

Holds B. Sc., M. Sc. and PhD in Civil Engineering and has more than 25 years of experiences in the fields of water resource, infrastructure maintenance and construction / land development. Most of experiences are with consulting, local governments, federal contractors and federal government. In depth technical skills in the field of water resources and modeling. Strong planning and management skills for technical assignments.

PERSONAL DATA

Nationality : Egyptian
Gender : Male
Residence : Currently USA

EDUCATION

: B. Sc. in Civil Engineering, Cairo University, 1992
: M. Sc. In Civil Engineering (Irrigation and Hydraulics), Cairo University, 1997
: Graduate study towards Ph.D. degree with emphases on Hydrology, GIS and Remote Sensing, University of Arizona, Tucson, AZ, 2002

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office, Internet

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jun. 2020 till now
Employer : U.S. Army Corps of Engineers, Norfolk District, Water Resources Division
Job title : Civil Engineer
Job Description :

- Project Manager for CAP project – Manchester Canal Aquatic Restoration, Richmond, VA.
- Developing inundation mapping projects for different streams in Virginia.
- Developing H&H for riverine flooding sources.
- Extensively using HEC-RAS and GIS for flood studies and mapping.
- Getting familiar with federal government regulation.

Dates : From Mar. 2015 till Jun. 2020
Employer : Department of Public of Public Works – Hillsborough County, FL

Project : Planning Culvert Replacement and Renewal Program (2015-2018):
Planned \$14 million yearly budget for about 100 project of stormwater pipes repairs for each fiscal year. Planning included development of basic construction documents and scope of work, budget allocation, and generating project under the County unified Capital Improvement Program (CIP).

Job title : Engineer

Job Description :

- Planning of Culvert Replacement and Renewal Program (Infrastructure Maintenance) with a total budget of \$14M.
- Utilized GIS to plan stormwater pipes replacement activities and to optimize spending by accounting for construction activities spatial distribution.
- Utilized GIS to generate basic construction document with essential scope of work and details suitable for replacement construction activities with no permit required.
- Plan review for drainage and flood solution plans.
- Develop GIS tools to enhance floodplain delineation in GIS utilizing SWMM Model output.
- Review stormwater and flood mitigation construction plans.
- Review watershed models (SWMM).

Dates : From Jan. 2015 till Mar. 2015

Employer : Terramax, 1507 S. Hiawasse Road, Ste 211, Orlando, FL 32835

Job title : Engineer

Job Description :

- Land development site plan preparation for complex high-density residential/commercial development using Civil3D.
- Develop drainage hydrologic and hydraulic models for land development projects.

Dates : From Jun. 2012 till Dec. 2013

Employer : Department of Public of Public Works – City of Chattanooga, TN

Job title : Project Engineer

Job Description :

- Developed hydrologic and hydraulic studies to identify and resolve localized flooding problem.
- Propose and designed alternative for rehabilitation of aging non-functioning drainage systems.
- Designed stormwater best management practices to meet new water quality standards.

Dates : From Mar. 2005 till Jun. 2011

Employer : Dewberry, 8401 Arlington Blvd., Fairfax, VA 22031

Projects :

- Baldwin County, AL Floodplain Study (2010-2011): County wide detailed floodplain study for about 120 miles of streams (Zone AE) using HEC-RAS. Flows were computed using gage analysis and modeling (HEC-HMS). Remaining of the County streams was modeled using simplified methods to update the Zone A delineations.
- Ashby Pond, Loudoun County, VA - Part of Erickson Living (2006-2009): Developed stormwater management plan for +/-125 acres of high density residential/commercial development in Loudoun County, VA. The plan

included detailed design for the drainage network, design of 4 stormwater management ponds, several rain gardens including, and meeting the State and Local stormwater management requirements. The project also included the design of new 1.1 miles of 4-lane Gloucester Pkwy.

- Job title** : Project Engineer
- Job Description** :
- Task manager on model development for federal (FEMA) contracts under map modernization (\$500K).
 - Used GIS and LiDAR for H&H model development and floodplain mapping.
 - Utilized GIS in house developed tools to better model and delineate floodplains.
 - Storm water management plans including pond design for high-density residential / commercial development and roadways.
 - Land development plan development for commercial and high density residential.
 - Detailed flood controls and pond design for permitting and construction.
 - Drainage design for major and local new highways.
- Dates** : From Dec. 2002 till Mar. 2005
- Employer** : County of Loudoun, VA, 1 Harrison St., Leesburg, VA
- Job title** : Senior Water Resources Engineer
- Job Description** :
- Construction plan reviews with emphases on drainage and floodplain management.
 - Interaction with consulting community to better streamline plan review process.
 - Assets with other team members in floodplain management of the County.
- Field of experience** :
- Hydrologic and hydraulic analyses for FEMA/NWS floodplain mapping.
 - Familiarity with Federal Highway Administration and most States Departments of Transportation Standards in relation to drainage.
 - Drainage improvement studies and modeling.
 - Hydraulic and flood control structures design and analysis.
 - Program / project management and planning.
 - Proficient in most water resources software: GIS, CAD, Civil 3D and H&H models.
 - Professional writing.
 - Management and planning of infrastructure maintenance and repair projects.