

# ***SOUTHWEST TEXAS JUNIOR COLLEGE***

## ***PREVENTIVE MAINTENANCE PLAN***

The preventive maintenance plan includes procedures for routine preventive, corrective, and deferred maintenance of college equipment and facilities, performed on a daily basis or at regularly scheduled intervals (deferred maintenance & custodial services covered under separate plans). This plan validates the College's costs for maintenance, while assuring the adequacy of its physical resources to provide an atmosphere for effective learning, and to meet the institution's stated purpose, programs, and activities.

The Maintenance Director schedules regular maintenance activities, and requires documentation of completed projects. The maintenance staff performs building checks at the beginning of every week. Environmental conditions of campus spaces, lighting systems, mechanical systems operation, and general facility conditions are verified to be adequate and operational. If not, general repairs or deficiencies are corrected, as soon as practical. Such repairs are noted in an activity report, if appropriate. Life safety equipment such as emergency lights, exit signs, fire extinguishers, and exit devices are included in building checks. All mechanical devices, including door hardware, motor-driven equipment, and toilet facilities, are checked monthly for proper operation. The administrative assistant for maintenance forwards online work orders received from College employees (via School Dude Software) to the appropriate staff member on a daily basis. Campus Police also report any needed repairs that they notice during evening building checks.

Equipment involving specialized training or equipment with proprietary components are outsourced for preventive maintenance service. Written documentation of the inspections, results, repairs, and cost are required to be provided to the College. Bids for maintenance contracts are solicited from qualified vendors, in accordance with State Purchasing Guidelines. Items generally covered by service contracts are: annual fire alarm inspections, annual kitchen exhaust hood fire suppression system re-charging and certification, annual sprinkler system inspections, and annual backflow preventer inspections (and others as they occur).

### **College Vehicles**

Manufacturers' recommended maintenance activity schedules for mechanical equipment service, including filter changes, oil changes, grease, belt adjustments, etc., are observed. All college vehicles, including all engine-driven equipment, are maintained in accordance with service manual recommendations. All major repairs, replacements, and service routines are noted in the vehicle service logs.

## **Custodial**

Custodial policies and procedures are located in a separate custodial handbook. The purpose of this handbook is to provide consistency in services for all Southwest Texas Junior College custodial staff. This handbook provides a description of the way proper cleaning is expected to be done on all SWTJC campuses. The goal of the institution in this regard is to focus on what is best for both building occupants and the environment as we continually research and review industry trends, products and new ideas.

## **Groundskeeping**

The Groundskeeping Department is responsible for the upkeep and sanitation of the college's landscaping/sidewalk areas, and their support systems. Serviced areas include: sidewalks, driveways, streets, parking lots, turf areas, plants, gardens, outdoor fountains, and other areas on college property. This includes mowing, edging, fertilization, parking lot clean-ups/trash pick-ups, some minor parking lot repairs, all plant bed, and yard maintenance tasks. Other duties include the maintenance of all equipment used (small engines, edgers, blowers, string trimmers, and hand tools) in accordance with the manufacturers' recommendations. Written equipment logs and service schedules are maintained.

Repairs and/or resurfacing of concrete sidewalks, and asphalt drives and parking lots are addressed by annually scheduled routine preventive maintenance.

- Daily
  - Blow off sidewalks
  - Pick up litter
  - Make repairs of equipment before starting duties
  - Check with supervisor for planned daily duties
  - Check for leaks and malfunctioning sprinkler system heads
- Weekly
  - Mow/trim campus
  - Help custodial staff with cigarette butts and outside trash as needed
  - Pull weeds in areas needed
  - Clean work areas before leaving for the day
  - Maintain Administration Building fountain level
- Monthly
  - Do randomly scheduled groundskeeping tasks
  - Prune and replace dead plant material

- Clean mulched plant beds and landscaped areas
- Apply chemicals for grass and weeds in parking lots, sidewalks, curbs, islands
- Fertilize grass and plants
- Clean and apply chemicals to Administration building fountain
- Clean up all curbs and street gutter areas
- Load and haul off debris from around campus
- Cut down any and all bad trees on campus
- Trim trees (within appropriate pruning dates)

#### Yearly

- Help set up for various indoor/outdoor activities on and off campus
- Clean parking lots after each event
- Remove trash cans from each event
- Remove leaves from campus
- Seed or sod turf areas on campus
- Replace or clean rock or mulch in landscaped areas (as needed)

#### Special Duties

- Help unload trucks for purchasing department
- Assist inside with the maintenance department with special job requests
- Help install signs
- Take truckloads of trash to local landfill
- Pick up loads of rock/mulch for campus areas
- Help with auctions of college property
- Other duties as assigned by the Director of Maintenance

#### **Routine Preventive Maintenance**

- Weekly checks of buildings must be performed at the beginning of each work week. Any noted deficiencies must be corrected as soon as possible.
  - Environmental conditions (heating and cooling)
  - Lighting
  - Equipment operation
  - Elevators or lifts
  - Automatic handicap doors
  - Air compressors drained and oil level checked
- Weekly checks must be made of all mechanical and motor driven equipment. Equipment requiring specialized training for service &/or repair will be outsourced.

- The manufacturers' recommended service schedule must be followed to include but not limited to: filter changes, oil changes, and belt adjustments, and hose inspections.
- All college vehicles must be serviced as outlined in the OEM service manuals.
- All major repairs, replacements, and routine service must be listed on the monthly reports and vehicle service logs.
- Monthly checks must be made of all life safety apparatus, including:
  - All fire extinguishers are verified to be fully charged and operational
  - Emergency eyewash stations and deluge showers are confirmed to be fully operational.
  - Kitchen exhaust hood filter racks are checked to be clean, and that fire suppression systems have not been discharged.
  - Emergency lighting checked to be fully operational.
- Other monthly checks include:
  - Clean and refilling of Administration fountain
  - Inspection and repairs of all restroom fixtures
  - Interior and exterior lighting is checked to be operational
  - Door hardware
  - Grease trap cleaning and inspection
- Quarterly repairs and inspections include:
  - Cleaning of all roofs and roof drains
  - Changing air filters on all equipment that is not covered under a maintenance agreement
  - Lubrication of bearings on equipment not covered under a maintenance agreement
  - Belts are inspected and replaced if needed on all air handling equipment.
- Annual roof surveys and evaluation are conducted by the maintenance staff.
  - Immediate roof repairs are accomplished under Corrective Maintenance procedures.
- Annual evaluation and reconstruction of asphalt paving and exterior concrete patios, curbing and sidewalks
  - Identify parking lots, drives that have the most immediate need for resurfacing, and prioritize the expenditure of budgeted funding.
  - Asphalt areas indicated by the annual evaluation to be resurfaced in the most distant future may require remedial improvements to extend longevity until resurfacing can be accomplished.

Anticipated replacement or repairs of any kind may be considered under Deferred Maintenance. Immediate repairs of any kind are accomplished under Corrective Maintenance procedures.

## **Corrective Maintenance**

The goal of the Maintenance Department is to have zero calls for problems or deficiencies, attainable by following the *Preventive Maintenance Program*.

Corrective Maintenance activities are scheduled by the Maintenance Director or as authorized by the Vice President for Administrative Services. Trouble notifications are received by telephone, electronic sources, or online work orders to the Maintenance Operations Office. Safety concerns or life threatening situations are quickly relayed to personnel responsible for immediate action. Calls concerning environmental comfort are verified through the energy management system prior to dispatching a technician. Work orders are assigned a number and priority for tracking purposes, when approved by the Maintenance Director. When the work order is completed, it is returned to Administrative Assistant for Maintenance Operations for future reference or cost tracking.

- Work order must be approved by the appropriate Vice President or Associate Vice President before being submitted to the Maintenance Director.
- Corrective action must be taken immediately to solve safety and life threatening problem.
- Work orders must be assigned numbers for control purposes.
- Copies of work orders that have been completed will be maintained in the Maintenance Department.

## **Deferred Maintenance**

The Maintenance Department participates in the process to meet the needs of the college facilities and grounds, through the short-range and long-range planning process. The *Preventive Maintenance Program* identifies deferred items by referencing historical costs, age (end of life usage), corrective maintenance performed, and in some cases energy usage. Corrective and sometimes even routine maintenance of items slated for replacement or repair may not be cost-effective, for the amount of funding and/or effort expended for the service. If this is the case, such an item is then added to the deferred maintenance log, or short-range plan.

Lack of funding also creates deferred maintenance situations. In these cases routine maintenance or preventive maintenance is postponed until necessary funds are made available for repairs or replacement. Items requiring emergency corrective action may be determined to be a deferred maintenance item. Repair parts availability or scheduling may dictate the need to immediately repair the item with the most cost-effective means, until the replacement component or permanent updates can be performed. These items need to be prioritized in the short and long range plans.

- All campus facilities must be inspected on a routine basis.

- Estimates for cost of replacements for facilities, equipment, and repairs are evaluated each year.
- Major repairs, replacement items, and additions will be listed in the college Strategic Plan and action will be taken as funds are appropriated.
- The Maintenance Director will be responsible for annual updating of the *Preventive Maintenance Plan*.
- Evaluation of maintenance procedures is an ongoing function.

Note: Separate Deferred Maintenance Plan available.