



January 2021
FLSA: EXEMPT

COLLECTION SYSTEM SUPERINTENDENT

DEFINITION

Under general direction, plans, organizes, directs and assists in a variety of maintenance, repair, operation, construction and inspection tasks in connection with operating and maintaining facilities and properties associated with the District's wastewater collection system and related facilities. Coordinates assigned activities with outside agencies. Provides responsible and complex technical support to the General Manager.

This is an "at will" management position.

SUPERVISION RECEIVED AND EXERCISED

Receives administrative direction from the General Manager. Exercises direct supervision over collection system staff. Works in close relationship with Principal Engineer, Maintenance and Operations staff.

CLASS CHARACTERISTICS

This is a management level position that oversees and directs all activities of the operation and ongoing maintenance of the District's wastewater collection system and related facilities including day-to-day operations, maintenance, repair, and short and long-range planning, including budgeting. Responsibilities include coordinating the activities of the division with those of other divisions and departments and managing and accomplishing the complex and varied functions of the division. The incumbent is accountable for accomplishing divisional planning and operational goals and objectives and for furthering District goals and objectives within general policy guidelines.

EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative only)

Management reserves the rights to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Develops and directs the implementation of goals, objectives, policies, procedures, and work standards for the division.
- Assume management responsibility for all services and activities associated with the operation, maintenance and repair of the District's wastewater collection system and lift stations.

EXAMPLES OF ESSENTIAL FUNCTIONS (continued)

- Oversee and participate in the development and administration of the wastewater collection system annual budget; direct the forecast of funds needed for staffing, equipment, materials, and supplies; monitor and approve expenditures; implement adjustments.
- Plans, organizes, administers, reviews, and evaluates the work of collections system staff. Assign work activities, projects and programs; review and evaluate work products, methods and procedures; meet with staff to identify and resolve problems.
- Provide for the selection, training, professional development, and work evaluation of department staff; authorize discipline as required; and provide policy guidance and interpretation to staff.
- Monitor and evaluate the efficiency and effectiveness of wastewater collection system methods and procedures; recommend, within divisional policy, appropriate service and staffing levels.
- Develop, implement and oversee a comprehensive maintenance program; ensure that equipment is properly inspected, repaired and maintained.
- Utilizes the computerized maintenance management system (CMMS) and ensures that standard operating procedures and parameters are developed and maintained for all collection system processes.
- Coordinate wastewater collection system activities with those of other divisions, outside agencies and organizations.
- Provide highly responsible and complex technical support to the General Manager/Principal Engineer, prepare and present staff reports.
- Conduct inspections of collection lines; identify areas which require maintenance or repair; ensure work is carried out in compliance with District standards.
- Oversee, direct and inspect the work of contractors for a variety of construction or maintenance projects including main installations, connections, backfill, and compaction and grading.
- Develop and implement safety training programs for wastewater collection system staff; ensure compliance with all District safe working practices, rules and regulations. Collaborate safety training with District Safety and Regulatory Compliance Officer.
- Serve as liaison for the District on wastewater collection issues with outside agencies, vendors, and customers; negotiate and resolve sensitive and controversial issues.
- Conduct a variety of organizational studies, investigations, and operational studies; recommend modifications to wastewater collection division programs, policies, and procedures as appropriate.
- Attend and participate in professional group meetings; stay abreast of new trends and innovations in the field of wastewater collection system operation and maintenance.
- Selects, trains, motivates and evaluates personnel performance; implements discipline and termination procedures, when required.
- Participate in team efforts with other management employee to encourage and reward employee accomplishments.
- Responsible for developing, auditing, and updating the sewer system management plan (SSMP) and is one of the legally responsible officials (LRO) responsible for certifying SSO reports and updating the questionnaire on the California Integrated Water Quality System (CIWQS).
- Develops and emergency response plan for the Collections Service Group.

- Prepares requests for estimates, requests for bids, and other documentation for maintenance and capital projects as relates to collection system. Reviews and comments on engineering plans and specifications for wastewater collection projects.
- Implements and maintains a system of inventory and information management. Oversees the development, data entry into, and reports generated from asset management software including databases that store information on maintenance and repair of valves, line breaks, etc.
- Develop and implement procedure to identify and enact program monitoring, measurement, and modifications. Analyze and examine performance statistics and make recommendations regarding methods of improving unit effectiveness.
- Manage District insurance claims related to the collection system.
- Work with County Health Department and other regulatory agencies to resolve sewage related complaints.
- Conduct system hydraulic capacity assessment, evaluation, and assurance. Characterize the capacity status of different segments of the system. Identify areas with capacity limitations. Predict areas with future capacity limitations. Undertake efforts to quantify and reduce inflow and infiltration to manageable levels. Quantify capacity requirements. Plan, design, and implement corrective or preemptive actions to maintain system design capacity and performance.
- Conduct system structural condition assessment and evaluation. Combination of inspection and conversion of recorded data into assessment knowledge.
- Communication and outreach with customers, constituents, and other stakeholders. Must be ongoing, open, timely, and two-way, with reciprocal information sharing. Develop strategies for ongoing communication and outreach as part of multiyear strategic planning.
- Reduce energy consumption throughout system while increasing efficiency and reliability. Pair energy savings decisions with balanced consideration of cost and reduction of District's carbon footprint.
- Analyze and plan for addition of stormwater (dry weather flows) to our system. Provide analysis on impact of combined vs. separate sewer and stormwater in terms of service to users, receiving water impacts, and regulatory guidance.
- Analyze principal system deficiencies that are related to impacts of climate change. This includes flooding, sea water intrusion, changes in storm intensity and frequency. Participate in planning for future response to climate change.
- Performs related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:

- Operational characteristics, services and activities of a wastewater collection system maintenance program.
- Operating characteristics of collection system maintenance equipment and tools including heavy equipment, and CCTV inspection and surveillance devices.
- Methods and techniques, tools and materials used in the maintenance and repair of wastewater collection systems and lift stations.

- Wastewater collection system inspection methods and techniques.
- Principles and practices of program development and administration.
- Principles and practices of budget preparation and administration.
- Principles of supervision, training and performance evaluation.
- Recent developments, current literature and sources of information related to wastewater collection.
- Office equipment including computers and supporting word processing and spreadsheet applications.
- Occupational hazards and standard safety practices related to collection system maintenance.
- Pertinent federal, state, and local laws, codes and regulations

Skill to:

- Developing and implementing goals, objectives, policies, procedures.
- Training, developing, evaluating staff.
- Reading and interpreting maps, drawings, and specifications.
- Utilizing a variety of computerized programs, including CMMS.
- Have a clear understanding of the District's goals and be able to communicate these goals.
- Be able to conceptualize and translate concepts into programs.
- Analyzing operating problems, evaluating alternative proposals, and making sound conclusions.

Ability to:

- Perform the full range of maintenance, cleaning and inspection duties.
- Implement appropriate safety procedures.
- Read and understand plans and profiles of sewer systems.
- Understand and carry out complex oral and written instruction.
- Schedule and supervise the work of others.
- Understand and apply maintenance techniques.
- Maintain accurate records and prepare clear and concise reports.
- Use English to effectively communicate clearly and concisely, both orally and in writing.
- Establish, maintain, and foster positive harmonious working relationships with subordinates and peers.
- Ability to perform a variety of mechanical maintenance and repair work to shop, plant and field equipment.
- Supervise/direct/coordinate the work of staff.
- Hire, supervise, train and evaluate staff.
- Interpret and explain and enforce District policies and procedures.
- Read, interpret and explain blueprints, construction drawings, specifications, and maps.

EDUCATION AND EXPERIENCE:

Any combination of training and experience which would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

Equivalent to the completion of the twelfth grade supplemented by college level course work or specialized training in mechanical systems technology, construction, engineering or a related field.

Five years of increasingly responsible experience in wastewater collection system operation and maintenance, including two years of administrative and supervisory responsibility.

Required Qualifications:

- Possession of a Class C driver's license required by the State of California, Department of Motor Vehicles, to perform the duties of the position. Continued maintenance of said driver's license in compliance with established District vehicle operation standards, and the ability to be insured for the operation of a vehicle/District vehicle in accordance with the terms and conditions of the District's insurance program are conditions of continuing employment. The California Sanitation Risk Management Authority (CSRMA) driving standards.
- 40-hour HAZWOPER certificate within one (1) year of employment.
- Possession of, or ability to obtain within 18 months of date of hire, a California Water Environment Association (CWEA) – Collection System Maintenance Grade IV certificate.
- Possession of, or ability to obtain within 18 months, a valid California Water Environment Association (CWEA) – Mechanical Technologist Grade I certificate.

Desired Qualifications:

- Possession of a California Class B license with endorsements.

Additional Requirements:

Ability to be on standby for after hour emergency call outs and acknowledge the notification within 15 minutes when on standby duty. If an emergency requires the employee to return to work, they must do so within 1 hour of responding to the notification.

Employee must pass a respiratory fit test within 2 months of employment and adhere to District respiratory policy which specifies facial hair restrictions.

All Carmel Area Wastewater District employees are, by State and Federal law, **Disaster Service Workers**. The roles and responsibilities for Disaster Service Workers are authorized by the California Emergency Services Act and are defined in the California Labor Code.

In the event of a declaration of emergency, any employee of the District may be assigned to perform activities which promote the protection of public health and safety or the preservation of lives and property. Such assignments may require service at locations, times, and under conditions that are significantly different than the normal work assignments and may continue into the recovery phase of the emergency.

If a "Local Emergency" is declared during the employee's shift, employees will be expected to remain at work to respond to the emergency needs of the community. If a "Local Emergency" is declared outside of the employee's shift, employees must make every effort to contact their direct supervisor or department head to obtain reporting instructions as Disaster Service Workers.

PHYSICAL DEMANDS

The physical demands and work environment described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions:

Standing:

- Average Frequency: 4 to 8 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Short (Less than 1 hour)
- Surfaces: Office – carpet, tile; field/plant – concrete, asphalt, dirt, gravel, mud, metal grating, grass, sloped and uneven terrain
- Description: Performs while supervising and guiding journey level technicians, and related positions in installation, maintenance and repair activities, overseeing the most complex and difficult maintenance and repair work and performing such work from time to time if needed including using tools, communicating with coworkers and contractors during informal meetings, during field inspections and performing other described job duties.

Walking:

- Average Frequency: 4 to 8 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Long (2 to 8 hours)
- Surfaces: Office – carpet, tile; field/plant – concrete, asphalt, dirt, gravel, mud, metal grating, grass, sloped and uneven terrain
- Description: Performs while supervising and guiding journey level technicians, and related positions during installation and maintenance tasks, overseeing the most complex and difficult maintenance and repair activities and performing such work as needed, transporting tools, parts and equipment as needed, to and from offices, and performing other described job duties.

Sitting:

- Average Frequency: 4 to 8 times per day
- Average Duration: Long (2 to 8 hours)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Long (2 to 8 hours)
- Surfaces: Cushioned vehicle seat, office chair
- Description: Performing various desk station activities including using a computer, reading and writing, driving a vehicle, during meetings and trainings, and performing other described job duties.

Kneeling/Crouching/Squatting:

- Average Frequency: 1 to 3 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Short (Less than 1 hour)
- Surfaces: Office – carpet, tile; field/plant – concrete, asphalt, dirt, gravel, mud, metal grating, sloped and uneven terrain
- Description: Performs during inspections and performing the most complex and difficult repair work in conjunction with using tools, retrieving or positioning items on and off lower shelves, ground level, or lower areas, inspecting and accessing equipment, and performing other described job duties.

Crawling:

- Average Frequency: 1 to 3 times per year
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: 4 to 8 times per year
- Maximum Duration: Short (Less than 1 hour)
- Surfaces: Office – carpet, tile; field/plant – concrete, asphalt, dirt, gravel, mud, metal grating, sloped and uneven terrain
- Description: Performs while working underneath building structures, accessing and inspecting equipment, and performing other described job duties.

Laying on Back/Stomach:

- Average Frequency: 1 to 3 times per year
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: 4 to 8 times per year
- Maximum Duration: Short (Less than 1 hour)
- Surfaces: Office – carpet, tile; field/plant – concrete, asphalt, dirt, gravel, mud, metal grating, sloped and uneven terrain
- Description: Performs while accessing and inspecting equipment.

Climbing/Balancing:

- Average Frequency: 1 to 3 times per month
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: 4 to 8 times per month
- Maximum Duration: Medium (1 to 2 hours)
- Surfaces: Ladder or stair steps, vehicle floorboards
- Description: Performs while ascending or descending extension ladders up to 40 feet, stepladders 10 to 12 feet, stair steps at plant sites, accessing vehicle cab 1 to 3 steps.

Reaching:

Above Shoulder Level:

- Average Frequency: 4 to 8 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Medium (1 to 2 hours)
- Description: Performs during inspections, possibly while performing the most complex and difficult maintenance and repair work and retrieving or positioning items on and off upper shelves. Unilateral or bilateral upper extremities from less than full-to-full extensions at each occurrence. A variable to reaching above shoulder level includes employee's height.

Between Waist and Shoulder Level:

- Average Frequency: Greater than 9 times per day
- Average Duration: Medium (1 to 2 hours)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Medium (1 to 2 hours)
- Description: Performs while utilizing a computer keyboard and input device to enter or retrieve data, which includes reaching within the primary reach zone, operating standard office equipment including a copy or fax machine, handling office supplies, driving a vehicle in conjunction with maneuvering a steering wheel, using tools during maintenance and repair activities as needed and performing other described job duties. Unilateral or bilateral upper extremities from less than full-to-full extensions at each occurrence.

Below Waist Level:

- Average Frequency: 4 to 8 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Medium (1 to 2 hours)
- Description: Performs during inspections and performing the most complex and difficult repair work in conjunction with using tools, retrieving or positioning items on and off lower shelves, ground level, or lower areas, inspecting and accessing equipment, and performing other described job duties. Unilateral or bilateral upper extremities from less than full-to-full extensions on each occurrence.

Pushing/Pulling:

- Average Frequency: 1 to 3 times per week
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 per day
- Maximum Duration: Medium (1 to 2 hours)
- Description: Performed during

Twisting/Rotating:

Waist:

- Average Frequency: 4 to 8 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Medium (1 to 2 hours)
- Description: Performs while accessing and inspecting equipment and performing other described job duties.

Neck:

- Average Frequency: Greater than 9 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Short (Less than 1 hour)
- Description: During normal body mechanics, performs while supervising and guiding employees including overseeing the most complex and difficult tasks and performs such work as needed, driving and performing other described job duties.

Wrists:

- Average Frequency: Greater than 9 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Short (Less than 1 hour)
- Description: Performs while performing the most complex and difficult maintenance and repair work in conjunction with using a variety of basic or power tools including screwdrivers, wire strippers, pliers, and other related tools and performing other described job duties. Unilateral or bilateral hand use.

Bending:

Waist:

- Average Frequency: 1 to 3 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Short (Less than 1 hour)

- Description: Performing inspections, performing the most complex and difficult maintenance and repair work, possibly while using tools and performing other described job duties.

Head/Neck:

- Average Frequency: Greater than 9 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Short (Less than 1 hour)
- Description: Performs while supervising and guiding journey level technicians, and related positions in installation, maintenance and repair activities, overseeing the most complex and difficult maintenance and repair work and performing such work from time to time if needed including using tools, performs while reading and writing, inspecting and accessing equipment, using basic or power tools, and performing other described job duties.

Wrists:

- Average Frequency: Greater than 9 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Short (Less than 1 hour)
- Description: Performs during normal body mechanics, handling office supplies, paperwork, driving in conjunction with maneuvering a steering wheel, performing the most complex and difficult maintenance and repair work and possibly while using tools and performing other described job duties. Unilateral or bilateral hand use.

Lifting/Carrying:

0 to 10 lbs.:

- Objects: Smaller power tools (drills, grinders, air tools, grease gun, skill saw, etc.); hand tools (wrenches, screwdrivers, pliers, hammers, ratchets, strippers/cutters, etc.); small tool bag, socket set, fasteners; couplings, short sections of metal/pipe or wood; miscellaneous parts, wiring, levels, tape measures, small fire extinguisher, electrical cords, diagnostic equipment, aerosol cans, rollers, brushes, one-gallon containers, two safety cones, step-stool/ladder, broom, squeegee/mop, shovel, binders, manuals, writing utensils, telephone handset, chair
- Average Frequency: Ongoing - tasks performed throughout shift
- Average Duration: Seconds to less than 15 minutes at a time
- Maximum Frequency: Ongoing - tasks performed throughout shift
- Maximum Duration: Seconds to less than 15 minutes at a time
- Height: Ground to shoulder or above
- Distance: Average - less than 100 feet including ascending/descending stairs. Maximum - 1,000 feet
- Description: Using hand or power tools as needed, performs a variety of lifts and carries to complete the following: carpentry, electrical, plumbing, painting, landscaping, cleaning, assembling/disassembling, diagnosing, repairing, bolting, screwing, cleaning, sweeping, stocking, storing, office duties, paperwork/manuals, writing.

11 to 25 lbs.:

- Objects: Larger hand tools (large sledgehammer, large wrenches), medium power tools (pneumatic nail gun, reciprocating saws, hammer-drill, core drill), medium tool bag, bucket of tools, 3-gallon containers, up to five safety cones, medium fire extinguisher, 6' ladder, pneumatic pipe plug, shovel with dirt, picking/digging tools, sections of metal/pipe or wood, boxes of tools/parts; valves, 100' of ¾" hose, 20' of 2" suction hose, 13-gallon trash can, partial box of paper/files
- Average Frequency: Routine- 1 per hour
- Average Duration: Seconds to less than 15 minutes at a time
- Maximum Frequency: 8 times per hour
- Maximum Duration: Seconds to less than 15 minutes at a time
- Distance: Less than 100 feet, including ascending/descending stairs
- Height: Ground to shoulder or above
- Description: Using hand or power tools as needed, performs a variety of moderate duty lifts/carries to complete the following: carpentry, electrical, plumbing, painting, landscaping, assembling/disassembling, diagnosing/repairing, bolting, screwing, cleaning, stocking, storing, valve removal/replacement, battery removal/replacement; small grate and lid removal/replacement; digging and filling. Retrieval, set-up, breakdown and replacement of equipment for projects.

26 to 50 lbs.:

- Objects: Large tool bag/kit, metal chain, small electric motors, 12' ladder, 20' extension ladder, jack hammer, concrete and metal debris, flanges, couplers, sections of metal/pipe or plastic/wood, smaller valves, small impellers, band saw, flange, pipe vice, oil bucket, blower, shaft, threader, traffic signage, wheelbarrow, 5-gallon container/bucket, empty pallet, case of paper or full box of files, 30-gallon garbage can, 50' of 1" hose, 10' of 6" suction hose, valve box lid, car battery
- Average Frequency: 4 times per day
- Average Duration: Seconds to less than 10 minutes at a time
- Maximum Frequency: 4 times per hour
- Maximum Duration: Up to 15 minutes at a time
- Distance: Less than 50 feet, including ascending/descending stairs
- Height: Ground to shoulder
- Description: Using hand or power tools as needed, performs a variety of medium duty lifts/carries to complete the following: carpentry, electrical, plumbing, painting, landscaping, assembling/disassembling, bolting, stocking, storing, valve removal/replacement, battery removal/replacement; grate and lid removal/replacement; digging and filling. Retrieval, set-up, breakdown and replacement of equipment for projects. Jackhammer use includes pushing, pulling, partial lifting, lifting, and guiding.

51 to 60 lbs.:

- Objects: 28' extension ladder, 10' step ladder, confined space winch, wheelbarrow, medium electric motor, medium VFD unit, steel flanges, steel elbows/necks/spools, couplers, longer sections of metal/pipe or wood, 100' of 1" hose, truck battery, 30' of 2" hose, 15' of 6" hose, 4' x 4' aluminum vault lid, sandbag, small steel stormwater grating

- Average Frequency: 4 times per month
- Average Duration: Seconds at a time
- Maximum Frequency: Four times per day
- Maximum Duration: Less than 1 minute at a time
- Height: Ground to waist
- Description: As needed for activities including repair and construction projects; retrieval, set-up, breakdown and replacement of project equipment; confined space entry set-up/breakdown, accessing vaults, collections infrastructure repair, flood preparations.

61 to 120 lbs. (two-person lifts):

- Objects: 32' extension ladder, AA frame ladder, forklift propane cylinder [63 pounds shoulder height], 2' submersible pump, portable railing anchor plate, trash pumps, vault lid, electric motors, VFDs, confined space base tripod, bollards, jumping jack, steel manhole covers, steel piping, 15' or more of large suction hose, generator, 8" x 20' suction pipe, large steel stormwater grating, various steel valves, flanges, elbows up to 150 lbs.
- Average Frequency: As assigned - 1 to 4 times per month
- Average Duration: Seconds at a time
- Maximum Frequency: As assigned – 4 times per day
- Maximum Duration: Less than a minute at a time
- Distance: Less than 25 feet
- Height: Ground to waist
- Description: As needed for non-routine projects and activities including repair, replacement or construction projects; confined space entry set-up/breakdown, accessing vaults, collections infrastructure repair. Lifting straps are to be used if safety will be increased.

Dragging/Pulling:

76 to 100 lbs. (single-person pulls):

- Objects: Floor jack, manhole covers, 100' of charged 1" water line, charged suction lines, metal grating, aluminum pipe, heavy duty electrical wire, long sections of plastic or wood, collections equipment jetting lines, collections camera tether/cable
- Average Frequency: 4 times per month
- Average Duration: Seconds to less than 10 minutes at a time
- Maximum Frequency: Four times per day
- Maximum Duration: 5 minutes
- Distance: Less than 5 feet to 100' feet for collections lines
- Height: Ground level or partial lift of one end from ground
- Description: A combination of pulling and/or partial lifting as needed to move heavy objects including: using a floor jack, removing and replacing a manhole lid with a metal hook, dragging hose, dragging lengths of pipe, wood or metal, dragging metal grating. Lifting straps are to be used if safety will be increased.

Grasping:

Simple:

- Average Frequency: Ongoing - tasks performed throughout shift
- Average Duration: Seconds to less than 15 minutes at a time
- Maximum Frequency: Ongoing - tasks performed throughout shift
- Maximum Duration: Seconds to less than 15 minutes at a time
- Description: Performs while operating a variety of equipment (forklifts, truck, golf cart, tractor, backhoe, etc.); operating small power tools; using small hand tools; retrieving and relocating miscellaneous tools, parts; utilizing a telephone handset, handling paperwork; utilizing caulking and grease guns; spraying aerosol cans; painting with rollers or brushes, mopping, sweeping, vacuuming, landscaping; scraping, utilizing a squeegee; any grasping necessary to complete required lifts/carries below 25 lbs. Unilateral and bilateral hand use.

Power:

- Average Frequency: Routine- 1 per hour
- Average Duration: Seconds to less than 15 minutes at a time
- Maximum Frequency: 8 times per hour
- Maximum Duration: Seconds to less than 15 minutes at a time
- Description: Performs while utilizing a shovel, digging bar or pick while digging; operating a jackhammer in conjunction with pushing, pulling, partial lifting and guiding; utilizing wrenches to remove or secure and torque bolts; using pry bars, wrenches, levers; tie down and securing equipment; utilizing wide variety of power tools grinders, electric chop saw, presses, drills, chainsaw, installing cabinetry including repairing walls. Any grasping necessary to complete required lifts/carries and pulls above 25 lbs. Unilateral and bilateral hand use.

Fine Manipulation:

- Average Frequency: 4 times per day
- Average Duration: Seconds to less than 5 minutes at a time
- Maximum Frequency: 2 to 3 hours
- Maximum Duration: Seconds to less than 10 minutes at a time
- Description: Performs while using of small hand tools (screwdrivers, small sockets, Allen wrenches, etc.), placing bolts, nuts, screws, nails, small parts; joining small components; using electrical testing equipment; making equipment adjustments, using machine-user interfaces, utilizing a writing utensil, using computer keyboards/tablets and mouse, touchpad or touch screens; using telephone. Unilateral or bilateral hand use.

Machine/Tools:

The machines and tools listed here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions:

- Drills
- Pneumatic nail gun
- Pliers
- Tape measures
- Sockets
- Socket adapters
- Ratchets
- Wrenches
- Screwdrivers
- Reciprocating saws
- Hammers
- Diagnostic tools
- Allen wrenches
- Digging bar
- Pick
- Writing utensil
- Telephone handset
- Sledgehammer
- Grinders
- Air tools
- Grease gun
- Skill saw
- Levels
- Square
- Wire strippers
- Spray can
- Roto hammer
- Jackhammer
- Pipe wrenches
- Presses
- Chop saw
- Computer keyboard, mouse, monitor
- Band saw
- Cut off saw
- Forklift
- 28-ton truck
- Golf cart
- Tractor
- Backhoe
- Aerial lift
- Dollies
- 4-wheeled cart
- Wrenches
- Motors
- Ladders
- Valves
- Generators
- Electric snakes
- Rollers
- Blowers
- Vacuum
- Broom
- Mop
- Squeegee
- Paint brushes

Weights and Measures:

The items listed here to be weighed or measured are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions:

Items Weighed:

- 4" C-900 pipe fitting – 6 lbs.
- 6" C-900 pipe fitting – 12 lbs.
- Gas Can (2 gallon) – 13 lbs.
- Suction hose (2" x 20' Green PVC) – 16 lbs.
- 6" x 4" I-beam – 20 lbs.
- Flow thru plug 6-8" – 20 lbs.
- 8" C-900 – 23 lbs.
- Pneumatic plug 10-18" – 25 lbs.
- Pipe (4" x 20' SDR 35) – 27 lbs.
- 3/8" chain – 28 lbs.
- Valve box lid (B12) – 28 lbs.
- Shoring (2' x 24-36" cylinder) – 30 lbs.
- Discharge hose (2" x 50' blue PVC) – 30 lbs.
- Cut off saw (hot saw) – 32 lbs.
- Jack hammer (30 pound) – 33 lbs.
- Gas can (5 gallon) – 33 lbs.
- Firehose (2.5" x 50') – 34 lbs.
- Confined space blower – 35 lbs.
- Electric motor (1 HP) – 35 lbs.
- Ventilation Blower (12V) – 36 lbs.
- Confined space winch – 41 lbs.
- Storm drain inlet (2x2) – 42 lbs.
- 20' extension ladder – 42 lbs.
- Concrete/Asphalt debris – 50 lbs.
- 6' plug hand crank – 50 lbs.
- Standard wheelbarrow (full) – 50 lbs.
- Metering vault lid (open) – 52 lbs.
- 28' extension ladder – 57 lbs.
- Traffic valve box (G5) – 58 lbs.
- Sandbags – 60 lbs.
- Pipe (4"x6' mission clay) – 60 lbs.
- Perma-Patch sack (60 pound) – 60 lbs.
- Concrete sack (60 pound) – 60 lbs.
- 2" Submersible sump pump – 60 lbs.
- Pipe (6"x20' SDR 35 – 61 lbs.
- Bumper crane assembly – 62 lbs.
- Lumber boards (2"x12"x16') – 64 lbs.
- Jack Hammer (60 pound) – 65 lbs.
- 2x4 grate – 71 lbs.
- Jet hose (pulling) – 71 lbs.
- Bollards (remove and replace) – 72 lbs.
- 32' extension ladder – 72 lbs.
- 4" plug valve – 75 lbs.
- 24" Manhole lid (open/lift) – 75 lbs.
- Concrete Sack (90 pound) – 90 lbs.
- Plywood (4'x8'x 1 1/8") – 94 lbs.
- Confined space base (tripod) – 95 lbs.
- Valve box (B12) – 96 lbs.
- Jack hammer (90 pound) – 97 lbs.
- Move furniture – 100 lbs.
- 2" Trash Pump (187 GPM) – 104 lbs.
- Pipe (8"x20' SDR 35) – 110 lbs.
- 4" gate valve – 114 lbs.
- 6" gate valve – 194 lbs.
- Manhole lid (36" diameter) – 229 lbs.

PERSONAL PROTECTIVE EQUIPMENT

Depending on the hazard, the employee is required to wear head, hearing, eye, foot, face, respiratory, body harness, and/or hand protection.

ENVIRONMENTAL ELEMENTS

- Employee is frequently exposed to outside weather conditions
- Employee is occasionally exposed to high, precarious places
- Employee is exposed to confined spaces; fumes or airborne particles; toxic or caustic chemicals
- Employee is exposed to unpleasant smells and odors
- Employee is exposed to moderate cold, moderate heat
- Employee is exposed to risk of electrical shock or mechanical hazards
- Employees in this classification may perform duties that involve a potential risk of exposure to blood-borne pathogens
- The noise level in the work environment is usually loud
- Employee, as needed, works indoors, office setting, climate controlled

NOTICE: The examples of functions, responsibilities, work environment, physical demands etc. listed in this Job Analysis are representative only, and not exhaustive of the tasks that an employee may be required to perform.