

# LOUISVILLE METROPOLITAN SEWER DISTRICT invites applications for the position of:

## Engineer I or II Grade 17 or 18-Floodplain Dept.

**SALARY:** \$26.49 - \$43.85 Hourly

\$55,099.20 - \$91,208.00 Annually

**OPENING DATE:** 10/29/18

**CLOSING DATE:** 11/12/18 11:59 PM

**JOB SUMMARY:** 

This position will be filled as an Engineer I or II based on candidate qualifications. Salary ranges are as follows:

Engineer I: \$55,099.20-\$83,990.40 Engineer II: \$59,300.80-\$91,208.00

### **Engineer I**

Assists in the review of plans and calculations for proposed non-complex public and private wastewater and storm water improvements, green infrastructure and water quality projects including detention basins, floodplains, floodways, and erosion prevention and sediment control plans. Performs reviews of site drainage, erosion prevention and sediment control and sanitary sewer and pumping station plans for impacts on the watershed and sewer shed and conformance to MSD design standards and master plan. Assists with planning and implementation of routine monitoring, condition assessment, maintenance, rehab, repair and replacement projects to facilitate proper operations and maintenance of the sanitary system by Operations Division. Provides technical and administrative support to planning, MS4, CRS and grant, and Consent Decree programs. Performs general drainage, detention basin, floodplain and floodway analyses. Assists in the review of wastewater pump stations and force mains. Provides basic functional area knowledge and strategic awareness in modeling, long-term planning and defining solutions for a broad range of services. Responds to and resolves customer requests related to existing sanitary and storm water facilities. Assists with walk-in customers.

## **Engineer II**

Provides engineering services related to routine privately and publically funded wastewater, stormwater, and flood protection infrastructure projects. Performs technical analysis activities, ensuring adherence to MSD specifications/design standards and appropriate local, state, and federal regulations/guidelines. Performs design through commissioning project management activities. Manages technical initiatives such as developing system hydraulic and hydrologic models, leading long-term planning and solution development initiatives, leading compilation and analyses of data, providing written summations to support regulatory and programmatic initiatives, developing regulatory reports and technical documents with technical writing proficiency, and developing Standard Operating Procedures (SOPs). Leads the development and implementation of programmatic initiatives related to KPDES Permit compliance, Consent Decree compliance, asset management, USACE Flood Protection System operation and maintenance, Municipal Separate Storm Sewer System (MS4) permit compliance, Green Infrastructure planning, Community Rating System (CRS) Program implementation,

Floodplain Management planning and watershed master planning. Coordinates internal/external stakeholder input meetings. Mentors division staff to develop technical job functions/skills and leadership/management abilities.

## **ESSENTIAL JOB FUNCTIONS:**

## **Engineer I**

Provides engineering services related to routine privately and publically funded wastewater, stormwater, and flood protection infrastructure projects under direct oversight by a staff PE. Provides technical support as needed across the Engineering and Operations Divisions. Assists in the preparation for and provides support during internal and external stakeholder meetings in various settings. Actively performs quality assurance reviews for own work products, including evaluation for completeness, grammar, punctuation, and accuracy. Assists with technical analysis activities, ensuring adherence to MSD specifications/design standards and appropriate local, state, and federal regulations/quidelines. Assists with program management activities such as developing system hydraulic and hydrologic models, coordinating long-term planning and solution development initiatives, compiling and analyzing data, providing written summations to support regulatory and programmatic initiatives and coordinating the resolution of customer requests. Assists with the development and implementation of programmatic initiatives related to KPDES Permit compliance, asset management, USACE Flood Protection System operation and maintenance, Municipal Separate Storm Sewer System (MS4) permit compliance, Green Infrastructure planning, Community Rating System (CRS) Program implementation, Floodplain Management planning and watershed master planning. Performs design through commissioning project management activities such as procuring planning, design and construction services, developing project cost estimates, tracking and managing assigned project schedules and budgets, developing risk management plans and schedule/budget variance recovery plans, coordinating with project internal/external stakeholders, and participating in public input meetings. Follows processes and procedures for expenditures in accordance with the MSD Procurement Regulations and Board Policies. Mentors Engineering Co-Ops to develop technical job functions/skills. Submits records for working files and final retention per MSD policy and procedures. Performs other duties as assigned.

#### **Engineer II**

Provides engineering services related to routine privately and publically funded wastewater, stormwater, and flood protection infrastructure projects. Performs technical analysis activities, ensuring adherence to MSD specifications/design standards and appropriate local, state, and federal regulations/guidelines. Manages technical initiatives such as developing system hydraulic and hydrologic models, leading long-term planning and solution development initiatives, leading compilation and analyses of data, providing written summations to support regulatory and programmatic initiatives, developing regulatory reports and technical documents with technical writing proficiency, and developing Standard Operating Procedures (SOPs). Leads the development and implementation of programmatic initiatives related to KPDES Permit compliance, asset management, USACE Flood Protection System operation and maintenance, Municipal Separate Storm Sewer System (MS4) permit compliance, Green Infrastructure planning, Community Rating System (CRS) Program implementation, Floodplain Management planning and watershed master planning. Performs design through commissioning project management activities such as procuring planning, design and construction services, developing project cost estimates, tracking and managing assigned project schedules and budgets, developing risk management plans and schedule/budget variance recovery plans, coordinating with project internal/external stakeholders, coordinating with regulating entities and participating in public input meetings. Performs public speaking to internal and external stakeholders in various settings. Leads initiatives to resolve routine customer requests related to wastewater, stormwater, and flood protection infrastructure. Follows processes and procedures for expenditures in accordance with the MSD Procurement Regulations and Board Policies. Mentors Engineer Is, Engineering Co-Ops,

Associate Engineer Is, and Engineering Technicians to develop technical job functions/skills and leadership/management abilities. Performs quality assurance reviews for own work and divisional staff work products, including evaluation for completeness, grammar, punctuation, and accuracy. Submits records for working files and final retention per MSD policy and procedures. Performs duties of Engineer I as needed and other duties as assigned.

## KNOWLEDGE, SKILLS AND ABILITIES NECESSARY TO THE WORK:

#### **Engineer I**

Knowledge of engineering principles, hydraulic/hydrologic calculations, modeling, and design methods, surveying, and general construction practices/methods; knowledge of MSD Design Manual, Standard Drawings and Standard Specifications, Metropolitan Subdivision Regulations and Zoning regulations, Erosion Prevention and Sediment Control (EPSC) and Local Regulatory Floodplain and other environmental regulations; skill in operating a PC and associated Windows environment software (e.g. Microsoft Office Suite); skill in oral and written communication; ability to read, interpret and discuss detailed construction plans and topo maps; ability to manage, plan and effectively prioritize multiple projects and initiatives; ability to analyze problems and develop reasonable solutions; ability to exercise sound judgment and discretion in decision-making; ability to work in a team environment; ability to be courteous and helpful under pressure; ability to work under heavy surges in workload and deadline pressure; ability to work 24 hour emergency response, various shifts and weekends.

## **Engineer II**

Knowledge of wastewater, stormwater, and flood protection infrastructure design and construction practices; knowledge of the National Pollutant Discharge Elimination System (NPDES) wastewater and stormwater regulations and permitting requirements, US Army Corps of Engineers regulations and permitting requirements and applicable local regulations and permitting requirements; knowledge of engineering principles, hydraulic/hydrologic calculations, modeling, and design methods, surveying, and general construction practices/methods; knowledge of MSD Design Manual, Standard Drawings and Standard Specifications, Metropolitan Subdivision Regulations and Zoning, Erosion Prevention and Sediment Control (EPSC) and Local Regulatory Floodplain and other environmental regulations; skill in project management and procurement of engineering and construction services; skill in oral and written communication, including public speaking; skill in technical writing; skill in operating a PC and associated Windows environment software (e.g. Microsoft Office Suite); ability to read, interpret and discuss detailed construction plans and topo maps; ability to manage, plan and effectively prioritize multiple projects and initiatives; ability to analyze complex problems and develop reasonable solutions; ability to exercise sound judgment and discretion in decision-making; ability to work in a team environment; ability to be courteous and helpful under pressure; ability to work under heavy surges in workload and deadline pressure; ability to work 24 hour emergency response, various shifts and weekends.

## **MINIMUM REQUIREMENTS:**

#### **Engineer I**

Bachelor Degree from an ABET accredited engineering program. Must be a certified Engineer-in-Training with the ability to obtain Professional Engineer's license from the state of Kentucky. No experience required. Must possess a valid driver's license. Must have safe work and driving habits. Must obtain Plan Reviewer/Preparer EPSC Certification within 6 months.

#### **Engineer II**

Bachelor Degree from an ABET accredited engineering program. Must possess a Kentucky Professional Engineer's License or ability to obtain through state reciprocity within 6 months. Four or more years of related experience. Masters of Engineering Degree may be substituted for 1 year of experience. Must possess a valid driver's license. Must have

safe work and driving habits.

APPLICATIONS MAY BE FILED ONLINE AT: <a href="http://www.louisvillemsd.org">http://www.louisvillemsd.org</a>

Position #18-109 ENGINEER I OR II GRADE 17 OR 18- FLOODPLAIN DEPT.

700 W. Liberty Street Louisville, KY 40203

## Engineer I or II Grade 17 or 18- Floodplain Dept. Supplemental Questionnaire

*	1.	What is your highest level of education completed?
		<ul> <li>No H.S. diploma or GED</li> <li>High School Diploma or GED</li> <li>Some college, no degree</li> <li>Associate Degree</li> <li>Bachelor Degree</li> <li>Master's Degree</li> <li>Other Graduate Degree</li> </ul>
*	2.	Do you have a valid driver's license?
		☐ Yes ☐ No
*	3.	Do you have a Bachelor's Degree from an ABET accredited engineering program? $\square$ Yes $\square$ No
*	4.	Are you a certified Engineer-in-Training?  ☐ Yes ☐ No
*	5.	Do you possess a Kentucky Professional Engineer's License or ability to obtain through state reciprocity within 6 months? $\square$ Yes $\square$ No
*	6.	Are you a Certified Floodplain Manager?  Yes  No
*	Re	quired Question