A Comprehensive Master Plan

Model for Maintenance Level Standards

The following is a maintenance standards model, defining four levels of maintenance for parks. Level I is the most intense level of care, with level 4 being for the most natural and least maintenance intense places.

As a rule of thumb, a Maintenance Level I cost approximately \$6,000/acre per year to sustain. Maintenance Level II is approximately \$4,500/acre per year. Maintenance Level III is \$3,400/acre per year. Maintenance Level IV costs \$1,800/acre per year. Most parks departments not only create levels within the system but also many times create levels of care within individual parks. For example, an entry and sports fields may be Level I, the majority of the park may be Level II and the edge woods may be Level IV.

Level 1 Maintenance (All life and safety issues will be secured from public access and resolved immediately.)

1. Lawn

- a. Mow as species dictates and once every five (5) days, may be as often as every three (3) days. Don't remove more than 1/3 of the leaf.
- b. Aeration once per growing season.
- c. Turf coverage at 95% of surface area. (5% bare spots). Seed and sod as needed and as species dictates.
- d. Weed control practiced so that no more than 30% (Fescue grass), 15% (Bermuda grass) of the surface is weed present.
- e. Inspect and dethatch as needed.
- f. If more than 1/3 of leaf blade is removed, grass clippings shall be removed upon visual inspection of need.
- g. Fertilize test annually and fertilize per recommendation.
- h. Irrigation automated system.
- i. Disease and insect control inspect and respond within 24 hours.

2. Sports Turf

- a. Mow as per species and twice per week. Don't remove more than 1/3 of leaf length.
- b. Aeration four (4) times per growing season.
- c. Turf coverage at 100% of surface area.
- d. Weed control practiced so that no more than 5% of the surface is weeds.
- e. Inspect and dethatch as needed.
- f. If more than 1/3 of leaf blade is removed, grass clippings shall be removed upon visual inspection of need.
- g. Trimming and Edging every five (5) working days.
- h. Fertilize test annually and fertilize per recommendation.
- i. Irrigation automated system.
- j. Disease and inspect control inspect and respond within 24 hours.
- k. Test for soil alkalinity annually and remediate per recommendation.
- 3. Litter picked up once per day.



A Comprehensive Master Plan

4. Lighting

- a. Security/general
 - i. Maintenance preserved original design. Inspect once per month during season and prior to season opening.
 - ii. Repair damaged systems within 24 hours of discovery life safety issues will be repaired immediately.
 - iii. Bulb replacement will be done within 48 hours after outage reported.
- b. Sports field lighting
 - i. Maintenance preserved original design. Inspect once per month during season and prior to season opening.
 - ii. Footcandle and uniformity levels meet 95% of the original design standards (Design standard for football/soccer/tennis/softball/baseball/indoor gyms, gymnastics/driving range/pools.) Repaired by next game.
 - iii. Damaged system repaired within 48 hours dependent on field conditions life safety.
 - iv. Scoreboards fall under this category as well.

5. Hard Surfaces

- a. Pick up glass immediately.
- b. Sweep/clean/wash at no time should there be accumulation of sand, dirt, or leaves where it distracts from appearance or safety.

6. Graffiti

- a. Remove 24 hours from time it is found.
- b. Painted directional/instructional information is crisp and clear. After inspection will remediate within 10 days.
- 7. Multi-Purpose Surfaces
 - a. Glass picked up immediately.
 - b. Sweep/clean/wash at no time should there be accumulation of sand, dirt, or leaves where it distracts from appearance or safety.
- 8. Repairs
 - a. Completed within 24 hours of when found unless life safety is involved.
- 9. Inspections
 - a. Daily inspections
- 10. Trees and Woody Plants
 - a. Pruning frequency as dictated by species or the design and with clearances for pedestrian/vehicle and maintenance needs.
 - b. Fertilize test annually and fertilize per recommendation.
 - c. Disease and insect control inspect and respond within 24 hours.
 - d. Mulching maintain 3".
 - e. Dead material removal life safety, no longer than 24 hours. Shrubs within 24 hours. Remove and remediate trees no more than 30 days goals two (2) weeks.
 - f. Trees in natural areas if a life safety issue, remove, if not, to remain.
 - g. Invasive plants will be removed within five (5) days of discovery.



A Comprehensive Master Plan

- 11. Floral (Foliage plants, perennials, annuals)
 - a. Invasive plants will be removed within five (5) days of discovery.
 - b. Normally extensive or unusual floral plantings are part of the design. These may include ground level beds, planters, or hanging baskets. Often multiple plantings are scheduled usually at least two blooming cycles per year. Some designs may call for a more frequent rotation of bloom. Maximum care of watering, fertilizing, disease control, disbudding and weeding is necessary. Weeding flowers and shrubs is done a minimum of once per week. The desired standard is essentially weed free.
 - c. Mulching maintain at 3".
 - d. If disruptive to the design intent, remove dead and remediate within five (5) days.
 - e. Clean beds when color and vitality of plant begins to falter within five (5) days.

12. Restrooms

a. Service once per day. Clean, sweep, wash, stock, deodorize.

13. Edging

- a. Mechanically (preferred choice) weekly during season.
- b. Chemically two times during growing season.

14. Ballfields

(All materials are contained within their designated storage areas.)

- a. Seasonal
 - i. Dragging daily.
 - ii. Grooming daily (including warning track)
 - iii. Lining/game preparation daily
 - iv. Irrigation test for coverage and system operation season starts and weekly. Repair dictated by severity of problem (life safety vs. nuisance).
- b. Regular Cycle
 - i. Fencing and gates inspect daily, repair within 24 hours of discovery.
 - ii. Safety netting inspect daily. Repair dictated by severity of problem and accessibility to problem. Repaired no longer than 48 hours.
 - iii. Support structures and features (fountains, dugouts, bleachers, stands, batting cages, concessions, soil/sand bins)— inspect daily. Repair dictated by severity of problem and accessibility to problem. Repaired no longer than 24 hours in season and 48 hours off-season.
 - iv. Control cable (electrical) repaired within 24 hours.

15. Fences

- a. Life safety fence/security
 - i. Repair immediately upon discovery.
- b. Sport fence



A Comprehensive Master Plan

- i. Repair within 24 hours.
- c. Decorative/Control/Bollards
 - i. Repair within 48 hours of discovery.
- d. Property Line Fence
 - i. Repair within five (5) days.

16. Playgrounds

- a. Consistent with established CPSC standards.
- b. Safety item repair immediately.
- c. Other items repair immediately if parts and technician are available.
- d. Equipment is secured from public use if safety items cannot be immediately repaired.
- e. CPSC inspection every 15 days.

17. Trails

- a. Maintain 3"-4" compacted depth of surface material uniformly on trail.
- b. Edging shall be repaired within 48 hours.
- c. Design standard soft surface trails at Level 1 are edged.

18. Waterway Management

- a. Earthen Dams conform to EPD requirements.
 - i. Water control structures Call Roads and Drainage Department upon discover. Follow up in two (2) days if no activity.
 - ii. Clean debris on a daily basis out of structures and off of backside of dam and shore where appropriate.
 - iii. Mow as species dictated and once every five (5) days, may be as often as every three (3) days. Don't remove more than 1/3 of the leaf.
 - iv. Aeration once per growing season.
 - v. Turf coverage at 95% of surface area. (5% bare spots). Seed and sod as needed and as species dictates.
 - vi. Weed control practiced so that no more than 30% (Fescue grass), 15% (Bermuda grass) of the surface is weed present.
 - vii. Inspect and dethatch as needed.
 - viii. If more than 1/3 of leaf blade is removed, grass clippings shall be removed upon visual inspection of need.
 - ix. Fertilize test annually and fertilize per recommendation.

b. Lakes

- i. Siltation when noted contact Code Enforcement upon discovery follow up in two (2) days if no activity.
- ii. Water Quality test quality level two times per year. Repair dictated by the severity of the problem.
- iii. Adhere to best lake management practices.
- iv. Shores/banks/edges
 - 1. Uniformity of selected plant material (grass, weeds, lawn) meets 95% of the design standard, if not repaired in two (2) weeks.



A Comprehensive Master Plan

- 2. Riprap uniformity meets 95% of design standard, if not repaired in two (2) weeks.
- v. Invasive Plant Material
 - 1. Plants removed upon discovery within five (5) working days.
- vi. Streams
 - 1. Visual inspection for obvious abnormalities (erosion, undercutting, water quality, dead fish, dead vegetation, wildlife damage notify immediately. Remediation dictated by severity of problem.
 - 2. Banks will remain natural within 25' and will have uniformity coverage 95% of design standard if not, repair within two (2) weeks.
- 19. Pedestrian Bridges
 - a. Life safety issues upon discovery will be addressed within 24 hours.
- 20. Drainage Structures
 - a. Debris removed within 24 hours of inspection.
 - b. Drop inlet height maintained at 100% of design standard.
- 21. Retaining Walls
 - a. Maintained at 100% of design standard repaired dictated by the severity of the problem.
- 22. Site Amenities (football/soccer goal posts/basketball backboards, goals, and posts/picnic tables, grills/volleyball nets standards/tennis standards and nets/disc golf baskets/benches/life guard chairs/trashcans/bike racks/flagpoles/dumpsters)
 - a. Repairs completed within 24 hours of when found unless life safety is involved.
 - b. Inspection daily.
- 23. Picnic Shelters
 - a. Reserved units cleaned and litter removed prior to and after each reserved use.
 - b. Minor repairs immediately.
- 24. Signage
 - a. Meets 100% of design standard and safety standards if not, repair within 24 hours.
- 25. Unique/Special Features (archeological remnants, unique natural features, historical structures, and specimen plant material)
 - a. Maintain at 100% of design and/or generally accept conservation/preservation/restoration standards.
 - b. Repaired dictated by the severity and accessibility of the problem.
- 26. Gates
 - a. Maintained at 100% of design and safety standards. Repair dictated by the severity of the problem.
- 27. Concession Trailers
 - a. Maintained at 100% of the County Health Department and original design standards. Repaired within 24 hours or sooner if dictated by code.



A Comprehensive Master Plan

Level II Maintenance (All life and safety issues will be secured from public access and resolved immediately.)

- 1. Lawn
 - a. Mow once every 10 days.
 - b. Aeration once per year
 - c. Coverage is at 80%.
 - d. Weeds 40% fescue, 25% bermuda
 - e. No dethatch
 - f. Remove grass clippings if it will kill the grass.
 - g. Fertilize no more than two times per year with all-purpose fertilizer.
 - h. Irrigation manual as dictated by design and weather conditions.
 - i. Disease/Inspect Control if determined to create safety issue or permanent damage to lawn respond within 48 hours.
- 2. Sports Turf
 - a. Mow once per week.
 - b. Aeration two times per season.
 - c. Coverage is at 100%.
 - d. Weeds -15% weeds.
 - e. Dethatch as needed.
 - f. If more than 1/3 of leaf blade is removed, grass clippings shall be removed upon visual inspection of need.
 - g. Trimming/Edging once every three (3) weeks.
 - h. Fertilize fertilize four (4) times per year with all-purpose fertilizer.
 - i. Irrigation automated.
 - j. Disease/Insect Control inspect and respond within 48 hours.
 - k. Soil Alkalinity test every other year and remediate.
- 3. Litter three (3) times per week.
- 4. Lighting
 - a. Security repair within 48 hours.
 - b. Sports design standards are recreational in lieu of competitive preserve original design.
 - i. Footcandle and uniformity levels meet 95% of the original design standards (Design standard for football/soccer/tennis/softball/baseball/indoor gyms, gymnastics/driving range/pools.) Repaired by next game.
 - ii. Damaged system repaired within 48 hours dependent on field conditions life safety.
- 5. Hard Surfaces
 - a. Clean once per month or more frequently if safety is involved.
 - b. Painted directional/instruction is crisp and clear will fix in 30 days.
- 6. Graffiti remove within 48 hours.
- 7. Repairs completed within five (5) days.
- 8. Inspection once per week.
- 9. Trees & Woody Plants
 - a. Prune once per season



A Comprehensive Master Plan

- b. Fertilize as health and appearance dictates
- c. Disease/Insect inspect and respond within 48 hours.
- d. Mulch 3"
- e. Dead Plants Shrubs
- f. If double dead, remove immediately.
- g. If single dead, remediate within five (5) days.
- h. Trees 30 days, goal two (2) weeks.
- i. Invasive Plants within five (5) days of discovery or complaint.

10. Floral

- a. No annuals
- b. Perennials and natives
- c. Deadhead as required by plant species or when detracts from general aesthetics of mass.
- 11. Restrooms services five (5) times per week.
- 12. Edging mechanically every two (2) weeks; chemically two (2) times per growing season.
- 13. Ballfields
 - a. Seasonal
- i. Dragging daily.
- ii. Grooming daily.
- iii. Lining/game preparation daily.
- iv. Irrigation test for coverage and system operation season starts and weekly. Repair dictated by severity of problem (life safety, nuisance).
 - b. Regular Cycle
- i. Fencing and gates daily, repair within 24 hours of discovery.
- ii. Safety netting inspect daily. Repair dictated by severity of problem and accessibility to problem. Repaired no longer than 48 hours.
- iii. Support structures and features (fountains, dugouts, bleachers, stands, batting cages, concessions, soil/sand bins)—inspect once per week. Repair dictated by severity of problem and accessibility to problem. Repaired no longer than 24 hours in season and 48 hours off-season.
- iv. Control cable (electrical) repaired within 24 hours.

14. Fences

- a. Life safety repair immediately.
- b. Sports repair within 48 hours.
- c. Decorative/Control/Bollards five (5) days.
- d. Property Line 10 days.

15. Playgrounds

- a. Consistent with established CPSC standards.
- b. Safety item repair immediately.
- c. Other items repair immediately if ports and technician are available.
- d. Equipment is secured from public use if safety items cannot be immediately repaired.
- e. CPSC inspection every 15 days.
- 16. Soft Surface Trail



A Comprehensive Master Plan

- a. 3"-4" depth maintained uniform
- b. Edging repaired within 10 days.

17. Waterway Management

- a. Earthen Dams conform to EPD requirements.
- i. Water control structures called to roads and drainage department upon discover. Follow up in two (2) days if no activity. Clean debris on a daily basis out of structures and off of backside of dam and shore where appropriate.
- ii. Mow as species dictates and once every five (5) days, may be as often as every three (3) days. Don't remove more than 1/3 of the leaf.
- iii. Aeration once per growing season.
- iv. Turf coverage at 95% of surface area. (5% bare spots). Seed and sod as needed and as species dictates.
- v. Weed control practiced so that no more than 30% (Fescue grass), 15% (Bermuda grass) of the surface is weed present.
- vi. Inspect and dethatch as needed.
- vii. If more than 1/3 of leaf blade is removed, grass clippings shall be removed upon visual inspection of need.
- viii. Fertilize test annually and fertilize per recommendation.
- ix. Irrigation automated system.
 - b. Lakes
 - i. Siltation when noted contact code enforcement upon discover follow up in two (2) days if no activity.
 - ii. Water Quality test quality level two times per year. Repair dictated by the severity of the problem.
 - iii. Adhere to best lake management practices.
 - iv. Shores/banks/edges
 - 1. Uniformity of selected plant material (grass, weeds, lawn) meets 95% of the design standard, if not repaired in two (2) weeks.
 - 2. Riprap uniformity meets 95% of design standard, if not repaired in two (2) weeks.
 - v. Invasive Plant Material
 - 1. plants removed upon discovery within five (5) working days.
 - vi. Streams
 - 1. Visual inspection for obvious abnormalities (erosion, undercutting, water quality, dead fish, dead vegetation, wildlife damage notify immediately. Remediate dictated by severity of problem.
 - 2. Banks will remain natural within 25' and will have uniformity coverage 95% of design standard if not repaired within two (2) weeks.

18. Pedestrian Bridge

a. Life safety issues – upon discovery will be addressed within 24 hours.



A Comprehensive Master Plan

19. Drainage Structure

- a. Debris removed within 24 hours of inspection.
- b. Drop inlet height maintained at 100% of design standard.

20. Retaining Walls

- a. Maintained at 100% of design standard repaired dictated by the severity of the problem.
- 21. Site Amenities repairs within five (5) days unless affect game play or reserved picnic unit.

22. Picnic Shelters

- a. Reserved units cleaned and litter removed prior to and after each reserved use.
- b. Minor repairs immediately.

23. Signs

- a. Meets 100% of design and safety standards
- b. Repair within 72 hours.
- 24. Unique/Special Features (archeological remnants, unique natural features, historical structures, and specimen plant material)
 - a. Maintain at 100% of design and/or generally accept conservation/preservation/restoration standards.
 - b. Repaired dictated by the severity and accessibility of the problem.

25. Gates

a. Maintained at 100% of design and safety standards. Repair dictated by the severity of the problem.

26. Concession Trailers

a. Maintained at 100% of the County Health Department and original design standards. Repaired within 24 hours or sooner if dictated by code.



A Comprehensive Master Plan

Level III Maintenance (All life and safety issues will be secured from public access and resolved immediately.)

- 1. Lawn
 - a. Mow once every 30 days
 - b. Aeration when needed by turf quality.
 - c. Coverage is at 80%.
 - d. Weeds 50% fescue, 35% Bermuda
 - e. No dethatch.
 - f. No grass clippings removal.
 - g. Fertilizer none.
 - h. Irrigation none.
 - i. Disease/Insect control none.
- 2. No Sports Turf
- 3. Open Field Turf
 - a. Mow every two (2) weeks.
 - b. Aeration when needed by turf quality.
 - c. Coverage is at 80%.
 - d. Weeds 50% fescue, 35% Bermuda.
 - e. Dethatch none.
 - f. Clippings remove only if threatens health of grass.
 - g. Trimming/Edging none
 - h. Fertilize once per year with all-purpose fertilizer.
 - i. Irrigation none.
 - j. Disease/Insect Control none.
 - k. Soil Alkalinity no testing.
- 4. Litter pick up once per week higher if people complain.
- 5. Lighting
 - a. Security repair upon complaint.
 - b. No sports lighting.
- 6. Hard Surfaces
 - a. Cleaned on complaints, repair as budget allows.
 - b. Clean once per month or more frequently if safety is involved.
 - c. Painted direction/instruction is crisp and clear will fix in 30 days.
- 7. Graffiti Remove within 48 hours.
- 8. Repairs Completed within two (2) weeks.
- 9. Inspection Once per month.
- 10. Trees and Woody Plants
 - a. Prune health and reasonable appearance.
 - b. Fertilize none
 - c. Disease/Insect epidemic condition threatens resource or public.
 - d. Mulch at initial planting only
 - e. Dead Plants shrubs remove within one month.
 - f. Trees within 60 days, goal 30 days.
 - g. Invasive Plants within five (5) days of discover or complaint.
- 11. Floral Native materials, non-manicured.



A Comprehensive Master Plan

- 12. Restrooms services 3 times per week.
- 13. Edging mechanically one time per month.
- 14. Ballfields none.
- 15. Fences
 - a. Life safety repair immediately.
 - b. Sport within five (5) days.
 - c. Decorative/Control/Bollards five (5) days.
 - d. Property Line 30 days.
- 16. Playgrounds
 - a. Consistent with established CPSC standards.
 - b. Safety item repair immediately.
 - c. Other items repair immediately if ports and technician are available.
 - d. Equipment is secured from public use if safety items cannot be immediately repaired.
 - e. CPSC inspection every 15 days.
- 17. Soft Surface Trails
 - a. Native material (earth/rock)
- 18. Waterway Management
 - a. Earthen Dams conform to EPD requirements.
 - i. Water control structures called to roads and drainage department upon discover. Follow up in two (2) days if no activity. Clean debris on a daily basis out of structures and off of backside of dam and shore where appropriate.
 - ii. Mow as species dictates and once every five (5) days, may be as often as every three (3) days. Don't remove more than 1/3 of the leaf.
 - iii. Aeration once per growing season.
 - iv. Turf coverage at 95% of surface area. (5% bare spots). Seed and sod as needed and as species dictates.
 - v. Weed control practiced so that no more than 30% (Fescue grass), 15% (Bermuda grass) of the surface is weed present
 - vi. Inspect and dethatch as needed.
 - vii. If more than 1/3 of leaf blade is removed, grass clippings shall be removed upon visual inspection of need.
 - viii. Fertilize test annually and fertilize per recommendation.
 - ix. Irrigation automated system.

b. Lakes

- i. Siltation when noted contact code enforcement upon discover follow up in two (2) days if no activity.
- ii. Water Quality test quality level two times per year. Repair dictated by the severity of the problem.
- iii. Adhere to best lake management practices.
- iv. Shores/banks/edges



A Comprehensive Master Plan

- 1. Uniformity of selected plant material (grass, weeds, lawn) meets 95% of the design standard, if not repaired in two (2) weeks.
- 2. Riprap uniformity meets 95% of design standard, if not repaired in two (2) weeks.

v. Invasive Plant Material

1. plants removed upon discovery within five (5) working days.

vi. Streams

- 1. Visual inspection for obvious abnormalities (erosion, undercutting, water quality, dead fish, dead vegetation, wildlife damage notify immediately. Remediate dictated by severity of problem.
- 2. Banks will remain natural within 25' and will have uniformity coverage 95% of design standard if not repaired within two (2) weeks.

19. Pedestrian Bridge

a. Life safety issues – upon discovery will be addressed within 24 hours.

20. Drainage Structure

- a. Debris removed within 24 hours of inspection.
- b. Drop inlet height maintained at 100% of design standard.

21. Retaining Walls

- a. Maintained at 100% of design standard repaired dictated by the severity of the problem.
- 22. Site Amenities repairs within two (2) weeks unless affect game play or reserved picnic unit.

27. Picnic Shelters

- a. Reserved units cleaned and litter removed prior to and after each reserved use.
- b. Minor repairs immediately.

28. Signs

- a. Meets 100% of design standard and safety standards
- b. Repair within five (5) days.
- 29. Unique/Special Features (archeological remnants, unique natural features, historical structures, and specimen plant material)
 - a. Maintain at 100% of design and/or generally accept conservation/preservation/restoration standards.
 - b. Repaired dictated by the severity and accessibility of the problem.

30. Gates

- a. Maintained at 100% of design and safety standards. Repair dictated by the severity of the problem.
- 31. Concession Trailers none.



A Comprehensive Master Plan

Level IV Maintenance (All life and safety issues will be secured from public access and resolved immediately.)

- 1. Turf areas not mowed. Weed control only if legal requirements demand it.
- 2. Fertilizer none.
- 3. Irrigation none.
- 4. Litter Control On demand or complaint basis.
- 5. Pruning none unless safety is involved.
- 6. Disease/Insect Control none except in epidemic or safety situations.
- 7. Lighting replacement on complaint basis.
- 8. Surfaces serviced when safety is consideration.
- 9. Repairs Should be done when safety or function is in questions.
- 10. Inspection once per month.
- 11. Floral plantings none.
- 12. Restrooms Service based on need.
- 13. Special Features service based on lowest acceptable frequency for feature. Safety and function interruption a concern when either seems significant.

