

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



Engineer I/II/III; Associate Engineer II; Sr. Engineer (Grade 17, 18, 19 or 20)

SALARY: \$26.49 - \$51.80 Hourly
\$55,099.20 - \$107,744.00 Annually

OPENING DATE: 11/15/18

CLOSING DATE: 11/30/18 11:59 PM

JOB SUMMARY:

These positions will be filled at the Engineer I/II/III, Associate Engineer II, or Senior Engineer level depending on candidate qualifications. Salary ranges are as follows:

Engineer I \$55,099.20-\$83,990.40

Associate Engineer II, Engineer II \$59,300.80-\$91,208.00

Engineer III \$63,939.20-\$99,091.20

Senior Engineer \$68,931.20-\$107,744.00

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.

Engineer III

Provides engineering services related to complex 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 complex technical initiatives such as assessing design appropriateness, conducting diagnostic infrastructure construction progress and quality of work assessments, evaluating system capacity assurance and mitigation initiatives, conducting compliance vulnerability assessments and corrective action initiatives, analyzing data, providing written summations to support regulatory and programmatic initiatives, developing regulatory reports and technical documents, and developing Standard Operating Procedures (SOPs). Leads the development and implementation of complex 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. Leads internal/external stakeholder input meetings. Develops and maintains quality assurance and quality control procedures for technical and programmatic initiatives within the division. Mentors staff within the division to develop technical job functions/skills and leadership/management abilities.

Associate Engineer II

Under the direct oversight by a staff PE, 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.

Senior Engineer

Provides specialized engineering expertise (Civil/Environmental, Electrical, Mechanical, Chemical, Construction, etc.) to ensure design, construction and commissioning of sustainable privately and publically funded wastewater, stormwater, and flood protection infrastructure projects. Leads specialized technical analysis and programmatic development activities as related to the District's KPDES Permit compliance, CMOM and NMC 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 within their field of engineering expertise. Leads thorough diagnostic infrastructure construction progress and quality of work assessments, working collaboratively with the Operations Division staff to optimize long-term system operability. Analyzes detailed contractor schedules, identifying critical path delay issues and leading recovery efforts involving specialized engineering expertise (mechanical, electrical, civil, construction, etc.). Performs design through commissioning project management activities. Develops and maintains quality assurance and quality control procedures for technical and programmatic initiatives within the division. Ensures facilities and equipment are operated and maintained for all applicable manufacturers' requirements and procedures. Mentors staff within the division to develop technical job functions/skills and leadership/management abilities. Performs job responsibilities with minimal supervision and technical oversight.

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/guidelines. 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.

Engineer III

Provides engineering services related to complex 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 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. Manages complex technical initiatives such as assessing design appropriateness, conducting diagnostic infrastructure construction progress and quality of work assessments, evaluating system capacity assurance and mitigation initiatives, conducting compliance vulnerability assessments and corrective action initiatives, analyzing data, providing written summations to support regulatory and programmatic initiatives, developing regulatory reports and technical documents, and developing Standard Operating Procedures (SOPs). Leads the development and implementation of complex 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 public speaking to internal and external stakeholders in various settings. Leads initiatives to resolve complex customer requests related to wastewater, stormwater, and flood protection infrastructure. Leads system capacity assurance identification and mitigation initiatives. Leads compliance vulnerability assessments and corrective action plan initiatives. Leads internal and external training initiatives for technical and/or programmatic activities. Develops and maintains quality assurance and quality control procedures for technical and programmatic initiatives within the division. Performs quality assurance reviews for own work and divisional staff work products, including evaluation for completeness, grammar, punctuation, and accuracy. Follows processes and procedures for expenditures in accordance with the MSD Procurement Regulations and Board Policies. Mentors Engineers I and II, Engineering Co-Ops, Associate Engineers, and Engineering Technicians to develop technical job functions/skills and leadership/management abilities. Submits records for working files and final retention per MSD policy and procedures. Performs duties of Engineer II as needed and other duties as assigned.

Associate Engineer II

Under the direct oversight by a staff PE, 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. 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 Associate Engineer I as needed and other duties as assigned.

Senior Engineer

Provides specialized engineering expertise (Civil/Environmental, Electrical, Mechanical, Chemical, Construction, etc.) to ensure design, construction and commissioning of sustainable privately and publically funded wastewater, stormwater, and flood protection infrastructure projects. Leads specialized technical analysis and programmatic development activities as related to the District's KPDES Permit compliance, CMOM and NMC 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, along with Floodplain Management planning and watershed master planning within their field of engineering expertise. Provides quality assurance recommendations for programmatic processes and Standard Operating Procedures (SOPs). Verifies that design deliverables meet regulatory level of control commitments. Monitors regulatory/enforcement compliance and recommends corrective actions when necessary. Performs community outreach and stakeholder coordination. Validates, scales, and prioritizes project recommendations. Leads thorough diagnostic infrastructure construction progress and quality of work assessments, working collaboratively with the Operations Division staff to optimize long-term system operability. Ensures facilities and equipment are operated and maintained for all applicable manufacturers' requirements and procedures. Analyzes detailed contractor schedules, identifying critical path delay issues and leading recovery efforts involving specialized engineering expertise (mechanical, electrical, civil, construction, etc.). 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. Provides strategic direction for multi-

disciplined project teams to review/develop drawing and specification documents, or other initiatives, in various settings requiring specialized engineering (mechanical, electrical, civil, construction, etc.) expertise. Communicates to management concerns, challenges, and technical decisions that may negatively impact the organization. Develops and maintains quality assurance and quality control procedures for technical and programmatic initiatives within the division. Performs quality assurance reviews for own work products and divisional staff work products, including evaluation for completeness, grammar, punctuation, and accuracy. Follows processes and procedures for expenditures in accordance with the MSD Procurement Regulations and Board Policies. Submits records for working files and final retention per MSD policy and procedures. Performs job responsibilities with minimal supervision and technical oversight. Mentors staff within the division to develop technical job functions/skills and leadership/management abilities. Performs duties of Engineer III 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.

Engineer III

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 activities and projects; 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.

Associate 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.

Senior Engineer

Knowledge of specialized engineering expertise (Civil/Environmental, Electrical, Mechanical, Chemical, Construction, etc.) as related to the design, construction and commissioning of sustainable privately and publically funded wastewater, stormwater, and flood protection infrastructure projects; 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 activities and projects; 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. .

Engineer III

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) and four or more years of related experience post-attainment of a Professional Engineer's License. Must possess a valid driver's license. Must have safe work and driving habits.

Associate Engineer II

Bachelor Degree from an ABET accredited engineering program. Six or more years of related experience. Must possess a valid driver's license. Must have safe work and driving habits. Must obtain Plan Reviewer/Preparer EPSC Certification within 6 months.

Senior Engineer

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) and nine or more years of related experience post attainment of a Professional Engineer's License. Must possess a valid driver's license. Must have safe work and driving habits.

APPLICATIONS MAY BE FILED ONLINE AT:
<http://www.louisvillemsd.org>

700 W. Liberty Street
 Louisville, KY 40203

Position #18-115
 ENGINEER I/II/III; ASSOCIATE ENGINEER II; SR. ENGINEER
 (GRADE 17, 18, 19 OR 20)
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Engineer I/II/III; Associate Engineer II; Sr. Engineer (Grade 17, 18, 19 or 20) Supplemental Questionnaire

- * 1. What is your highest level of education completed?
- No H.S. diploma or GED
 - High School Diploma or GED
 - Some college, no degree

- Associate Degree
- Bachelor Degree
- Master's Degree
- Other Graduate Degree

* 2. Do you have a valid driver's license?

- Yes No

* 3. Are you a certified Engineer-in-Training?

- Yes No

* 4. Do you possess a Kentucky Professional Engineer's License or ability to obtain through state reciprocity within 6 months?

- Yes No

* 5. Please describe your work experience with sanitary sewer and/or drainage systems. If none, please type N/A.

* Required Question