

Parks and Open Space Department Maintenance Plan May 2024

Table of Contents

Overview	
Our Mission and Guidin	g Principles3
Mission	
Guiding Principles	
Organization of Parks an	nd Open Space Divisions:4
Park Maintenand	ce4
Open Space	
Trails	
Forestry	
□ Athletic Fields	
PARK MAINTENANCE	E DIVISION
Park Maintenance Distri	cts Map:5
Categories of Mainten	ance5
Mowing and Turfgr	ass Maintenance:5
Multipurpose Athle	tic Field areas:6
Irrigation:	7
Horticulture:	
Site Amenities:	
Dog Parks:	
Compost pile	
Preventative Mainte	enance11
OPEN SPACE DIVISIO	N12
Categories of Mainten	ance12
Open Space and Veg	getation Management in Active Recreation Areas:
Open Space and Veg	getation Management in Passive Recreation Areas:12
Special Events and	City Requests:14
TRAILS DIVISION	
Categories of Mainten	ance14
Hard and Soft Surfa	ace Trails:14
FORESTRY DIVISION	
Categories of Mainten	ance15
Tree Establishment	and Care:
Large Tree Care:	

ATHLETIC FIELD MAINTENANCE DIVISION	
Categories of Maintenance	
Multipurpose Fields:	
Synthetic Turf Fields:	
Hard Surface Play Courts:	
Baseball/Softball Skinned Infields:	
SNOW REMOVAL	
PARKS CLASSIFICATION	
Mini Parks	21
School Parks	
Civic Parks	
Nature Parks	
Trails, Trail-heads, ROWs	
Neighborhood Parks	24
Community Park	25
Regional Park	25
Facilities	

Overview

The goal of the Parks Maintenance Division is to present a positive image, safe and clean facilities and well maintained properties that encourage stewardship of parks, trails and open spaces while offering a pleasurable experience for the residents and visitors of our facilities.

The Parks Maintenance Division is responsible for over 846.10 acres of developed parkland, 1678.86 acres of open space, 125 miles of trails as well as landscape features at facilities. Main areas of emphasis include:

- Turfgrass
- Irrigation
- Horticulture
- Site Amenities & Playgrounds
- Open Space
- Trails
- Forestry
- Athletic Fields and Play Courts
- Facilities

In establishing this maintenance plan we have used South Suburban Park and Recreation guiding principles and objectives of the master plan along with industry standards to guide us as we strive to provide the residents of South Suburban with high quality park, trail and open space facilities. In order to achieve and maintain these standards we intend to hire the right people for the right job and provide necessary training and professional development.

Our Mission and Guiding Principles

Mission

South Suburban Park and Recreation District is a citizen founded organization with a mission to foster healthy living through stewardship of the environment, parks, trails and open space, by providing recreational services and programs.

Guiding Principles

Guiding principles are broad initiatives describing what SSPRD aspires to achieve. The mission, vision and guiding principles chart a course towards ensuring SSPRD's long-term sustainability and ability to contribute to the community's physical, emotional and social wellness.

Quality First - We aim to consistently create a positive experience for our community. We strive to maintain and improve the quality of our offerings and customer service with innovations to remain industry leaders.

Connect Community - We create an inclusive culture that engages, welcomes and connects all members of the community to feel a sense of belonging in our spaces and programs. We effectively communicate and provide diverse offerings which are accessible to all ages, abilities and cultures.

Enrich Wellness - We prioritize wellness by offering indoor and outdoor recreation that strengthens bodies, engages mind and refreshes a person's spirit. We facilitate wellness by providing recreation opportunities that represent the characteristics and needs of our diverse neighborhoods and communities.

Stewards of Nature and Sustainability - We conserve and enhance natural systems with green spaces, wildlife areas and water recreations that promote interaction and respect for nature. We provide environmental education and volunteer opportunities to encourage community stewardship. Our spaces are designed and managed to be resilient environmental assets.

Fiscal Responsibility - We make investments with a long-range view of fiscal responsibilities, balancing emerging needs while maintaining the quality of indoor facilities, outdoor spaces and programs. We use funding responsibly and are transparent about priorities. We manage resources through extensive planning processes, investing in infrastructure, efficient operations and strategic partnerships.

Organization of Parks and Open Space Divisions:

The following maintenance practices fall under the oversite of the Assistant Director of Parks & Open Space and are supervised by two managers, Park Maintenance Manager and Open Space, Trails & Forestry Manager.

- Park Maintenance
 - o Turfgrass management
 - Irrigation management
 - Playgrounds
 - Horticulture
 - Site furnishings and amenities
- Open Space
- Trails
 - Hard surface and Soft surface
 - Parking lots
- Forestry
- Athletic Fields

PARK MAINTENANCE DIVISION

The Park Maintenance Division is broken down into six park maintenance districts and one Mary Carter Greenway maintenance district. The park maintenance districts (PMD) are responsible for all maintenance within the parks with the exception of large tree pruning or removal, which is performed by the Forestry Division. Park maintenance includes; turf management, irrigation, playground inspection and repairs, horticulture and all site furnishings and amenities within the parks. The Mary Carter Greenway (MCG) maintenance district is responsible for the maintenance along the South Platte River from Reynold's Landing to the SSPR District boundary north of US Highway 285 / Hampden Ave.

Park Maintenance Districts Map:



Categories of Maintenance

Mowing and Turfgrass Maintenance:

Mowing: Turf areas are mowed weekly, beginning mid-April through the end of October. The parks are mowed at a height of 2.5" each week during the growing season. A mowing schedule is developed prior to the start of the mowing season to coordinate with irrigation programming. When a mowing schedule is interrupted by adverse conditions including, but not limited to rain, the site will be mowed two times the following week to achieve the desired turf height without damaging the plant. All trash and litter from the turf area is removed prior to initiating any mowing of the turf area. Mowing equipment is equipped with sharp blades so as not to tear but cleanly cut the blade of grass. Turf is mowed in a professional manner to not scalp turf or leave areas uncut. Care will be taken to prevent discharge of clippings onto paved surfaces, tree wells and shrub beds.

Clippings: Clippings that accumulate on the turf will be removed prior to leaving the site when excessive accumulation is observed. Sweeping of all turf is not necessary, but piles and swaths of excessive clippings will be removed prior to leaving the site. Appropriate methods of disposal will be done off site. Cut grass and debris that is discharged onto paved areas such as streets, sidewalks, driveways, and adjacent properties is removed before the crew leaves the site.

Trimming: Parks are line trimmed in conjunction with the mowing operations. All trimming is done at the same height as the adjacent turf, 2.5". Trimming is done using a line trimmer and special care is taken while trimming around trees so as not to inflict damage to the bark of the tree. Similar care is taken around fence posts, benches, boards, signs, etc. to prevent damage to those amenities as well.

Edging: All sidewalks and curbs are mechanically edged using a metal blade, exposing the concrete surface. All materials dislodged by edging are removed from the site or mulched into the turf area, at the time edging occurs. Edging is performed as needed throughout the year.

Aerification: Parks are core aerated twice per year. In parks less than 3 acres, a smaller walk behind or pull behind with a small UTV or similar size vehicle is utilized. These are core aerations that target 3-to-4-inch depth and the aeration cores are left on site to break down into the turf grass area.

Fertilization: Parks receive up to three applications with a total of 2# of nitrogen per 1000 square feet. Fertilizer is applied by either a walk behind drop spreader or broadcast spreader. Smaller mechanical spreaders may be used to increase efficiency on larger open areas. Care is taken to not distribute fertilizer onto hard surfaces, playgrounds and open spaces. Each site is cleaned of over-distribution by utilizing a blower or broom to move the product back into the turf grass areas. Bulk fertilizer applications are done without the use of phosphorus. However, phosphorus may be used in the middle of a park or on an athletic field to promote root growth in order to recover from programmed use. Spot specific application such as this keeps it contained, preventing runoff.

Seeding: Parks are over seeded as needed to repair thin, worn, or less aesthetically pleasing areas at the PMD Supervisor's discretion. Over seeding is performed at a rate of 4lbs per 1000 square feet and is done by utilizing a mechanically driven slit seeder or broadcast seeding. This task is planned near the time of aeration and is usually in the spring and fall seasons.

Top Dressing: PMD Staff will top-dress when needed at the PMD Supervisor's discretion. Top dressing is done by spreading a topsoil or planters mix at a depth of ¹/₈ to ¹/₄ of an inch deep across a park area. This process provides organic nutrients to the soil, protects the crown of the plant, changes the soil profile over time, helps protect newly seeded areas from erosion and helps keep seed moist during germination periods.

Weed Control/Herbicides: All parks are targeted to be sprayed once during the late spring / early summer or in the fall with a selective herbicide depending on the target. Tree wells and mulch beds are sprayed up to three times per year with a non-selective herbicide. Boom sprayers may be used for applications to large turf areas for broadleaf control. Backpack sprayers are utilized in smaller areas, shrub beds, and tree wells for either selective or non-selective applications. Pre-emergent applications are conducted at the time of year necessary to achieve desired control of the target.

Trash and Debris Collection: Twice per week between April and October, trash and debris is removed from the site during routine visits. During the months of October through April, trash and debris is checked and removed during routine site inspections.

Multipurpose Athletic Field areas:

Aeration with Pro-Core: Deep tine aeration with the Pro-Core will occur on all high wear areas of athletic fields at least once per year. All efforts will be made to ensure this occurs two to three weeks before or after conventional aeration occurs. This process will be done in conjunction with conventional core aeration and will not be used to replace core aeration in the spring and fall. The maintenance staff will ensure there is enough soil moisture to penetrate the soil profile to a depth up to 8 inches in depth.

Aeration with Slicer: The Aerway aerator is pulled behind the turf tractor to assist with alleviating compaction problems. The blades will slice the surface of the field opening up aerification points without leaving cores behind. The slicer will be utilized on all multipurpose fields at an as needed basis from April to the end of October and at the PMD Supervisor's discretion. The maintenance staff will ensure there is enough soil moisture to allow the Aerway to penetrate the soil profile up to 6 inches in depth.

Fertilization: Spring fertilization for athletic fields will follow that of all turfgrass areas. In the fall, the application will occur later in the year. One pound of Nitrogen per 1,000 square feet will be applied in late October to be timed with after the last mowing but before the turf has gone dormant. It will be predominantly fast release Nitrogen. In addition to these two applications, two additional applications of one-half pound of Nitrogen per 1,000 square feet each will be made, one in June and one in August. These will be applied to all soccer/lacrosse goal boxes and multipurpose field sidelines.

Top Dressing: Top dressing, or filling in indentations and divots, will occur on all multipurpose fields one time per year or at the PMD Supervisor's discretion. They will be top-dressed with an 80%/20%, specified sand/compost mixture approved by the supervisory staff at a rate of approximately one-fourth of an inch per 1,000 square feet. Indentations and divots are filled and leveled to provide a safe, level playing field. Filling in indentations and divots may take the place of a full field broadcast of topsoil. The fields may need to be divided into two groups with half the fields getting top-dressed in the spring along with aeration and the other half getting top-dressed in the fall to coincide with fall aeration. This depends on staffing levels and resources available.

Sodding: Bare spots of turfgrass located on slopes, athletic fields, or other areas that necessitate immediate turf establishment will be sodded. The area will be cultivated and leveled to one inch below existing grade to allow for the thickness of the sod. Fertilizer will be applied at a rate of one pound of Nitrogen per 1,000 square feet in a formulation that has a minimum of a one-to-one ratio between Nitrogen and Phosphorous. The increased phosphorus will assist in root establishment. The new sod will be laid out in a "brick" pattern ensuring seams line up as little as possible. All edges and seams of the sod will be pulled tight together with the edges of the sod tucked together to assist in lessening the shrinkage of the sod; sod rolls will be utilized for larger areas. For the first two to three weeks of establishment, the maintenance staff will modify irrigation controllers to apply less water at a time but more frequently every day to keep the soil below the sod moist but not saturated. Gradually the area will be weaned off this type of irrigation into a more conventional irrigation practice to match the loss of evapotranspiration.

Seeding: Over seeding of turf grass will be done on an as-needed basis and at the PMD Supervisor's discretion. Sparsely covered turf areas and small bare areas will be over seeded with a blend of turfgrass seed that most closely matches existing turf in the given area. Over seeding will be accomplished by utilizing a drill seeder that cuts a small trench and delivers the seed to that trench. This will be accomplished by passing over the bare area in two different directions at right angles to each other with half the total amount of seed applied during each direction. The rate of seed will vary depending on the cultivar used.

Multi-purpose Fields: Soccer and lacrosse fields are laid out and painted for use in the spring, summer and fall prior to seasons of play. Additional painting will be necessary depending on turf growth. Permanent goals are installed or temporary goals are placed prior to the start of season and removed at the end of the season to allow for field restoration and growth regeneration. Football fields are laid out and painted in the fall prior to the season. Additional painting will be necessary depending on turf growth. The athletic field marking paint is mixed with a plant growth regulator (PGR) which is intended to reduce the number of repainting occurrences.

Irrigation:

Irrigation Applied: The amount of water that is applied is based on weather, soil conditions, sun exposure, intended use and the micro-climate of the site. The irrigation programming is based on a 5 day/week schedule. The PMD Supervisors will target less frequent, deep-water cycles when possible. The irrigation program is adjusted as needed based on weather, use, seasonal requirements, cultivation efforts and turf conditions. State of the art web-based programs are used to schedule the irrigation controllers to achieve maximum benefit of water distribution. These systems provide leak detection notices, water usage and percent scaling based on weather conditions.

Irrigation System Maintenance: All irrigation systems are visually inspected and repaired as needed on a bi-weekly basis. During the inspection, heads are adjusted, raised and plumbed to distribute water as efficiently as possible, in the desired area. Observations are made to the entire site for over or under

watering, as well as soft or soggy spots on the grounds that could indicate leaks or failures in the irrigation system. These areas are investigated and are monitored or repaired as necessary. Additionally, soil moisture is monitored via visual observation as well as soil moisture probes in order to maintain proper soil moisture levels. These inspections are typically done after the mowing operations to discover potential damage by the equipment.

Irrigation System Program Adjustment: Once per week, the PMD Supervisors will make necessary adjustments to the irrigation programming at each site to compensate for maintenance practices and changes in weather. Minor changes are made daily to accommodate specific needs. All systems are turned off if there is a rain event that surpasses the programmed precipitation rate (usually .25"). Systems are turned back on when the field capacity of soil moisture has depleted, requiring an irrigation cycle to replenish the soil.

Irrigation System Component Replacement: Failed components are replaced during bi-weekly system inspections. PMD staff are equipped with a stock of irrigation tools, heads, emitters and fittings, valve diaphragms and solenoids during the inspections to fix or replace any issues or failures when they are discovered. A parts list is filled out for items used during the inspections to help with inventory control and reordering.

Mainline Repairs: When an irrigation mainline fails, the target is to make the repair the same day and have the irrigation system recharged the following day. The objective is to have the shortest possible irrigation system down time so as to not deplete the soil moisture levels to a point where "catching up" to replenish soil moisture is necessary.

Irrigation Monitoring: Programmed irrigation cycles are monitored by utilizing flow meters. The flow meter monitors the flow rate of a given irrigation zone/station and is interrupted if excessive flow is detected. A deviation of 5-25% is allowed. The deviation is determined by the flow rate of each zone and the importance of the interrupted cycle. Flow reports are checked on a daily basis and staff is dispatched to investigate and repair components as necessary to address and clear the flow alarms.

Irrigation System Replacement: Presently the District targets total system upgrade every 30-35 years. Other criteria for replacing irrigation systems are prioritized according to watering efficiencies, repair and maintenance costs, and timing with other capital improvement projects conducted by the District so as to not disrupt the park site more than is necessary.

Irrigation System Activation: In the spring, PMD Staff begins turning systems on, making repairs and preparing them for irrigation cycles around March 15th with a target of activating irrigation programs April 15th; contingent on weather. In the event of sustained freezing temperatures in the spring, systems that have been activated will have the components that are above ground drained or wrapped in insulation, during the window of freezing temperatures.

Irrigation System Winterization: Systems are winterized around the middle of October with a completion target of December 1st, contingent on weather. Irrigation systems are winterized by forcing compressed air into the irrigation system via a 1" inlet quick coupling valve. Desired air rates are 360-400 cubic feet per minute at a regulated pressure of 60-85 pounds per square inch. The winterization is completed with trailer mounted air compressors and the district will utilize up to 4 of them to complete the process in one month's time. Potable water meters that are on a yoke are loosened to allow the water to drain from the meter connection to the irrigation system.

Drinking fountains/ornamental fountains: Drinking fountains and ornamental fountains in the parks are operational between mid-May and mid-October, contingent on weather. The fountains are the last components of the water system to be activated due to the fragile nature that the exposed components have to freezing temperatures. Fountains are inspected and maintained at the same time the irrigation systems are inspected. Any items that need to be repaired or maintained at the time of inspection are addressed. In the event that the repair is more extensive or time consuming, a Work Order is generated to assign the necessary staff to address the issue or concern.

Backflow Devices: All backflow devices are tested annually as required by law. These tests are performed in-house by a Certified Cross Control Technician. Park devices are tested as the systems are turned on in the spring. Failed components are replaced by PM Staff and retesting is conducted after the component has been replaced. All outdoor devices are stationed inside a cage to prevent damage and theft of the devices. The backflow cages were designed and fabricated in-house to save on costs. The cages are replaced on an as needed basis and are usually needed due to damage from vehicles and equipment.

Horticulture:

Horticultural practices outlined below take place in all park types. These practices are executed in all flower beds, perennial beds, shrub beds or rose gardens throughout the entire district.

Annual Flower Bed Maintenance: Annual flower beds are designed with desired aesthetics of the community, and flowers are ordered to arrive during appropriate planting times in the spring. Watering of beds is done on a daily basis for the first week after planting and then three days per week or as needed to ensure a full bloom of the bed during the season. Fertilizing and deadheading is performed every two weeks to stimulate new growth throughout the summer months. An annual flower bed is not mulched for ease of maintenance and planting. At the end of the season the annuals are removed and the soil is turned at a depth of 8 to 12 inches to allow for an exchange of air, nutrients and moisture for planting the following season.

Perennial and Shrub Beds: Shrub beds are designed with the concepts to find the right plant for the specific location and utilize Plant Select to help bring in different species that are native to climates similar to Colorado landscapes. Plant Select is a nonprofit collaboration of Colorado State University, Denver Botanic Gardens and professional horticulturalists. It seeks out and distributes the best plants for landscapes and gardens from the intermountain region to the high plains and beyond. Installation and replacement are performed during spring or fall. Supplemental watering of newly planted perennials is performed for 2 years after the planting date to help establish healthy root systems. Beds are cleared of debris and mulched in the spring. Mulch in a shrub bed is maintained at approximately 3 inches and is replenished as needed for the remainder of the growing season. When mulch is added to a shrub bed, care is taken to maintain 6" of clearance around the crown of the shrub. At the beginning of each season, water wells are re-established to hold the water in the targeted location around the plant. Watering is done to meet the needs of the plant water requirement and beds are designed with similar plants with regard to water requirements. Weed and pest management is performed by manually removing, applying herbicides or pesticides, or by biological control efforts utilizing insect predators or parasites. Weed and pest management is done once a pest is identified. Plants are pruned using best management practices to promote growth, regrowth, plant health and bloom throughout the growing season. Pest control may be necessary and is performed by park maintenance staff. In the event a plant becomes no longer viable it will be replaced.

Rose Garden Management: In the spring, rose bushes are pruned to remove previous season's growth and glue is applied to reduce boring wasps creating dieback in the remaining cane. During the months of June through October, beds are weeded and plants are deadheaded once every two to three weeks. Japanese beetles are manually picked from the plants to reduce damage as frequently as possible depending on staffing levels. Fungicides and insecticides are applied as necessary to reduce beetle kill and the spread of rust, powdery mildew and blackspot. In late fall, the beds receive 6-8 inches of mulch to reduce winter die back.

Site Amenities:

Picnic Tables and Park Benches: All picnic tables and park benches are repaired on as needed basis. Memorial Benches are inspected twice per year and repaired when needed. Picnic tables in the high use shelters are refurbished every two years. Staff also maintains an inventory of 36 aluminum tables which are used to accommodate special events and requests from shelter users.

Playgrounds: Playgrounds are inspected weekly and repaired as necessary. Wood chips are re-distributed weekly. Top-dressing of wood chips occurs every two years or as necessary. Poured in place surfacing is

inspected and repaired as necessary during the weekly inspections. Audits of all play structures are performed as needed and when elements are replaced or upgraded.

Park Shelters: Rentable shelters are power washed three to four times per year. The shelters are repainted every four to five years in most cases. In the event that a shelter needs additional cleaning, it will be scheduled when resources are available. These cleanings can be due to excessive tape left on support structures, cake, soda, juice or other celebration debris left behind. Shade structures along trails and throughout other areas of SSPRD's maintenance boundaries are cleaned and maintained as needed.

Restrooms: All touchable surfaces are cleaned and disinfected a minimum of 5 days per week. All stainless steel surfaces are polished after disinfectants have been applied on an as needed basis. Soap dispensers and toilet paper are stocked continually on an as-needed basis. Restrooms are swept clear of cobwebs, insects and debris during each visit. On a monthly basis, the entire interior is soaped and washed out completely from ceiling to floor or as needed. Restrooms are intended for year-round use. Potable water restrooms are heated to prevent freezing in cold weather months. Restrooms may be closed periodically due to vandalism and maintenance needs.

Pipe Chase and Storage Area Maintenance: All areas are stocked with appropriate cleaning supplies and the floors must be kept passable and free of trip hazards. These areas have a small space heater to prevent freezing in cold weather months.

Portalets: Portalets are provided by a vendor and are scheduled to be cleaned and serviced two to three times per week. The need may arise for a cleaning outside of the regularly scheduled service and District Administration will call for an additional service if needed.

Trash Removal / Dog Waste Bags: During the months of March thru October, trash receptacles and dog bag dispensers are checked daily and maintained as necessary. November thru February they are checked weekly and maintained as necessary. Recycle containers are maintained on the same schedule.

Art in the Park: All art pieces are inspected twice per month and the artist is notified if maintenance or repairs are required.

Art in the Open Space Parks or Trail Side: All art pieces are inspected along with other maintenance tasks and the Art Committee Liaison along with the artist is notified if maintenance or repairs are required.

Trail Side, Memorial and Open Space Park Bench Maintenance: All benches are monitored in coordination with other maintenance tasks and repaired or maintained as needed.

Fence Line Maintenance: All fence lines are monitored in coordination with adjacent maintenance tasks and minor repairs are made as needed. Major repairs and replacements are completed between November and March of each year.

Retaining Wall Maintenance: All retaining walls are monitored in coordination with adjacent maintenance tasks and minor repairs are made as needed. Major repairs and replacements are completed between November and March of each year.

Nature Play Amenities: Nature Play and Typical Play Structures are inspected monthly for proper anchoring, wearable parts and appropriate placements or replacements of moving parts. Repairs will be made as needed.

Memorial Rest Area Maintenance: All Rest Areas are monitored in coordination with adjacent maintenance tasks and minor repairs are made as needed. Major repairs and replacements are completed between November and March of each year.

Park Signage: District signs are inspected and repaired as needed. Refurbishment and upkeep is completed by the sign shop and repair and replacement is coordinated through the sign shop staff.

Graffiti Removal: Most municipalities within the District have ordinances in place that mandate timely removal of graffiti. Explicit or offensive graffiti is removed within 24 hours of discovery and other non-offensive graffiti is scheduled weekly, dependent upon available resources. There are a variety of methods used to remove the graffiti including pressure washing, sand blasting and chemical removal.

Dog Parks:

The District offers dog parks to allow dog owners to have an off-leash area for their dog(s) to play and run. These areas are enclosed with fencing and gates to discourage dogs from running away. District dog parks have two off leash areas allowing for rotation to reduce wear on the grass areas. The timing of these rotations is decided by the Supervisor of the park. There may be areas of granite fines and concrete to reduce exposed dirt and mud at the entrance. The grass areas are irrigated to help prevent erosion and to flush the surface of contaminants. Dog parks are mowed on a regular basis to maintain a groomed appearance.

Irrigation system maintenance: Dog park irrigation systems are inspected monthly and repaired as needed. The inspections are typically completed soon after each mowing operation.

Clock program adjustments: Technicians may adjust the controllers to compensate for changes in weather, plant health or repair. Minor changes in programming are made more frequently to accommodate other specific needs. The goal is to repair mainline and lateral lines within 24 hours.

Systems turn on: The irrigation system turn on process begins in March with a target of full utilization by April 15th of each year. These dates are contingent upon weather.

Systems winterization: Systems are winterized beginning the last week in October with a completion target of December 1st, contingent on weather.

Backflow devices: Backflow devices are tested annually as required by all water suppliers. These tests are performed by District staff. Most devices are tested as the systems are turned on in the spring and facility devices are tested annually on a contracted basis.

Seeding: Dog parks are overseeded as needed to repair thin, worn, or less aesthetically pleasing areas at the PMD Supervisor's discretion. Overseeding is performed at a rate recommended for the seed type that is selected and is done by utilizing a mechanically driven slit seeder or broadcast seeding.

Compost pile

Parks staff manages a compost pile. This pile consists of grass clippings, leaves, aeration cores, top soil and sod along with other organic matter that is collected throughout maintenance practices. The pile is mixed up 3-4 times per year to encourage decomposition of the organic materials. Once the pile is broken down into soil it is run through a screen deck to clean the soil of debris and it is piled to use for top dressing. At this time a new pile is established for decomposition.

Preventative Maintenance

Equipment such as line trimmers, backpack blowers, edgers, aerators, chainsaws, brush chippers, stump grinders, line trimmers, backpack blowers, and all small engine equipment is preventatively maintained and kept up by staff members in Park Maintenance. Mowers and all large equipment is maintained by the Fleet Maintenance Division. Mower blades are sharpened by Fleet Maintenance Staff and blades are changed by PM Staff weekly as their schedule allows. Aeration tines are ordered through Fleet Maintenance and replaced when they are worn beyond ½ of the potential core depth. PMD Staff will perform this task during the winter or summer seasons when the implements are not being utilized. Deep core solid tine aerification

rods are ordered and replaced by the Fleet Maintenance Staff with coordination and consideration to the needs of the park maintenance operations.

OPEN SPACE DIVISION

The Open Space Division is responsible for 1,678.86 acres of natural open space property spread across the 46 square miles of the SSPR District. The Open Space Staff manages the dryland grasses and controls the nuisance weeds and vegetation. They are also responsible for the mowing operations within the open space properties.

Categories of Maintenance

Open Space and Vegetation Management in Active Recreation Areas:

Open space in active recreation areas is where dryland grasses are used as buffers adjacent to irrigated bluegrass or other irrigated turfgrasses. Park examples of where this occurs, are Kline Homestead Park, Province Center Park, Ketring Park to name a few.

Mowing: Trail side and manicured park buffer areas may be mowed from 3" to 6" in height at a width from the fence or property line at approximately 5 feet. Staff will begin this mow line 12 to 18 inches away from fence lines to prevent damage to fences or private property. Residents who back to an open space area can maintain this area by mowing or line trimming between their fence line and the edge of South Suburban's mow line. Mowing beyond the SSPRD mow line is prohibited. Weed infestations in these areas may be mowed, or line trimmed, once every four to six weeks, to prevent seed production. This may need to occur on a routine schedule dependent upon vegetation growth rates beginning in May and ending in October of each year.

Weed Control: Active open space areas are mowed or trimmed at 6" to 9" in height to reduce the active weed seed viability. In the event that action thresholds are met spraying applications will occur to control weeds.

Line Trimming: Street curbs, retaining walls, utilities and other objects are line trimmed to 6 inches in height in coordination with the mowing operations.

Clipping Removals: All trail surfaces and hardscaped areas are cleared of most clippings within a day of the mowing and trimming operation.

Open Space and Vegetation Management in Passive Recreation Areas:

Open Space in passive recreation areas is where there are no SSPR active parks or irrigated turfgrasses adjacent to the dryland vegetation. These areas are typically drainage corridors and/or large open fields as well as areas along the bluffs. Examples of these areas include, Big Dry Creek trail corridor, The Bluffs in Lone Tree as well as Willow Springs Open Space.

Mowing: Open Space Vegetation along passive property borders (no residential property), creek sides and in wildlife areas are not mowed. Weed infestations in these areas may be mowed, or line trimmed to prevent seed production, on a routine schedule dependent upon vegetation growth rates beginning in May and ending in October of each year. Herbicide applications will occur in identified areas where control is needed during the growing season. Mowing will occur behind or adjacent to residential property where fences exist. When possible due to grades and vegetation a buffer 10 feet wide will be mowed annually. Staff will begin this mow line 12 to 18 inches away from fence lines to ensure private property is not damaged. Residents who back to an open space area can maintain this area by mowing or line trimming between their fence line and the edge of South Suburban's mow line. Mowing beyond the SSPRD mow line is prohibited. In the rest of these open spaces, mowing is not a standard practice. This encourages the

grass plant to grow to seed and drop the seed encouraging natural regeneration of the grass type successful in that specific growing area.

Weed Control: Herbicide applications are conducted once to twice per year and are dependent upon the weather, weed infestations, the Counties Weed Plan parameters and in coordination with the State Noxious Weed List regarding priority. All list A species are first priority and list B species are second priority with small infestations targeted prior to large infestations. List C species are targeted when resources are available and as priorities are completed from May through October of each year. Herbicides used are in coordination with the local County Extension's recommendations. Chemicals chosen are the lowest signal word and minimal dosages available for proper control. Mechanical and Biological tools are also used within our Integrated Pest Management Plans. Weed mapping is conducted throughout the year as infestations are identified. The mapping is referenced when herbicide applications are being conducted. When herbicide applications cannot be made, staff will strive to mow the area prior to seed development on the weed to prevent further infestation. When it is appropriate to seed an infested area, staff will drill or slit seed to encourage the climate appropriate seed to "choke" out the weed infestation. When the infestation is eradicated, the area is monitored and seeded as necessary to establish growth of the desired plant type.

Open Space Grasses: The District allows open spaces to grow in and regenerate with a standard blend of grasses acclimated to our climate. The vegetative growth in the open space areas is intended to sustain regeneration of the plant, provide habitat and ecosystems for insects and wildlife and maintain or improve water quality for lakes, ponds, streams and riparian habitats adjacent to these areas. For water quality, these areas act as a buffer to minimize surface runoff and trap silt and pollutants from entering a water body.

Pond and Lake Maintenance: All ponds and lakes are monitored monthly in coordination with adjacent maintenance tasks and repairs or maintenance is completed as needed. These areas are maintained with beneficial bacteria, water colorants, aquatic herbicides and aeration or water flow control devices to achieve a healthy water quality. Inlets, overflow, outlet areas and banks are cleared of debris and litter to promote positive recreational opportunities and to achieve proper water quality.

Waterway and Creek Maintenance: The Trails and Open Space Manager works with local Flood Districts and Storm Water Authorities to coordinate the cleaning and maintenance of the District Waterways and Creek systems. These areas are monitored annually and after significant storm events. The maintenance responsibility is shared by local municipalities, local flood districts and storm water management authorities to ensure the systems are conveying flood waters appropriately.

Water Management: Open Space staff monitors water quality from the beginning of spring to the end of fall. Water bodies are inspected for algae, riparian plant growth in the body of water and along the tributary feeding the body of water and for aerification needs. The body of water will be aerified to prevent stagnation and to provide oxygen for fish and wildlife and plant life.

Irrigation Applied within Open Spaces: The average target for irrigation in areas with temporary or converted systems will be determined by weather and vegetation establishment. Colorado typically receives 10" to 15" of annual precipitation and this will be considered a minimal target for establishing areas after the first year from seeding. 5 to 10 gallons per square foot per year may be targeted for seasonal establishment of newly seeded areas. These are our specified targets, and some areas may receive more and some less depending on the intended use of the area, vegetation type, soil types and expected aesthetics.

Irrigation System Maintenance: All systems are inspected monthly and repaired as needed. The inspections are typically completed soon after each mowing operation.

Clock Program Adjustments: Technicians may adjust the controllers to compensate for changes in weather, plant health or repair. Minor changes in programming are made more frequently to accommodate for other specific needs. Mainline and lateral line repairs: Our intention is to make these repairs within 24 hours.

Systems Activation: Systems are turned on beginning in March with a target of full utilization by April 15th of each year. These dates are contingent upon weather.

Systems Winterization: Systems are winterized beginning the last week in October with a completion target of December 1st, contingent on weather.

Backflow Devices: All backflow devices are tested annually as required by all water suppliers. These tests are performed by district staff. Most devices are tested as the systems are turned on in the spring and facility devices are tested annually on a contracted basis.

Litter Control: All areas are monitored during the adjacent maintenance tasks and litter is removed as soon as possible or as resources become available.

Special Events and City Requests:

Open spaces may be mowed in their entirety to accommodate a special event or a city organized event. Open Space staff will mow, trim and remove/mulch clippings of an open space in its entirety to a height of 6 to 8 inches to contribute to the success of an event and to minimize the potential of fires from fireworks, hot exhaust on vehicles, cigarettes, etc. These events may include concerts, the 4th of July and other national holidays, craft fairs, theatrical performances or educational programs.

TRAILS DIVISION

The Trails Division is responsible for over 125 miles of trails, both hard surface and soft surface. This includes soft surface trail repairs due to heavy rains and erosion, sweeping of hard surface trails and trail replacement for damaged trails. The trails staff are also responsible for all parking lot repairs across the district.

Categories of Maintenance

Hard and Soft Surface Trails:

Trails Maintenance: All trail systems are inventoried annually and an overall condition is assigned per section of trail. By traveling in a vehicle or on foot, these conditions are recorded and then organized into a maintenance list that is then delegated into an Operations and Maintenance Budgeted action or submitted as a Capital Improvement Project action. All trail systems are maintained in accordance with available resources and prioritized by our safety, community requests and aesthetics. Trails are cleaned and cleared soon after the trail side mowing operations are completed every four to six weeks. In the situation where a significant weather event occurs the trails will be inspected and repaired from rutting, washouts, sediment and debris as needed. Regional trails and regional trail connections are cleaned and cleared routinely and on an as needed basis. Staffing levels and available resources can impact the timing of needed maintenance and repairs.

Debris Removal: All trail systems are maintained to be safe and passable by pedestrians, mobility aid devices, cyclists and equestrian users when applicable. This may require sweeping, blowing, machine grading, compaction, top dressing and hand work and is performed when the debris is identified by staff.

Crack Filling / Sealing: Cracks in the surface of concrete or asphalt trail systems are widened or cleaned to accept sealants and filled to prevent moisture entry and to prevent tripping hazards. Once annually is the target goal and staff will respond immediately when a safety issue is identified.

Lip Grinding: Lips greater than $\frac{1}{2}$ " are ground to level the area and reduce tripping hazards. Once annually is the target goal and staff will respond immediately when a safety (> $\frac{1}{2}$ ") issue is identified.

Weed Control: Herbicides and mechanical trimming / mowing of trail sides, seams and cracks within trail systems is conducted in coordination with the mowing operation and routinely occurs every four to six weeks May through October and as necessary from November through April.

Pothole and Erosion Maintenance: Pothole and erosion maintenance is done by trails staff and identified through trail and parking lot inspections which routinely occur every four to six weeks May through October and as necessary from November through April. The winter months can create potholes suddenly due to freeze thaw cycles and become a routine repair to prevent further damage from water infiltration and plowing.

Low Water Crossing and Underpass Maintenance: The trails crew will inspect these areas every four to six weeks May through October and as necessary from November through April. Crossings and Underpasses are maintained immediately after significant storm events and on an as needed basis. Debris is cleaned and cleared and passages are swept and washed. Low water crossings are inspected at the time of the routine trail inspection.

Soft Surface Material Maintenance / Overlay: All soft surface trails are inventoried and overlaid with new material when ruts, subgrade and erosion are excessive and or may create an impassable surface condition. These areas are identified through trail inspections every four to six weeks from May to October and as necessary November through April. Soft surface trail maintenance occurs year around.

Hard Surface or Paved Maintenance: All hard surface trails are inspected and repaired with new materials or sealants when roots, subgrade and or erosion are excessive and or may create an impassable surface condition. These areas are identified in the inventory and prioritized for repairs as resources allow. Hard surface trail maintenance occurs year around while paving is usually performed during the warm seasons.

Trash and Recyclables Removal / Litter Control: Trash receptacles and dog waste bag dispensers are checked every other week and maintained as necessary year around.

Bridge deck, rail, abutment and clearance maintenance: Bridge decks, rails, abutments and clearance inspections and maintenance tasks routinely occur every four to six weeks May through October and as necessary from November through April. Safety issues are repaired immediately and monitored along with the annual inventory task. The district will conduct structural integrity and use inspections utilizing an engineering firm on an as needed basis.

Parking Lots: All parking lots are inventoried annually and an overall condition is assigned per parking lot. These conditions are recorded and then organized into a maintenance list that is then delegated into an Operations and Maintenance Budgeted action or submitted as a Capital Improvement Project action. All parking lots are maintained in accordance with available resources and prioritized according to safety, community concern and aesthetics.

FORESTRY DIVISION

The Forestry Division is responsible for the management of the District's urban forest, which consists of over 47,000 trees. The Forestry Staff is responsible for pruning and removals of large trees and oversite of contractual tree service companies.

Categories of Maintenance

Tree Establishment and Care:

New Tree Plantings: New trees are planted by selecting the right species for the conditions in which the tree will be planted. Considerations for the specific tree are: if it is native to the Colorado climate/region, what the soil conditions are, if the location is appropriate for the growth habit of the tree, and what the purpose of the planting is (such as shade, shelter, barrier from parking lot/road/noise, beautification etc.). Tree diversity is also taken into consideration. Tree diversity is important to consider preventing disease and infestations from decimating the tree canopy. Installation or replacement is performed during the spring or fall seasons. Supplemental watering of newly planted trees is performed for 3-5 years after the planting date, to achieve a healthy root system and a healthy established tree. Tree wells are established at the time of planting and in accordance with the drip line of the tree. Tree wells are established by getting to bare ground and then covered with 2" of mulch. The tree well is maintained with a 3" layer of mulch and replenished as needed until the tree reaches an established DBH of 6". At this point a determination is made for the appropriate size of the tree well to allow the tree to continue to grow and protect the root zone. Newly planted and transplanted trees, less than 4" DBH with smooth bark, are wrapped with tree wrap to prevent sunscald from October to April. The newly planted tree is maintained by observation and corrective pruning to promote establishment.

Tree Planting: The District strives to plant 100-130 new trees each year. Plantings are conducted to replace trees that have been removed and to place new trees where the district and urban corridor will benefit from the placement of a new tree location. This includes replenishing the district's tree nursery. Things considered for a new location are cooling effect, erosion control, aesthetics and shading specific amenities such as a playground or picnic area. The district strives to not stake newly planted trees. In the event staking is necessary, stakes will be installed on each side of the tree in accordance with the prevailing winds. Staking can occur when a tree is planted on a hillside, when encouragement of plumb growth is needed. All staking is site specific and determined by the district forester.

Tree Transplanting: The District will transplant trees when necessary to save the tree and to save money. A tree may need to be transplanted to accommodate a construction project or expansion to a park amenity, or from the nursery to an existing tree well. It may also be necessary to accommodate a new location for a multipurpose sports field to maintain a safe run off area. The district forester will determine how much of the root ball is needed to transplant the tree depending on the size of the tree. The goal is to allow the plant to develop new feeder roots within the zone of the future root ball that will be moved. This will reduce the amount of transplant shock the plant experiences. The greater the root ball diameter, the more roots will be included in the move. Watering the tree is important before and after the tree is transplanted. The best time of year to transplant a tree is when it's dormant in spring or fall. In fall, transplant before the first frost. In spring, plan to relocate before the tree starts sprouting.

Pruning & Removal: Tree pruning takes place as needed and after storm events. Pruning is completed with care to protect the canopy of the tree while promoting healthy growth. Tree removal will occur when pruning is not sufficient to correct the disease or damage or when the canopy of the tree is reduced to 60 percent or less. Staff will perform clearance trimming adjacent to trails at least annually with some areas requiring more frequent trimming (line-of-site triangles at tail junctions or street intersections). Staff will strive to keep woody vegetation two feet back from the trail's edge and keep vertical clearance at eight feet for pedestrian trails and sidewalks and at twelve feet where equestrian and vehicular traffic is likely.

Branch Pruning: Trees are pruned through a selective removal of plant parts to achieve defined objectives such as: crown reduction, clearance, managing health, structure improvement, risk reduction, crown restoration or fruit and flower production. Pruning takes place in the spring and fall depending on the species of tree following ISA bmp's and procedures.

Root Pruning: Root pruning can be necessary for removal of roots to preserve the tree due to construction improvements or severe root decay. This is done selectively and as minimally as possible to accommodate the construction while preserving the health of the tree. The district forester will evaluate each situation independently and will make a determination as to the scope of root pruning necessary to accommodate the project. In the event the root pruning would be detrimental to the tree's health the tree will be removed and one will be replanted as close to the area of removal as possible; depending on species and growth patterns of the new tree.

Tree Nursery: The PM Staff maintains a tree nursery for transplanting into parks and facilities. The tree nursery is populated with 2" DBH or smaller trees which are grown and maintained in the nursery until they are large and healthy enough to be transplanted into a park or at a facility. Most of these trees are utilized for replacements of trees that have been removed and are planted in existing tree wells.

Inventory and inspect trees: The PM Staff and Forestry Staff utilize a tree inventory software "TreePlotter" to maintain the inventory of District trees. Staff will add/update tree attributes in the tree inventory software while they inspect trees for potential issues or assess for hazards. New tree plantings are added to the database as they occur. The process of monitoring the District's tree inventory is ongoing and occurs year around.

Pest and disease monitoring and treatment: The PM Staff and the Forestry Supervisor will inspect trees for pests and disease infestations during regular park visits and while tree inventories are being conducted. When a pest or disease is suspected in a tree it is reported to the district forester. The Forestry Supervisor will identify the pest or disease and reference the integrated pest management system to determine the best course of action to target the pest or disease while saving the tree. Furthermore, the District manages and updates an EAB management plan working with the other cities and municipalities of the surrounding area.

Customer Service Requests: Forestry Staff will respond to requests from adjacent landowners or patrons to improve their tree interaction experience with the District by planting, pruning, removing or treating for pests.

Mulch Tree Wells: When a tree is planted, PM Staff will create a bare earth area under a tree's canopy and fill with no more than 3 inches of mulch. When the mulch is installed, care is taken to establish a 3–5 inch separation between the mulch and the tree trunk so the mulch does not touch the stem so as to not cause rotting or damage to the stem. Mulch is replenished as needed and the tree well is sized accordingly to tree growth. This is accomplished by utilizing the District's mulch pile. This mulch pile is formed by chipping and mulching trees, branches and organic materials collected from storm cleanup, pruning practices and tree removals. The mulch pile is separated into two piles of mulch for staff to utilize in order to keep tree wells mulched and the other pile is for sharing with the community. When inventory allows, the community can take mulch form the pile throughout the growing season during regular business hours for their own personal use.

Water Management: New tree plantings are watered slowly to prevent runoff of water. The new tree is watered weekly for approximately 3 years but up to as many as 5 years. This would depend on the tree species, location and exposure to urban elements. Mature trees can receive watering every other week if needed. The intent is to not water mature trees and allow them to flourish with natural moisture however, mature trees can be watered based on field inspections performed by the Forestry Supervisor. Winter watering of trees occurs on new tree plantings. The desired rate is the same as stated above but may be limited to soil intake due to winter conditions.

Herbicides: Herbicide applications may be used to enhance or establish a tree well within a developed park. The application would be conducted by a state licensed applicator. The tree well that an herbicide application would establish or maintain is to protect the critical root zone of a tree to prevent root destruction and decimation and to limit the amount of soil compaction providing efficient moisture and oxygen transfer to the root zone.

Tree Wrapping: PM Staff will hand wrap young and smooth barked trees 4-6 inch DBH with an opaque non-sticky material to prevent winter sunscald. Trees that are still in the establishment phase of the planting cycle are predominantly targeted, while inventories and inspections can add specific trees to the wrapping list when necessary.

Beaver Wrap Trees: PM Staff will encircle the lower trunk of a tree with a wire fence to protect it from beavers chewing through the bark. This is performed in areas of known beaver activity and anywhere where beaver activity is identified.

Tree Protection: A contractor or staff member will install orange safety fencing around the critical root zone of a tree, in construction areas and along construction access points, to encourage construction traffic and

processes to keep a safe distance from the root zone and or keep equipment away from the trunk and branches protecting the health of the tree.

Large Tree Care:

Storm debris removal and damage restoration: After storm events, PM Staff will inspect parks, trails and open spaces to remove, dispose of or chip into mulch branches or trees damaged by the storm event. Identifying and removing "hangers" is important at this stage of storm damage restoration for safety. After the storm debris is picked up, PM Staff will return to the affected trees and conduct restoration pruning on the broken branches where needed.

Tree Removal: Trees are marked for removal when it has been determined that the tree's vigorous life is no longer attainable by a risk assessment or by damages sustained by weather events, infestations or mechanical damage. These removals are done by the District Forester, or a licensed contractor. When the tree is removed it is cut and felled leaving a tree stump 4-6 inches above ground. The tree that was removed will be chipped and turned into mulch and the mulch is utilized for establishment of tree wells. Identifying trees which pose a risk to park users or property and perform tree inventories and defective tree evaluations annually in high priority or high use areas and every two to three years in lower priority and lower use areas; prioritize hazard reduction pruning and required tree removals. When possible branches, stems and trunks with cavities are left in place to provide nesting habitat for birds and small animals as long as the failure of these does not pose a risk to trail users or structures. Large branches which fail and trunks of fallen trees are occasionally left on site to act as wildlife cover while the smaller branches are chipped and scattered to return the nutrients to the soil.

Stump Removal: Stump removal is done by using a stump grinder or by using mechanical equipment to dig or pull it out of the ground. The stump is removed when the entire stump is ground, chipped or pulled out of the ground going all the way down to the main leader root. Stump removal takes place anytime throughout the year and before a new tree is planted in an existing tree well.

ATHLETIC FIELD MAINTENANCE DIVISION

The Athletic Field Maintenance crew is responsible for all baseball/softball infield maintenance as well as lining the infields and soccer / lacrosse fields for in-house programs and OYSG, Organized Youth Sport Groups, holding a permit. This crew also puts out soccer and lacrosse goals for the season and removes and maintains them in the off-season.

Categories of Maintenance

Multipurpose Fields:

Layout fields, rotate fields, paint/re-paint fields, deliver goals and storage bins according to the needs of programming.

Synthetic Turf Fields:

Fields are groomed bi-monthly and as needed throughout the year. The turf is groomed using a Greens Groomer to keep the turf pile vertical. The direction of travel while grooming is dependent on the need for redistribution of crumb rubber to an area. Perimeters are blown off weekly to remove dirt, gravel, sunflower seed shells and other debris that is left behind from patron use. Lines that are not permanent are painted as needed to maintain good visibility. Two times per year, the fields are "raked" with a groomer to lift the infill rubber and evenly redistribute the displaced infill rubber and remove embedded debris. Litter is removed and trash is emptied on an as needed basis. The addition of rubber fill will be performed as necessary.

Hard Surface Play Courts:

Tennis/Pickleball Courts: During the summer months the tennis and pickleball courts are scheduled to be washed . Leaf cleanup happens monthly during the fall and first thing in the spring. Cracks are repaired annually. Windscreens are rolled up in November and rolled back down in May to prevent unnecessary wear and weathering of the windscreen material and allow for snow and ice to melt off the court surface.

Basketball Courts: Courts are swept twice per year and washed once per year. Backboards and nets are inspected monthly and repaired or replaced as needed. Court lines are inspected monthly and repainted as needed.

Inline Hockey Rinks: Rinks are swept four times per year and washed once per year. Dasher boards and fencing is inspected monthly and repaired as needed. Lines are inspected monthly and repained as needed.

Skate Park: Skate parks are inspected weekly for trash and debris. Metal ramps, coping, rails and ledges are inspected weekly. Skate parks are inspected monthly for overall safety and use. Cracks, gouges or damage to the concrete surfaces or uneven transitions are repaired as soon as they are identified. Grinding, buffing or mud-jacking is performed to remove uneven transitions of concrete. The fencing around the facility is repaired as needed.

Baseball/Softball Skinned Infields:

Baseball/softball fields: Fields are lined and dragged for District programs on a daily basis while in use. Other fields used by outside organizations are dragged twice per week. Foul lines and coed lines are painted to start the season and approximately every two weeks during the season, or as needed.

Refurbish Infields: Lighted fields are refurbished annually. This involves grooming and leveling the fields with a crown in the center to promote water to runoff to the edges. Infield mix is added when needed to keep the field level with the surrounding edges. Other fields are done on an as needed basis.

Fence and Backstop Repair: All fencing and backstops are inspected weekly and repaired as needed.

Install Temporary Backstops: Temporary backstops are installed at various sites throughout the District depending on need for tee-ball. These backstops are installed the first week of June and removed the first of August.

Dugouts/Player Benches Litter/general maintenance: Litter and debris will be removed each day the field is prepped for games or practice from all backstop, outfield, and dugout fences. All baseball fields that have dugouts with a soil or infield mix base will be hand raked each day the field is prepped for a game or practice. This will be done to eliminate trip hazards and low spots that will puddle during bad weather. All baseball fields that have concrete dugouts and concrete areas surrounding the backstop area will be swept off or blown with a backpack blower each day the field is prepped for a game or practice.

Pitching Mound/Batter's Box Repair: AFM Staff will remove all loose infield mix created from the previous days use every day the field is prepped for a game or practice. The remaining, undisturbed infield mix in the batter box will be moistened and lightly scarified with a hard rake. The loose infield mix previously removed will be brought back into the batter box and raked to level. If needed, new infield mix will be added to the area. Once leveled, the area will be wet down until the water has penetrated to the base area that was previously moistened and scarified. After a drying period of about one hour, the area will be compacted with a hand tamper. The District will use artificial pitching mounds where it can and will install Jox-Box padding in batters boxes to prevent deep holes and speed up infield preparation processes. The Jox-Box is installed 1" below grade and is covered with infield mix for a seamless transition from the baseline to the home plate area.

Foul lines and Warning Track: Foul lines are painted to start the season and approximately every two weeks during the season, or as needed. The warning tracks are spike dragged once per week or as needed.

Weed mitigation is done at the start of the season and as needed throughout the season. This is done by pulling weeds, spike dragging or spraying when needed.

Grass Transition or "Lip": The infield will be hand raked along its perimeter towards the infield area of the field every day it is prepped for games or practice. This process will help eliminate the buildup of infield mix along the infield/outfield transition of turf grass, preventing an unsafe playing condition. In the fall or early spring staff will broom the turf area immediately beyond that transition if needed to allow for hand raking throughout the season to be sufficient for field prep.

Watering: Infields can be watered at the lighted facilities to moisten the infield and break up the hardpan layer that can occur throughout the season. When the field is moistened it is then spike dragged and watered again to promote moisture penetration into the infield mix. Softening the infield improves player safety.

SNOW REMOVAL

Snow removal is performed as needed regardless of the day of the week or the time of day, including holidays. Deployment of staff to perform snow removal operations depends on when the snow event occurs and how much snow accumulates. The goal is to have the snow plowed and ice removed or treated within 24 hours after the snow event ends. Snow removal is prioritized based on facility and or trail usage. The first priorities are SSPRD facilities and routes along and/or feeding to school properties, then routes with commuter trails, bus stops and park trails are cleared. These priorities are subject to change depending on the amount of snow and relating to school district schedules or other types of closures. Some storms with heavy snow will take longer to clear while the priority does not change. Ice mitigation will continue after the storm event as snow melts and refreezes.

Sidewalks and Trails: Snow is removed from hard surface sidewalks and trails within 24 hours of the end of the snow event. Ice mitigation occurs as necessary to prevent freeze thaw cycles from causing unsafe conditions on the trail or sidewalk.

Parking Lots: During a snow event, parking lots are plowed as needed to deal with the rate of snowfall. After facility operational hours, snow removal is performed as needed to ensure lots are safe and ready to be utilized when facilities are open.

Ice Melt: Ice melt is used on trails, sidewalks, and parking lots when necessary.

PARKS CLASSIFICATION



Mini Parks: < 2 Acres

Parks that are either active or passive but address a specific neighborhood need. Due to the smaller size of the park, these parks are maintained through a contractual service for turf mowing; additional maintenance is performed by SSPR Maintenance Staff.

Mini Parks - 18.93 acres

٠	Barnes Park	1.25 acres
•	Ben Franklin Pool	1.83 acres
•	Bobcat Park	.80 acres
•	Charley Emley Park	1.74 acres
•	Chase Park	.92 acres
•	Cook Creek Tennis Courts	1.19 acres
•	Elati Park	.24 acres

Mini Parks con't:

•	Footbridge Park	.36 acres
•	Harmony Park	.93 acres
•	Holly Tennis Center	1.73 acres
•	Ida Park	.21 acres
•	LaQuinta Park	1.65 acres
•	Nesbitt Park	.33 acres
•	Otero Tennis Courts	.71 acres
•	Persinger Park	.43 acres
•	Promise Park	1.04 acres
•	Rusty Sun Tennis Courts	.87 acres
•	Sheridan Square Park	.28 acres
•	Sunset Park	1.93 acres
•	Wildcat Park	.49 acres

School Parks: < 10 acres

May provide amenities such as sports fields, play equipment and potential formal fields for youth sport group activity and paved areas for court games generally associated with schools. Due to the smaller size of the park, some of these parks are maintained through a contractual service for turf mowing; additional maintenance is performed by SSPR Maintenance Staff.

School / Parks - 43.80 acres

•	Alice Terry Elementary School Park	7.49 acres
•	Carl Sandburg Elementary School Park	1.08 acres
•	Damon Runyon Elementary School Park	.90 acres
•	Dry Creek Elementary School Park	2.59 acres
•	East Elementary School Park	1.74 acres
•	Eugene Field Elementary School Park	1.67 acres
•	Homestead Elementary School Park	8.49 acres
•	Laura Ingalls Wilder Elementary School Park	1.34 acres
•	Mark Hopkins Elementary School Park	3.35 acres
•	Mark Twain Elementary School Park	1.33 acres
•	Park at Lone Tree Elementary School	8.16 acres
•	Peabody Elementary School Park	1.63 acres
•	Walnut Hills Elementary School Park	4.03 acres

Civic Parks: Varies <10 acres

Typically located close to a municipal entertainment or population center and used for civic purposes. Due to the smaller size of the park, some of these parks are maintained through a contractual service for turf mowing; additional maintenance is performed by SSPR Maintenance Staff.

Civic Parks – 15 acres

•	Bega Park	1.93 acres
•	Gallup Gardens	2.77 acres
•	Kimmer Plaza	7.24 acres
•	Lincoln Commons	1.12 acres
•	Veterans Park	.65 acres
•	War Memorial Rose Garden	1.29 acres

Nature Parks: Vary in Size

Provide a variety of nature based activities, mostly passive including walking paths, small play structures, may include views of the mountains and water ways. Some locations may offer interaction with water from wading to active tubing or wake boards.

Nature Parks – 21.70 acres

•	Creekside Experience	5.55 acres
•	Lee Gulch Overlook	6.47 acres
•	Reynold's Landing	9.68 acres

Trails, Trail-heads, ROWs

Provide over 125 miles of trails and sidewalks for pedestrian and bicycle mobility. Locations vary from along the Mary Carter Greenway / South Platte River to a variety of drainage ways that offer miles of trails that connect to parks and other trails throughout the district. Trail surfaces vary from dirt to granite fines to asphalt or concrete. There are several ROWs, Rights of Way, along streets that have sidewalks that are also used for connections to parks and trails within the district.

Trails, Trail-heads, ROWs - 562.44 acres

•	Acres Green Drive Medians	2.39 acres
•	Acres Green Trail	3.23 acres
•	Bear Creek Trail	2.94 acres
•	Big Dry Creek East Trailhead	3.61 acres
•	Big Dry Creek Trail	65.86 acres
•	Carriage Club Estates Trail	.07 acres
•	Centennial Link Trail	17.92 acres
•	Cimarron Trail	2.99 acres
•	Coal Mine Trail	.91 acres
•	Columbine Trail	28.04 acres
•	Cook Creek Regional Trail	3.25 acres
•	East West Trail Connection	3.03 acres
•	Franklin St. Right-of Way	.10 acres
•	Foxridge West Open Space and Trails	7.38 acres
•	Heritage Hills Trail	1.15 acres
•	Highlands Greenbelt	24.55 acres
•	High Line Canal Trail	27.00 acres
•	Lee Gulch Trail / Ivan Thomas Greenway	54.08 acres
•	Little Dry Creek Greenbelt	11.38 acres
•	Littleton Community Trail	2.49 acres
•	Mary Carter Greenway	143.88 acres
•	Mission Viejo Trailhead	5.51 acres
•	Maximus Trail Park	3.83 acres
•	Oxford Trailhead	.65 acres
•	Quebec St. Greenbelt	3.05 acres
•	Railroad Spur (Mineral) Trail	17.69 acres
•	Rattlesnake Trail	.61 acres
•	Sheridan Community Trail	.29 acres
•	Sumac Hill Farm Conservation Easement	10.80 acres
•	Sweetwater Trail	4.64 acres
•	Terra Ridge Trails	1.16 acres
•	West Belleview Trailhead	.35 acres
•	Wildcat Ridge Trails	9.69 acres
•	Wildcat Trail	.48 acres

Trails, Trail-heads, ROWs con't: -

- Willow Creek Greenbelt Trail
- Writer's Vista Trailhead
- Wyandot Trailhead

94.90 acres 1.84 acres .70 acres

Neighborhood Parks: 2-19.99 acres

Provide both active and passive recreation opportunities and serve as a common area for neighbors of all ages to gather, socialize, and play. Typically includes multi-purpose athletic field, basketball and/or tennis courts, playground, shade pavilion, looped, trails, non-flushing restrooms, etc.. In most cases, programmed sports should be limited to youth games and practices.

Neighborhood Parks – 359.26 acres

• A	bott Park	8.87 acres
• A	tair Park	12.09 acres
• Be	elvedere Park	5.01 acres
• Be	erry Park	3.01 acres
• Ca	arriage Club Estates Park	3.83 acres
• Ce	entennial Ridge Park	4.94 acres
• Cl	herry Park	5.52 acres
• Cl	arkson Park	8.26 acres
• Co	olumbine Manor Park	4.94 acres
• Co	ook Creek Pool	3.19 acres
• de	Koevend Tot Lot	2.14 acres
• Fa	irways at Lone Tree Park	4.26 acres
• Fo	oxhill Park	7.27 acres
• Fo	oxridge Park	2.98 acres
• G	allup Park	8.62 acres
• Ha	amlet Park	2.89 acres
• Ha	arlow Park	12.76 acres
• He	eritage Village Park	8.06 acres
• H	ogback Hill Park	3.72 acres
• H	olly Pool	2.16 acres
• H	unter's Hill Park	6.04 acres
• Ja	ckass Hill Park	18.91 acres
• Ja	mes A. Taylor Park	2.96 acres
• K	ine Homestead Park	5.92 acres
• Li	nksview Park	7.72 acres
• Li	ttle Dry Creek Park	19.04 acres
• Li	ttle's Creek Park	6.73 acres
• Lo	onesome Pine Park	6.24 acres
• M	edema Park	16.82 acres
• M	illiken Park	6.85 acres
• Pa	llos Verdes Park	7.79 acres
• Pa	los Verdes Tot Lot	2.60 acres
• Po	owers Park	4.75 acres
• Pr	airie Sky Park	13.91 acres
• Pr	omenade Park	2.16 acres
• Pr	ovince Center Park	3.63 acres
• Pt	ıma Park	34.49 acres
• Ri	dgeview Park	5.29 acres
• Ri	dgewood Park	10.33 acres

Neighborhood Parks con't:

•	Southbridge Park	10.36 acres
•	Sterne Park	15.25 acres
•	Tennis Center and Park at Lone Tree Golf Club	4.24 acres
•	Walnut Hills Park	8.91 acres
•	Wildcat Ridge Park	11.56 acres
•	Writer's Vista Park	12.24 acres

Community Park: 20-49.99 acres

Serve as a focal point for community-wide activities that serve a broad purpose, balancing active and passive recreation needs. Allow for group activities not feasible nor desirable at the neighborhood level due to noise, lights, traffic, etc. May include multiple programmed athletic fields and courts, large playground with multiple structures, walking trails, shade pavilions, public art, plazas, and restrooms. Should maintain a balance between programmed sports facilities and other activity areas to appeal to the broader community. Specialty park amenities may also occur within community parks. Tennis, pickleball, pools, disc golf, nature play.

Community Parks – 302.88 acres

Arapaho Park	26.12 acres
Bowles Grove Park	19.98 acres
Cherry Knolls Park	27.75 acres
deKoevend Park	34.68 acres
Ketring Park	45.14 acres
Progress Park	23.86 acres
Sheridan Community Park	35.35 acres
Sweetwater Park	32.13 acres
TrailMark Park	27.49 acres
Willow Creek Park	30.38 acres
	Arapaho Park Bowles Grove Park Cherry Knolls Park deKoevend Park Ketring Park Progress Park Sheridan Community Park Sweetwater Park TrailMark Park Willow Creek Park

Regional Park: 50+ acres

Provides recreational programs and amenities intended to serve the community as well as park users throughout the surrounding region. Typically, regional parks provide lighted synthetic athletic complexes, lighted sports courts, large or multiple playgrounds, multiple shade pavilions, restrooms, walking trails, etc. Regional parks may also support specialty facilities, universal playgrounds, display gardens, bicycle and skateboard facilities, public art, outdoor event spaces, plazas, and other unique amenities.

Regional Parks – 125.14 acres		
Cornerstone Park	67.02 acres	
 David A. Lorenz Regional Park 	58.12 acres	

Open Space: Vary in Size

Open Space – 1,678.86 acres

Provides passive nature experiences throughout the district. Most areas are along drainage ways, creeks or streams and tend to be abundant with a variety of wildlife.

INDOOR FACILITIES

Statement of Intentions: The Parks and Open Space Department maintains the landscape around each indoor facility with the intention of offering an aesthetically pleasing and inviting landscape. These facilities create an experience for the patron, and it starts with them entering the premises and gives the last impression when they leave the facility.

Facilities – 46.8 acres

Douglas H. Buck Community Center	3.2 acres
Goodson Recreation Center	7.0 acres
Lone Tree Recreation Center	7.79 acres
Sheridan Recreation Center	2.75 acres
South Suburban Sports Complex	23.13 acres
The Lone Tree Hub	2.93 acres

Each of these facilities are maintained with a high frequency of inspection and maintenance. The forestry, horticulture and turf cultivation practices meet or exceed the maintenance levels of Regional Parks identified above. There can be an increase in blowing and sweeping the hardscapes and replenishing mulch in the shrub beds and tree wells depending on events and tournament traffic and desiccation from users walking through the tree wells or shrub beds. The Parks and Open Space Department installs holiday lighting at these facilities from the week after Thanksgiving to the week after New Year's Day.