operate motor vehicle in performance of job duties is essential. Knowledge and skills for this position should be obtained through a combination of education and work experience in Information Technology field.

Describe the guidelines and supervision an employee receives in order to do this job, including the employee's independence and discretion.

Employee will receive limited supervision and will be given a high degree of latitude in setting priorities for daily activities. Employee is expected to exercise sound professional judgment when applying technology based solutions to engineering needs.