

COUNTY OF SOLANO

CLASS SPECIFICATION

PUBLIC WORKS MAINTENANCE WORKER

CLASS SUMMARY:

Under general supervision, performs construction and maintenance work on Public Works projects. This journey level class performs a wide variety of tasks related to construction, repair, and maintenance of roads, flood control channels, roadside drainage, bridges, and traffic markings and signs. Public Works Maintenance Worker does some grounds keeping work along roads, drainage channels, etc. and is done primarily to keep them free of obstructions, fallen limbs, overgrown vegetation, etc. Incumbents may be assigned to the Roads, Traffic Maintenance, or Flood Control sections.

DISTINGUISHING CHARACTERISTICS:

This class is distinguished from the:

- **Public Work Maintenance Worker (Trainee)** class which is the entry level class for the series.
- **Public Works Maintenance Worker (Senior)** class which is primarily a heavy equipment operator (motor graders, backhoes, striper truck, etc.) and may lead the work of a crew in road repair activities.

SUPERVISION RECEIVED AND EXERCISED:

- Supervision is provided by a Public Works Maintenance Supervisor.
- No supervision is exercised over others, however may provide consultation and advice to Public Works Trainees.
- May receive lead direction from a Public Works Maintenance Worker (Senior).

ESSENTIAL DUTIES: *This class specification represents the core area of responsibilities; specific position assignments will vary depending on the needs of the department.*

Depending on whether assigned to the Channel Maintenance, Traffic Maintenance, or Road Maintenance unit, duties may include but are not limited to the following:

- Performs the following Channel Maintenance duties:
 - Drains roadside rain and flood waters and clears fallen trees and limbs, mud slides and other road hazards; clears and trims brush, trees, tree limbs and other material from the roadside, channels, channel roads, bridges or levees; operates loader power broom, shears, chain saws, chipper, and a variety of light and heavy mowers; sweeps intersections clear of debris and loose gravel.
 - Reconstructs damaged bridges, channels or levees and manually places rip rap; repairs access road washouts, fences, and access gates on wood and chain link fences by using small hand tools and welders as needed; repairs, installs or replaces culverts

- using front end loader, backhoe and a variety of power equipment; replaces water channel flap gates.
- Daily pre-operation and post-operation inspection of equipment to which assigned.
- Performs the following Traffic Maintenance duties:
 - Stencils traffic lettering and speed limits on roadway using stencils and spray paint equipment and maintains a stenciling log; helps strip roads by finding the center of the roadway and marking the center using “cat pawing” techniques or by operating the lead car for the striper and filling the striper with paint and reflective beads; installs pavement markers. Installs and repairs road signs and sign posts at proper height and angle and regularly inspects all signs on an assigned route; washes all signs. as needed and maintains a traffic sign log book; fabricates road signs using various materials, color and lettering in accordance with highway regulations and current needs; operates computerized sign making equipment.
 - Installs raised pavement markers.
 - Inspects repairs and replaces bridge navigational lights.
 - Daily pre-operation and post-operation inspection of equipment to which assigned.
- Performs the following Road Maintenance duties:
 - Operates a dump truck and attached equipment to haul asphalt or other materials and spread material on roadways for chip sealing or dust coating or blade patching; installs guardrails along County roads; installs pavement markers.
 - Assists in permanent patch, pothole patch, chip seal, tack oiling, dust coat, blade patch, crack sealing, and pavement removal and replacement on various road projects; applies oils, aggregates, and blacktop to roadways; uses level lute, and various manual and power rollers to spread, level and compact road materials, installs pipe culverts under roadways; may keep track of bottom dumps of road aggregates during road construction and use calculator to compute amounts delivered
 - Performs operator maintenance, according to lube chart or owner’s manual, on equipment; fuels mobile equipment and check fluid levels; change oil on small engines, lube vehicles, inspect brakes, inspect steering and suspension systems, check tires and lighting systems.
 - Daily pre-operation and post-operation inspection of equipment to which assigned.
- Performs other duties as assigned.

EDUCATION AND EXPERIENCE:

- **Education:** High School Diploma, GED, or equivalent; **AND**
- **Experience:**
 - **Either:** One year of full-time paid experience construction and road maintenance work equivalent to journey level public works maintenance worker; **OR**
 - One year of full-time paid experience in the Solano County class of Public Works Maintenance Worker (Trainee).

LICENSING, CERTIFICATION AND REGISTRATION REQUIREMENTS:

- Applicants are required to possess a valid California Driver's License, Class A with any required endorsements.
Notes: The driver's license must be kept current while employed in this class. A Hazmat certification may be required.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Knowledge of:

- Methods, techniques and materials used in road work such as chip sealing, patching, dust coating, crack sealing, oiling, pavement removal and replacement.
- Operation of equipment and tools commonly used on road construction, traffic signing, pavement marking, and channel/bridge maintenance, repair and reconstruction.
- Motor vehicle code as it relates to the operation of construction equipment.
- Traffic sign construction.
- Traffic sign regulations and Requirements.
- Tree trimming methods and techniques.
- Pavement marking methods and techniques.
- Pavement marking regulations and requirements.
- Guardrail installation and repair methods.
- Use of herbicides and maintenance of spray equipment.
- Carpentry tools and methods as they relate to concrete forms and fences.
- Methods and techniques of lifting and cribbing bridges.
- Methods of working with asphalt and concrete.
- Materials, compaction methods and placement of material rip rapping.
- Backfill, and run off protection around bridges, channel slopes and levee slopes.
- Safe work methods around heavy equipment traffic, canals and stream beds
- Customer service techniques for dealing with customers.
- Basic english composition, spelling, grammar, vocabulary, and punctuation for both written and oral communications.
- Standard office procedures, practices, equipment, personal computers, and software.

Skill and/or Ability to:

- Operate a variety of construction equipment in a safe and efficient manner;
- Service and make minor adjustments and repairs to construction equipment.
- Follow and understand verbal and written directions.
- Detect uneven surfaces and level them out.
- Establish and maintain cooperative working relationships.
- Demonstrate tack and diplomacy.
- Work safely around vehicular traffic.
- Proofread and/or edit for errors in spelling, grammar and punctuation on road signs.
- Read and understand highway manuals regarding traffic signing and marking.

- Operate hand and power pruning tools, power washers and spray painting and equipment.
- Work at heights
- Make routine arithmetical calculations.
- Determine the center of a roadway.
- Determine proper sign placement and alignment.
- Work around and mix paints, solvents, and glues.
- Weld and construct fences and concrete forms.
- Work with asphalt and concrete.
- Maintain balance in and around streams
- Organize and prioritize work assignments.
- Maintain accurate records and document actions taken.
- Establish good relationships with the public and internal customers.
- Use modern office equipment to include computers and related software applications.
- Operate and maintain a variety of hand and power tools properly and safely.

PHYSICAL REQUIREMENTS:

- **Mobility and Dexterity:** This class typically requires employees to perform the following: (1) balancing, stooping, kneeling, reaching, crawling, fingering, grasping, and repetitive motion; (2) climbing and working safely on ladders and step ladders with a total weight that does not exceed the weight capacity of the ladder or the highest rated capacity of the harnesses and lanyards used for fall protection; and (3) standing or walking during normal work hours on uneven surfaces.
- **Lifting, Carrying, Pushing and Pulling – Heavy work:** This class typically requires employees to perform the following: exerting up to 100 pounds of force occasionally with assistance, and/or up to 50 pounds of force frequently, and /or up to 20 pounds of force constantly to move objects.
- **Vision:** This class requires employees to have close visual acuity, with or without correction, to prepare and analyze data and figures, view a computer terminal, read, and to distinguish between normal and off shade colors and to read gauges and meters in dimly lighted areas etc. Employees are also required to have depth perception and good eye-to-hand coordination in order to operate a motor vehicle and to operate a variety of hand and power tools.
- **Hearing/Talking:** This class requires employees to perceive the nature of sounds at normal speaking levels with or without correction, and have the ability to receive detailed information through oral communication. Employees in this class are also required to be able to communicate to express or exchange ideas. Detailed or important instructions must occasionally be conveyed to others accurately, loudly, and/or quickly.
- **Other:** This class typically requires employees to have sufficient sense of smell, and touch to observe equipment functions for normal and abnormal occurrences.

WORKING CONDITIONS:

- **Outdoor Work:** Employees in this class will often be working outdoors and thus may be subject to exposure to intense noises, fumes, odors, pollens, dust, inadequate lighting, and to unpleasant field conditions including rainy, windy, cold, or hot weather; may be exposed

to e.g. insects, rodents, snakes, bees, wasps, spiders, ants, etc. employees may work in high water streams, rivers and channels; employees may be required to work with hot paving materials.

- Work in an Industrial Area: Employees in this class will often be working in an industrial area and thus will be subject to exposure to moving mechanical parts, electrical currents, toxic agents, fuel, oil, gases, smoke, fumes, odors, dust, and vibrations. Employees may be subject to injuries when working with hand and power tools and equipment.
- Traffic Hazards: Employees in this class will be required to operate a vehicle and thus may be subject to traffic hazards while driving.
- Working at Heights: Employees in this class may be required to work at heights 50-75 feet above the ground on equipment and structures.

OTHER REQUIREMENTS:

- Background Checks, Reference Checks and Physicals: The County will conduct a background check, a reference check and a physical on candidates prior to appointment to a position within this class.
- Independent Travel: Incumbents are required to travel independently, to perform work at other work sites, etc.
- Hours of Work: Incumbents may be required to work weekends, holidays, irregular hours, on-call, and after normal business hours.
- Drug and Alcohol Testing: Candidates applying for positions in this class are subject to, drug and alcohol testing as required under the Federal Omnibus Transportation Employee Testing Act of 1991. Testing of incumbents includes post-accident, as well as random and reasonable suspicion testing as required by law.

CLASS HISTORY AND CLASS INFORMATION:

- Date Approved by the Civil Service Commission: October, 1992
- Date(s) Revised: February, 1996, September 2016
- Class Code: 973040