VILLAGE OF EMPRESS	
Title: Parks Maintenance Policy	Policy Number:72-02
Effective Date: April 20, 2017	Reviewed Date:

Parks Maintenance Policy

1. Policy Purpose

1.1. To facilitate the orderly and economical use of resources for parks maintenance.
1.2. To ensure community priorities and standard of care are maintained.

2. Definitions

2.1. Parks are defined as Centennial Park, Uptown RV Park, Peter Fidler Park, the Village Office Park, and the Entrance sign to Empress.

Index

3. Guidelines

3.1. Mowing

A safe and timely mowing operation is our foremost objective. Therefore the following procedures will be followed at all times.

a. Never mow or operate a mower in an area where play is taking place, be it children or adults. If this situation arises, notify the Public Works Foreman before entering the area. The Public Works Foreman is to request the group to move either temporarily or for a longer period of time so the mowing crew can move into that area.
b. The mowing machine operator is not to leave his assigned machine unless it is turned off and the key is removed. The machine is to be secured when not in operation.
c. Before mowing, walk the area and check for rocks, cans, bottles or other objects that may become flying objects and endangering others, may cause damage to the mower, jeopardize the safety of the operator and/or cause damage to vehicles, buildings, etc. The operator should remove these objects upon discovery and before mowing.
d. Carry out assignments as directed by Foreman or CAO. If others request additional work beyond the assigned scope of operation, refer that person to the Village Office. It is the intent to stay on schedule. This is not possible if we are continuously diverted from our primary mission.
e. If the Public Works Foreman cannot quickly resolve any problems at the site of operation, he is to contact the CAO as soon as practicable for resolution.
Common sense and a friendly manner either solve small problems or maintain small problems as small problems.
f. DO NOT mow wet grass.
g. A seasonal mowing schedule will be formulated by the Public Works Foreman with final approval by the CAO each spring, summer and fall as necessitated. The Foreman will be responsible for day-to-day assignments, according to that schedule. The CAO may request re-scheduling or modification of the schedule, due to special events.
h. Grass in all parks is to be mowed to a height of 2 ½ inches. The large grass area in Peter Fidler Park surrounding the RV sites is to be maintained to ensure it does not exceed 15 centimeters.

3.2 Trimming

It is the aim of the Department to complete all required trimming as is required at that site during the same time as the mowing operation. The mowing crew, as part of their Standard Procedure of Operations, is to do the entire trimming before leaving that mowing site.

a. Trimming is to be done around all buildings, landscape features such as rocks and fences, trees, etc. taking care not to damage tree bark or plants.

3.3. Edging

It is the aim of the Department to complete all required edging as is required at that site during the same time as the mowing operation. The mowing crew, as part of their Standard Procedure of Operations, is to do the entire edging before leaving that mowing site. The edger is to be maintained in a sharp manner. Edging is to be completed at the beginning of the season and then maintained as necessary throughout the season.

a. Trees: Prior to beginning, an outline will be made using a small ½" black plastic hose with a connector long enough to make a 12 inch zone around the tree with no vegetation. Once placed around the tree and connected, it will be centered and then a safe water soluable spray paint will be used to mark the area prior to edging. Once sprayed the hose is to be removed and the edging completed. This zone will be mulched with bark.
b. Firepits: Prior to beginning, an outline will be made using a piece of small ½" black plastic hose with a connector long enough to allow for a 6" fringe around the firepit. Once placed around the firepit and connected, it will be centered and then a safe water soluble spray paint will be used to

mark the area prior to edging. Once sprayed the hose is to be removed and the edging completed. This vegetation free zone will be covered with gravel.

c. Hedges: Prior to Beginning, an outline will be made using twine or heavy string/cord tied between two sticks or spikes the length of the hedge, 8 inches from the outside of the hedge. Once placed and leveled a safe water soluble spray paint will be used to mark the area prior to edging. Once sprayed the twine is to be removed and the edging completed.

3.4. Weeding

It is the aim of the Department to complete all required weeding as is required at that site during the same time as the mowing operation. The mowing crew, as part of their Standard Procedure of Operations, is to do the entire weeding before leaving that mowing site.

a. The preferred method of weeding is by hand, and in flower beds and around shrubs, this is the only method allowed.

b. In areas that have mulch or gravel, chemical application may be used following recommended application procedures, taking care to stay 2 feet away from all trees and shrubs (these areas are hand weeded). Once weeds are dead the remains are to be removed, to leave a clean appearance. Areas that have become out of control are to be monitored diligently and brought back to acceptable standards as soon as possible, this may mean spending more time in that area than the once per week standard.

3.5. Fertilizing

Fertilization on lawns will be once a year when possible, using an approximate percent composition (analysis and grade) of 20% nitrogen, 5% phosphorus and 10% potash. This is to be done in late spring or late fall.

a . Fertilization is not to be done on any inclines of over 4-1 or not at all on inclines leading to any body of water.

b . Fertilization is to be done when the grass is dry.

c. The product is to be a controlled, slow released (12-16 weeks) type with a volume of spread of approximately 60 lbs. per ½ acre.

d. A grid will be pre-set by maintainer so striping will be avoided.

e . Any spillage is to be cleaned up immediately

f. Fertilization of shrubs or trees will be at the drip line in amounts dictated on the bag, when possible.

g. Fertilizing of Flowers will be done in accordance with the directions on the container.

3.6. Seeding

This procedure will occur in the spring and/or in the fall. In most cases a mixture of the latest drought and disease resistant types of grass such as fairway crested wheat will be applied.

a . Application for over-seeding on established grass will usually be at a rate prescribed by the turf condition, i.e. 25 to 50 lbs. per acre.

b . Over-seeding will occur on worn areas requiring such and not everywhere.

c . If possible, a light coat of top-dressing will follow over-seeding to protect seed from birds, keep it moist, and to establish better roots right away.

d. Seeding new areas, smaller areas, or special areas, may require a different seed, i.e. a drought resistant variety. The procedure would be to loosen soil, level seed, rake in, fertilize and water. Watering is not always possible. The area should be marked off to protect it from foot traffic.

3.7. Watering

Whenever possible, watering is done in the morning for more effectiveness. Watering of grass will be limited to 1 "per week, but may be split in twice weekly ½" settings for all grass. Trees and shrubs require deeper and less frequent watering once established, and flowers require more frequent watering.

a. Underground sprinklers should be placed on a timer scheduled to come on at 6 a.m. and off at 7

a.m.

b. Rain in sufficient quantities will require the automatic sprinklers to be turned off
c. Different zones may be timed to start on different mornings if there is not enough pressure to run all zones at once.
d. A consistent rotation must be maintained.
e. Where there are no underground sprinklers, watering of grass will be done by above ground sprinklers and monitored to stay within the 1" per week guidelines.
f. Flower pots will be watered by hand every morning.
g. Flower beds shall be watered twice per week.

3.8. Deadheading

Deadheading is the removal of spent blooms from annual plants to maintain a tidy appearance, prevent the formation of seed heads and to encourage further blooming through the season.

a. All annual flower beds will be deadheaded once a week at the time the crew is in the park mowing.

3.9. Pest Management

In the spring fake wasp nests will be hung from the trees in all park areas.

a. All Park areas will be assessed weekly for bee or wasp nests in roof overhangs, under tables, benches and equipment, in trees or underground.
b. Treating hornets and other wasps should be done at night, without shaking or disturbing the nest. You will need a quick spray with something like Bonide Wasp and Hornet Aerosol or PT Wasp and Hornet Killer.
c. Care should be taken when spraying directly on trees and bushes with product, spraying as little as possible. If you spray on a house, it is recommended that you clean the area the next day, because of their oil bases.
d. When dealing with social wasps, such as hornets, wear protective equipment including a bee hat, long-sleeved shirt, coveralls, eyewear and gloves.
e. Locate the wasp nest by examining all protected areas in the vicinity of wasp activity. Simply removing the wasp nest will not resolve the problem, because surviving wasps will reconstruct a new one.
f. The best strategy is to treat the wasp nest at night when all the workers and queen are present. Spraying into hornets nests should ALWAYS be done at night. They are far less aggressive and are all at home. This tactic maximizes the effect of the pesticide application by killing most if not all of the wasps. If a treatment is made at night, avoid shining a light directly on the nest or use a red filter on the flashlight to dim the shine.
g. Daytime treatments are successful when the wasp nest is treated, or if the wasps present on the nest are killed. Then, the wasp nest is removed, and the attachment area treated with an insecticide LAMBDASTAR ULTRACAP 9.7%. Returning workers looking for the wasp nest contact the residual and die. Complete the job by removing the wasp nest, particularly if it is in an attic, wall void, etc. This service prevents secondary infestations by dermestids or other pests.

3.10. Fences

In the spring each fence will be inspected, cleaned and repaired as necessary.

a) Wooden Fence -.

Wood Fence Procedures

i. Clear the area along the fence.
ii. Use a power washer that operates at 1,500 to 2,000 psi to clean wood that has lost all its colour (gray) using a 25 degree tip on the end of the wand and holding it about 18" from the wood. Keep the wand moving to avoid gouging the wood.
iii. Wood that still has some colour can be cleaned using a garden hose sprayer and bristle brush on stubborn dirt deposits.
iv. Wear rain gear for cleaning the fence.
v. Fix or repair damaged pieces by gluing split and broken pieces with a waterproof glue and clamp. Tighten loose boards using weather resistant or stainless steel screws. Recess the heads and fill with a light coloured caulk.

vi. Apply wood preservative to the base of the posts to help prevent rot.
vii. After 24 hours the fence should be dry enough to stain/oil. If it's cool and humid allow another 24 hours.
viii. Lay plastic sheeting or scrap cardboard under the fence. Cover any nearby grass or plants.
ix. Use a paint roller with a medium nap cover to apply a soaking coat to the wood. Let the wood absorb as much sealer as possible. Roll about a 3 foot section of fence and then brush the sealer into the wood. If the wood still appears dry, roll on additional sealer. Work the sealer into all recesses and corners. The roller applies the stain, but you need the brush to work it well into the wood's surface. Coat detailed areas with a trim roller and small brush. Keep edges wet to prevent overlap marks.

b) Metal Fencing will be monitored and painted at the first sign of rust. Follow the procedures outlined below for metal and galvanized wire fences
c) Chain link fences are typically silver-colored galvanized steel. Although the galvanized links and posts are rust resistant, they can deteriorate to the point where you need to refinish the fence. It's not a difficult task. Don't be tempted to spray paint the fence, because you will lose a lot of paint to overspray. It's best to use a paintbrush on the posts and a roller on the chain link. Choose oil-based, rust-inhibiting aluminum flake paint for the project. The small flakes of aluminum in the paint overlap with each other to create a watertight bond on the metal. Trim the grass as low as possible underneath the fence with a weed trimmer or grass clippers.

Metal and Galvanized Wire Fence Procedures

i. Use a power washer to remove dust and debris from the fence.
ii. Remove rust and flaking paint on the entire fence with a wire brush. Brush one side of the fence and repeat the process on the other side to get anything you happened to miss with the first pass.
iii. Lay plastic sheeting or scrap cardboard underneath the fence. Cover any nearby flowers and shrubs with plastic sheeting to keep paint off them.
iv. Coat the rusty areas of the fence with an oil-based primer designed for metal. Do not coat the portions of the fence that still have the original galvanized coating. The primer may not bond properly with the original metal and may peel, necessitating the need for more painting. Spread the primer with a long-napped roller. Take your time and cover the bends and loops in the chain link mesh. Let the primer dry following the manufacturer's dry time guidelines.
v. Paint the fence with the paint you selected, using a long-napped roller. Paint areas you cannot reach with the roller with a paintbrush. Start at the top and work your way down. When you finish one side of the fence, paint the other side as well.

3.11. Trees and Ornamental Trees

Trees, other than ornamental trees or street trees, will be trimmed if branches/dead wood is reachable from the ground with extended trimming tools. If a ladder can be secured from the ground, it can be used in limited situations. Standing, dead trees are to be removed as discovered. Chain saws are not to be used on ladders. Trimming or tree removal will be done with the Public Works Backhoe, whenever possible. The Public Works Foreman, for all removal and trimming of standing trees, will make assessment for safety.
Downed trees, which are acceptable for wood burning stoves, will be cut into moveable lengths and transported to the wood pile. Most trimming and tree removal, except for dangerous situations will be done in late fall and winter. Ornamental trees will be trimmed and shaped as need arises. Trees, which look to be under stress, will be fertilized in the spring or fall. Trees that are dead or not healthy enough to be attractive will be removed and replaced. Ornamental trees are to have a grass free and wood chipped area around them, so they can be mowed around with a ride-on mower.
A contractor will be hired when necessary.

Tree Evaluation Procedure

The Village of Empress is dedicated to the safety of buildings, vehicles, fences, shelters, people pets etc. in our parks. To that end, we will annually inspect the trees located in parks where buildings, vehicles, fences, and/or people and their pets are likely to be in the common use of the park. In addition, public works will inspect trees for potential safety conditions after severe storms. The condition(s) of the trees will be evaluated and the condition neutralized according to the evaluation.

INTRODUCTION

Trees add to our enjoyment of outdoor experiences whether in forests, parks or urban landscapes. Too often, we are unaware of the risks associated with the defective trees, which can cause personal injury and property damage. Interest in defective tree management has increased in recent years due to safety and liability concerns resulting from preventable accidents. Recognizing defective trees and taking proper corrective actions can protect property and save lives.

A "defective tree" is a tree with structural defects likely to cause failure of all or part of the tree, which could strike a "target." A target can be a vehicle, building, or a place where people gather such as a park bench, picnic table, street, or backyard.

Because of the natural variability of trees, the severity of their defects, and the different sites upon which they grow, evaluating trees for hazardous defects can be a complex process. When in doubt, consult an arborist.

INSPECTING TREES

Inspect trees under your responsibility every year. Tree inspections can be done at any time of year, leaf- on or leaf-off. To be thorough, inspect trees after leaf drop in fall, after leaf-out in spring, and routinely after severe storms.

Inspect trees carefully and systematically. Examine all parts of the tree, including the roots, root or trunk flare, main stem, branches, and branch unions. Be sure to examine all sides of the tree. Use a pair of binoculars to see branches high off the ground.

Consider the following factors when inspecting trees:

^Tree Condition: Trees in poor condition may have many dead twigs, dead branches, or small, off- color leaves. Trees in good condition will have full crowns, vigorous branches, and healthy, full- sized leaves; however, green foliage in the crown does not ensure that a tree is safe. Tree trunks and branches can be quite defective and still support a lush green crown.

^ Tree Species: Certain tree species are prone to specific types of defects. For example, some species of maple and ash in the Northeast often form weak branch unions and aspen is prone to breakage at a young age (50-70 years) due to a variety of factors, including decay and cankers.

^Tree Age and Size: Trees are living organisms subject to constant stress. Pay particular attention to older trees, which may have accumulated multiple defects and extensive decay.

WHAT TO LOOK FOR

Defects are visible signs that the tree is failing. We recognize seven main types of tree defects: dead wood, cracks, weak branch unions, decay, cankers, root problems, and poor tree architecture. A tree with defects is not hazardous, however, unless some portion of it is within striking distance of a target.

Dead Wood: Dead wood is "not negotiable" -- dead trees and large dead branches must be removed immediately! Dead trees and branches are unpredictable and can break and fall at any time. Dead wood is often dry and brittle and cannot bend in the wind like a living tree or branch. Dead branches and tree tops that are already broken off ("hangers" or "widow makers") are especially dangerous!

Take immediate action if:

^ A broken branch or top is lodged in a tree.
^ A tree is dead
^ A branch is dead and of sufficient size to cause injury (this will vary with height and size of branch).

Cracks: A crack is a deep split through the bark, extending into the wood of the tree. Cracks are extremely dangerous because they indicate that the tree is already failing.

Take action if:

^ A crack extends deeply into, or completely through the stem.
^ Two or more cracks occur in the same general area of the stem.
^ A crack is in contact with another defect.
^ A branch of sufficient size to cause injury is cracked.

Weak Branch Unions: Weak branch unions are places where branches are not strongly attached to the tree. A weak union occurs when two or more similarly-sized, usually upright branches grow so closely together that bark grows between the branches, inside the union. This ingrown bark does not have the structural strength of wood, and the union is much weaker than one that does not have included bark. The included bark may also act as a wedge and force the branch union to split apart. Trees with a tendency to form upright branches, such as elm and maple, often produce weak branch unions.

Weak branch unions also form after a tree or branch is tipped or topped, i.e., when the main stem or a large branch is cut at a right angle to the direction of growth leaving a large branch stub. The stub inevitably decays, providing very poor support for new branches ("epicormic" branches) that usually develop along the cut branch.

Take action if:

^ A weak branch union occurs on the main stem.
^ A weak branch union is cracked.
^ A weak branch union is associated with a crack, cavity, or other defect.

Decay: Decaying trees can be prone to failure, but the presence of decay, by itself, does not indicate that the tree is defective. Advances decay, i.e., wood that is soft, punky, or crumbly, or a cavity where the wood is missing can create a serious hazard. Evidence of fungal activity including mushrooms, conks, and brackets growing on root flares, stems, or branches are indicators of advanced decay.

A tree usually decays from the inside out, eventually forming a cavity, but sound wood is also added to the outside of the tree as it grows. Trees with sound outer wood shells may be relatively safe, but this depends upon the ratio of sound to decayed wood, and other defects that might be present. Evaluating the safety of a decaying tree is usually best left to trained arborists.

Take action if:

^ Advanced decay is associated with cracks, weak branch unions, or other defects.
^ A branch of sufficient size to cause injury is decayed.
^ The thickness of sound wood is less than 1" for every 6" of diameter at any point on the stem.

Cankers: A canker is a localized area on the stem or branch of a tree, where the bark is sunken or missing. Cankers are caused by wounding or disease. The presence of a canker increases the chance of the stem breaking near the canker. A tree with a canker that encompasses more than half of the tree's circumference may be defective even if exposed wood appears sound.

Take action if:

^ A canker or multiple cankers affect more than half of the tree's circumference.
^ A canker is physically connected to a crack, weak branch union, a cavity, or other defect.

Root Problems: Trees with root problems may blow over in wind storms. They may even fall without warning in summer when burdened with the weight of the tree's leaves. There are many kinds of root problems to consider, e.g., severing or paving-over roots; raising or lowering the soil grade near the tree; parking, or driving vehicles over the roots; or extensive root decay.

Soil mounding, twig dieback, dead wood in the crown, and off-color or smaller than normal leaves are symptoms often associated with root problems. Because more defective roots are underground and out of sight, aboveground symptoms may serve as the best warning.

Take action if:

^ A tree is leaning with recent root exposure, soil movement, or soil mounding near the base of the tree.
^ More than half of the roots under the tree's crown have been cut or crushed. These trees are dangerous because they do not have adequate structural support from the root system.
^ Advanced decay is present in the root flares or "buttress" roots.

Poor Tree Architecture: Poor architecture is a growth pattern that indicates weakness or structural imbalance. Trees with strange shapes are interesting to look at, but may be structurally defective. Poor architecture often arises from storms, unusual growing conditions, improper pruning, topping, and other damage.

A leaning tree may be defective. Because not all leaning trees are dangerous, any leaning tree of concern should be examined by a professional arborist.
Take action if:

^ A tree leans excessively.
^ A large branch is out of proportion with the rest of the crown.

MULTIPLE DEFECTS:

The recognition of multiple defects in a tree is critical when evaluating the tree's potential to fail. Multiple defects that are touching or are close to one another should be carefully examined. If more than one defect occurs on the tree's main stem, you should assume that the tree is extremely defective.

CORRECTIVE ACTIONS

Corrective actions begin with a thorough evaluation, if a defective situation exists, there are three recommended options for correcting the problem: move the target, prune the tree, or remove the tree.

Move the Target: Removing the target is often an inexpensive and effective treatment for correcting a defective tree. Easily moved items like play sets and swings, RV's, and picnic tables can be placed out of the reach of the defective tree with little effort and expense.

If the target cannot be moved and a serious defect exists, consider blocking access to the target area until the defect can be properly eliminated.

Prune the Tree: A defective situation may be caused by a defective branch or branches, even though the rest of the tree is sound. In this case, pruning the branch solves the problem.
Prune when:

^ A branch is dead.
^ A branch of sufficient size to cause injury is cracked or decayed.
^ A weak branch union exists and one of the branches can be removed.
^ Branches from a sharp angle, twist, or bend.
^ A branch is lopsided or unbalanced with respect to the rest of the tree.
^ A broken branch is lodged in the crown. Remove the branch and prune the stub.

Pruning a tree properly early in its life is a good way to effectively avoid many potential problems when the tree is older and larger. When done correctly, routine pruning of trees does not promote future defects. If done improperly, immediate problems may be removed, but cracks, decay, cankers, or poor architecture will be the ultimate result, creating future defects.

We recommend that the "natural target" pruning method be used. This pruning method is fully described in How to Prune Trees (Bedker, O'Brien & Mielke, 1995).

Remove the Tree

Before cutting a tree down, carefully consider the alternatives. The effects of removing a tree are often pronounced in landscape situations and may result in reduced property values. Tree removal should be considered as the final option and used only when the other two corrective actions will not work. Tree removal is inherently dangerous and is even more serious when homes and other targets are involved. Removal of defective trees is usually a job for a professional aborist.

CABLING AND BRACING

Cabling and bracing does not repair a defective tree, but when done correctly by a trained arborist, it can extend the time a tree or its parts are safe. Done incorrectly, it creates a more serious hazard. Cabling or bracing as treatment for a defective tree will not be done unless the tree has significant historic or landscape value, and only with the CAO's written orders.

TOPPING AND TIPPING -- POOR PRUNING PRACTICES

Topping is the practice of pruning large upright branches at right angles to the direction of growth, sometimes used to reduce the height of the crown. Tipping is the cutting of lateral branches at right angles to the direction of growth to reduce crown width. Both of these practices are harmful and should **never** be used. The inevitable result of such pruning wounds is decay in the remaining stub, which then serves as a very poor support to any branches that subsequently form. Trees that are pruned in this manner are also misshapen and esthetically unappealing.

4. FACILITIES

4.1 Centennial Park

a) *Bathrooms*

The building will be inspected inside and out at the start of each season to determine if it requires any maintenance, (painting, toilet and taps in good working order, light bulbs if equipped working, etc.) At the beginning of the season, the whole building inside and out will be dusted down to remove any cobwebs and dust, than once every 2 weeks throughout the season. All interior walls and floors will be washed down at the beginning of the season and as required throughout season. Exterior walls will be pressure washed when required.
During Active period (May 1 to September 30), restrooms will be checked and serviced once a day. Servicing will consist of cleaning toilets and sinks, sweeping floors, emptying garbage, refilling toiletries if required. Floors to be mopped once a week or more often if required (muddy).

b) *Camp Kitchen*

The building will be inspected at the start of each season to determine if it requires any maintenance, (painting, light bulbs if equipped working, etc.) At the beginning of the season, the whole building inside and out will be dusted down to remove any cobwebs and dust, than once every 2 weeks throughout the season.
The floors will be swept and floors and walls pressure washed if necessary at the beginning of the season, than every two weeks thereafter. There will be a picnic table and a garbage container with a lid available in the shelter throughout the season. The picnic table will be cleaned daily and the garbage removed daily. The whole facility will be inspected inside and out weekly for wasp nests including under the table(s).

c) *Spray Park*

At the beginning of the season the splashpad deck will be swept and pressure washed. Follow procedures outlined in the operators manual section 2.0 and 4.0 (page 6 through 10) for start up procedures. Follow section 6 on page 12 for winterizing at end of season, and section 5 for daily, weekly, monthly and yearly operator duties and check points.

2.0 Prior to startup

Preparing the Splashpad water features
At the start of each season you must remove the winter caps from the Splash pad's water features and attach the appropriate spray nozzles to each feature.
Before installing spray nozzles on the water features, you should clean and lubricate with petroleum jelly all threads to prevent stripping and cross threading.
Store the winter caps for future use.

4.0 Command Center startup procedure

Start up procedure
• Open all the solenoid valves on the water distribution manifold and close the drain valve.
• Verify that all Splashpad water features have been prepared for operation. Refer to section 2.0 Prior to startup – Preparing the Splashpad water features for details.

Commissioning and operation

The following are a few reminders when commissioning or re-opening the Splashpad for operation.
Once all plumbing connections to the features and from the city supply are completed, the following testing and adjustment procedures may be executed:
(Refer to your Command Center drawing in your manual.)
1. Close valve handles on the backflow preventer

2. Slowly open the city water supply line or other water source.
3. Slowly open the valve handles on the backflow preventer.
4. Observe the pressure gauge on the manifold to see if the pressure increases.
5. Adjust the pressure regulator up or down until the gauge reads 30PSI
6. Close the drain valves on the feature lines and the manifold.
7. Turn the power switch on the controller to the ON position.
8. Set the operational hours on the controller {see section 3}
9. Remove all winter caps and spray nozzles from water features and open the features 1 by 1 manually to flush all debris from the lines.
10. Install all spray caps and nozzles on the features and turn them on 1 by 1 to adjust the flow.{see instructions below}
11. Set the controller to Auto mode and touch the activator to verify if operational and that the sequence works.

Pressure and flow adjustments

Due to the potential variation in city water pressure and volume, an inspection should be performed to ensure that the features are functioning properly and adjust the pressure regulator accordingly. An increase or decrease in pressure and flow may cause the spray pattern to exceed the desired spray zone and ultimately the water features performance. Pressure and flow may be adjusted on the solenoid valves linked to each of the features. Although, the features with spray nozzles are less sensitive to pressure differentiation, an inspection is still recommended. To adjust the pressure, manually activate the spray feature using the controller. Adjust the flow by using the wing valve handle on the respective solenoid valve.

System and water feature inspection

When re-opening the splashpad for the season inspect all electrical connections to ensure they are tight and there is no corrosion from water or humidity {to be done before turning on power} Inspect all splashpad water features for any broken parts or loose hardware and lubricate any features that have been assembled with bearings.

6.0 Periodic maintenance

As with any play equipment it is imperative that a reasonable periodic maintenance schedule be implemented by the owner / operator of the splashpad equipment. Splashpads vary in their specific maintenance requirements due to differentiating factors such as splashpad size, bather load, operating environment, and climate. The schedule should include monthly and seasonal check points. In some instances weekly verification may be required depending on the equipment and frequency of use. It is the responsibility of the owner / operator to ensure the safety of the user.

Daily

- Remove debris from the deck drain and basket.
- Keep the Splashpad area clean of any debris, dirt, grass and leaves.
- Ensure that all anchoring hardware is tight at all times.
- Check that all other hardware is secure. Tighten when necessary.

Monthly

- Clean spray nozzles and spray heads from hair, grass and dirt.
- Inspect and clean if necessary solenoid valves following the procedure described in this manual.
- Inspect all hardware to ensure they are tight.
- Disassemble and lubricate moving parts and inspect for wear. Replace when necessary.
- If necessary, use mild cleaners that do not harm plastic, paint or fiberglass.

Beginning of season

- Inspect all major components, water features and piping for signs of wear or

damage. Inspect all hardware to ensure they are tight.
• Clean the Splashpad area of any debris, dirt, grass and leaves.

End of season
• Inspect all water features and operating system and begin winterization process.
• Make a note of all requirements and repairs that should be addressed prior to system startup next spring.

5.0 Winterization procedure
It is important to properly winterize the Splashpad in environments where temperatures fall below the freezing point. The following is a list of key points to remember when winterizing your Splashpad:
• Ensure that main water supply line is turned off and drained.
• Manually open all solenoid valves by turning the coil counter clockwise and open all drain valves located at the bottom of each supply line{if applicable} for the individual water features to allow water to drain by gravity. Open all bleeders on backflow preventer and pressure regulator {if applicable} allow to drain. Compressed air can be used to blow out the system if desired.
• Replace spray caps with winter caps on flush mounted features where provided (i.e. ground geysers, water jellies, split stream etc.) To prevent water and debris from infiltrating into plumbing system.
• For features like water tunnels, cylinder directional water jets rotate directional spray nozzles to the closed position and re-secure locking ring.
• Spray nozzles on above ground play products and activator caps may be left in place.
• Ensure that all drain systems are free of debris and are properly functioning to allow for drainage during spring thaw.
• Turn power switch off in controller.
• Shut-down main power source to controller

d) Playground Equipment
Refer to Policy # 72-01

e) Fence
Inspected at the beginning of season by walking fence line and ensuring it is solid and stable, with no weak or leaning sections. Follow the procedures for metal fences in the guidelines of this policy.

f) Benches
At the beginning of the season inspect all benches top and bottom, wash down top and bottom. Ensure if wood construction, wood is in good shape with no cracks, rough spots or splinters. If metal constructions inspect paint and all metal pieces for rust, dents and/or weak spots. If plastic construction inspect for cracks or brittle areas. Benches should be monitored for end of life and placed in budget for replacement. Extending the life of the benches with good maintenance practices including refurbishing in the shop through the winter months by sanding down and resealing or painting as required.

g) Picnic Tables
At the beginning of the season inspect all picnic tables top and bottom, wash down top and bottom. Ensure if wood construction wood is in good shape with no cracks, rough spots or splinters. If plastic construction inspect for cracks or brittle areas. Picnic tables should be monitored for end of life and placed in budget for replacement. Extending the life of the tables with good maintenance practices including refurbishing in the shop through the winter months by sanding down and resealing or painting as required, and replace planks as required.

h) Garbage Receptacles
At the beginning of the season garbage receptacles will be emptied and cleaned inside and out with a pressure washer. Garbage receptacles will have a plastic garbage bag installed in each

receptacle and each receptacle will have a lid. Garbage receptacles will be checked daily and emptied **at a minimum**, once per week or more frequently if they are full or starting to smell, or if indicated elsewhere in policy for more frequent trash removal.

4.2 Uptown RV Park

a) Hedges

At the beginning of the season remove all accumulated trash and weeds. Check watering system to ensure it is working. Monitor throughout season and pull all weeds as necessary. Spraying cannot be done in close proximity to hedge. Hand weeding must be done.

b) RV gravel pads

Ensure gravel areas remain weed free throughout season. In early spring after snow has gone, place soil sterilant on graveled areas. Monitor and spray with roundup as required to maintain a non vegetative state (no weeds, tree/ bush suckers or grass) on all graveled areas.

c) Firepits

Firepits are to be inspected every spring to ensure there are no areas rusted out. Old fire residue is to be removed. The interior as well as the 6 inches beyond the exterior of the pit will have gravel placed. The exterior gravel is to be maintained in a sterile state, and the grass kept edged in a neat fashion to maintain the 6 inches. Throughout season fire pits are to be monitored and kept clean of all weeds and debris.

d) Shrub Beds

As soon as snow is gone in spring, clean out any rubbish and old weeds throughout beds. Check and see if additional mulch is required. Put down weed suppressant chemical **following chemical directions for distance from plant material**. Weekly watering and weeding are required to keep the beds weed free and plants in good health. Bushes are to be inspected and dead plants reported for replacement.

e) Trees

As soon as snow is gone in spring, clean out any rubbish and old weeds throughout trees. Check and see if additional mulch is required. Put down weed suppressant chemical following chemical directions for distance from plant material. Weekly watering and weeding are required to keep the trees weed free and in good health. Trees are to be inspected and broken or dead branches removed. Tree pruning will be done in their dormant season. – fall or winter following recommended pruning practices for each tree variety. All tree suckers are to be removed. All evergreens will have a deep watering once a week using a hose moving between trees while working in the park. Dead trees are to be reported for replacement. Trees in grassed area will be edged following the edging guidelines of this policy.

f) Registration Area

Registration area will be well marked and checked daily to ensure adequate supply of envelopes. RV park will be monitored daily for camper registrations, and registrations are to be submitted to office daily. If camper is in park and no registration is found in box, write down license plate number, make and model of vehicle and camper, and check at That's Empressive and Town Office to see if registered there. If no registration, attend at camp site, and advise them of their responsibility to register and pay for services. If no one is around, a note will be left on camper. Registration areas are to be clean, weed free and well marked and protected from the elements. Signage is to be of a professional nature.

g) Grass areas

At the beginning of the season rake up all the branch and tree litter. Grass is to be fertilized in the spring. Test the sprinkler system to ensure it is operating correctly with no leaks or heads broken. Follow the guidelines for weekly watering, mowing and trimming of grassed areas.

h) Picnic Tables

At the beginning of the season inspect all picnic tables top and bottom, wash down top and

bottom. Ensure if wood construction wood is in good shape with no cracks, rough spots or splinters. If plastic construction inspect for cracks or brittle areas. Picnic tables should be monitored for end of life and placed in budget for replacement. Extending the life of the tables with good maintenance practices including refurbishing in the shop through the winter months by sanding down and resealing or painting as required, and replacing planks as required.

i) ***Fences***

Inspected at the beginning of season by walking fence line and ensuring it is solid and stable, with no weak or leaning sections. Refasten any loose boards. Follow wood fence maintenance procedures as outlined in the guidelines of this policy. Monitor fence throughout season paying particular attention after any big wind storms. Maintain a 4-6" buffer zone next to fence with no growth using either the edging method or the chemical method under the weeding guidelines. Monitor throughout year for additional applications to ensure no growth up through fence.

j) ***Garbage Receptacles***.

At the beginning of the season garbage receptacles will be emptied and cleaned inside and out with a pressure washer. Garbage receptacles will have a plastic garbage bag installed in each receptacle and each receptacle will have a lid. Garbage receptacles will be checked daily and emptied **at a minimum**, once per week or more frequently if they are full or starting to smell.

4.3 Tennis Court

a) ***Fences***

Inspected at the beginning of season by walking fence line and ensuring it is solid and stable, with no weak or leaning sections. Ensure chainlink is secured properly in all areas. Clean out all grass and weeds from fenceline, and spray roundup in a narrow strip (no more than 6") along all fenceline to keep growth away from fence for ease of maintenance. Monitor throughout year for additional applications to ensure no growth up through fence. Follow galvanized fence maintenance procedures as outlined in the guidelines of this policy.

b) ***Cracks***

All cracks are to have all vegetation removed and cracks sealed at the beginning of the season. Monitor throughout season for additional applications. Ensure traffic is kept off courts till tar is dry to avoid it being tracked elsewhere.

c) ***Equipment***

Equipment such as basketball hoops, badminton and/or tennis nets are to be monitored for end of life cycle and placed in budget for replacement.

4.4 Park Beside Town Office

a) Hedges

At the beginning of the season remove all accumulated trash and weeds. Edge following guidelines provided in this policy. Check watering system to ensure it is working. Monitor throughout season and pull all weeds as necessary. Spraying cannot be done in close proximity to hedge. Hand weeding must be done.

b) Flower Beds

At the beginning of the season remove all accumulated trash and weeds. If it is a perennial bed, being careful not to rip out the plant, but rather cutting off last year's growth. Perennial beds will be fertilized and watered in the spring by May 1st. Annual flower beds will be planted with the annual flowers after the long weekend in May. Follow the guidelines for watering, weeding and deadheading of flower beds.

c) Grass Area

At the beginning of the season rake up all the branch and tree litter. Grass is to be fertilized in the spring. Test the sprinkler system to ensure it is operating correctly with no leaks or heads broken. Follow the guidelines for weekly watering, mowing and trimming of grassed areas. This park is to be mowed using the hand mower with a bagger.

d) Trees

As soon as snow is gone in spring, clean out any rubbish and old weeds throughout trees. Check and see if additional mulch is required. Put down weed suppressant chemical following chemical directions for distance from plant material. Weekly watering and weeding are required to keep the trees weed free and in good health. Trees are to be inspected and broken or dead branches removed. Tree pruning will be done in their dormant season. – fall or winter following recommended pruning practices for each tree variety. All tree suckers are to be removed. All evergreens will have a deep watering once a week using a hose moving between trees while working in the park.

e) Gravel areas

Ensure gravel areas remain weed free throughout season. In early spring after snow has gone, remove any old, dead vegetation and place soil sterilant on graveled areas following the guidelines for distance from trees, and plants outlined on the application directions. These areas are to be hand weeded weekly. Monitor and spray with roundup as required to maintain a sterile state (no weeds, tree or bush suckers or grass) on all graveled areas, taking care to stay far enough away from trees and plants, and ensuring no drift that will affect adjacent plants and trees.

f) Bird Bath

In spring clean out birdbath and hose down. When watering flowers twice weekly, clean out birdbath and refill.

g) Swing

At the beginning of the season the swing is to be inspected top and bottom and cleaned top and bottom. Throughout season the swing will be inspected weekly top and bottom for wasp nests. First thing in spring when temperatures are sufficient, the swing will be re-oiled following the guidelines for maintaining a wood fence outlined in this policy.

h) Table and Benches

At the beginning of the season inspect all tables and benches top and bottom, wash down top and bottom. Ensure wood is in good shape with no cracks, rough spots or splinters. Tables and benches should be monitored for end of life and placed in budget for replacement. Extending the life of the tables and benches with good maintenance practices following the procedures outlined in the guidelines for wooden fences. Throughout season the table and benches will be inspected weekly top and bottom for wasp nests. Refurbishing will be done in the shop through the winter months by sanding down and resealing or painting as required, and replacing planks as required.

4.5 Peter Fidler Park

a) Shower House

The building will be inspected inside and out at the start of each season to determine if it requires any maintenance, (painting, toilet and taps in good working order, light bulbs if equipped working, etc.) At the beginning of the season, the whole building inside and out will be dusted down to remove any cobwebs and dust, than once every 2 weeks throughout the season. All interior walls and floors will be washed down at the beginning of the season and as required throughout season. Exterior walls will be pressure washed when required. Area outside of Shower house will be seeded to fairway crested wheat grass and mowed/trimmed up weekly to ensure a neat and tidy appearance. Shutoff valves will have a pipe barrier painted a bright yellow around them to protect them from being run into. All vegetation shall be removed and sterilant used in this barriered off area surrounding the shutoff valves.

During Active period (May 1 to September 30), restrooms will be checked and serviced once a day. Servicing will consist of cleaning toilets and sinks, sweeping floors, emptying garbage, cleaning shower stalls, refilling toiletries if required. Floors to be mopped twice a week or more often if required (muddy).

b) RV gravel pads

Ensure gravel areas remain weed free throughout season. In early spring after snow has gone, remove any old, dead vegetation and place soil sterilant on graveled areas. Monitor and spray with roundup as required to maintain a non-vegetative state (no weeds, tree or bush suckers or grass) on all graveled areas.

c) Grass area

i) RV Sites

These sites will be seeded back to fairway crested wheat following guidelines. Sites may need to be watered with an above ground sprinkler till seed takes hold. Once established, the following year will not require watering. At the beginning of the season rake up all the branch and tree litter. Grass is to be fertilized in the spring. Follow the guidelines for weekly mowing and trimming of grassed areas.

ii) Remainder of Park

The remainder of the park shall be mowed in the spring, and then as required to maintain a height of no more than 15 cm. Disturbed areas may require seeding or overseeding following the seeding guidelines in this policy.

d) Picnic tables

At the beginning of the season inspect all picnic tables top and bottom, wash down top and bottom. Ensure if wood construction wood is in good shape with no cracks, rough spots or splinters. If plastic construction, inspect for cracks or brittle areas. Picnic tables should be monitored for end of life and placed in budget for replacement. Extending the life of the tables with good maintenance practices including refurbishing in the shop through the winter months by sanding down and resealing or painting as required, and replace planks as required.

e) Firepits

The interior and exterior 6 inches of pit will have gravel placed. The gravel is to be maintained in a sterile state, and the grass kept edged in a neat fashion to maintain the 6 inches perimeter edging, following the edging guidelines provided in this policy. Throughout season fire pits are to be monitored and kept clean of all weeds and debris.

f) Trees

Each RV Site will have a tree planted to provide some shade. The tree variety shall be approved by the CAO. The trees will have a mulched radius of 12-15 inches that is maintained with an edger using the guidelines for edging provided in this policy. Trees will be inspected and pruned following the guidelines provided in this policy.

g) ***Trails***
Trails that are marked with red shale shall be sprayed to kill all vegetation. In the spring they will be harrowed to remove any trash and bring the shale to the surface. Grass will be maintained at a height of 2 1/2 inches for a distance of six feet on either side of the trials to ensure good visibility of any snakes while walking.

h) ***Signs***
At the beginning of the season inspect all signs. The board and post the signs are attached to are to be maintained with paint to present a cared for appearance as well as to ensure good visibility. Signs are to be monitored and placed on a list for replacement when they no longer present a professional appearance.

i) ***Registration area***
Registration area will be well marked and checked daily to ensure adequate supply of envelopes. RV park will be monitored daily for camper registrations, and registrations are to be submitted to office daily. If camper is in park and no registration is found in box, write down license plate number, make and model of vehicle and camper, and check at That's Empressive and Town Office to see if registered there. If no registration, attend at camp site, and advise them of their responsibility to register and pay for services. If no one is around, a note will be left on camper. Registration areas are to be clean, weed free, well-marked and protected from the elements. Signage is to be of a professional nature.

j) ***Picnic Area by river***
Grass, picnic tables, garbage receptacles, and fire pit are all to be maintained in the same manner as the RV sites.

k) ***Benches along river***
At the beginning of the season inspect all benches top and bottom, wash down top and bottom. Ensure if wood construction wood is in good shape with no cracks, rough spots or splinters. Benches should be monitored for end of life and placed in budget for replacement. Extending the life of the benches with good maintenance practices including refurbishing by sanding down and resealing or painting as required, and replace planks as required.

l) ***Garbage Receptacles***
At the beginning of the season garbage receptacles will be emptied and cleaned inside and out with a pressure washer. Garbage receptacles will have a plastic garbage bag installed in each receptacle and each receptacle will have a lid. Garbage receptacles will be checked daily and emptied **at a minimum**, once per week or more frequently if they are full or starting to smell.

m) ***Boat Launch***
Early in the spring, the trail to the launch will be evaluated to see if there is any wash outs that require grading and/or gravelling. Rip-rap will be installed along the bank edges in the summer when the river is at its lowest following rip rap installation guidelines, and monitored after spring runoff every year. A picnic table and garbage can will be placed on site along with "No Fire" signage. Picnic table, signage and garbage can will be monitored in accordance with section d), h), and l) of Peter Fidler Park guidelines. Parking areas will follow c) ii of Peter Fidler Park guidelines.

4.6 Ball Diamonds

a) ***Bleachers***
At the beginning of the season inspect all bleachers top and bottom, wash down top and bottom. Ensure if wood construction wood is in good shape with no cracks, rough spots or splinters. Ensure posts/legs are not rotted. If metal construction, inspect for rusted or weak spots, and if required paint them. Bleachers should be monitored for end of life and placed in budget for replacement. Extending the life of the bleachers with good maintenance practices including refurbishing by sanding down and resealing or painting as required, and replace planks as required.

b) ***Fences***
Fenceline should be monitored to ensure there are no weeds or grass growing up in the fenceline, or blown into the fenceline. Fencelines are to be trimmed close to the ground than have a 4 inch strip of roundup applied on each side of the fence to create a sterile environment next to the fence, for ease of maintenance. Fence posts and fencelines shall be painted following the guidelines provided in this policy.

c) ***Diamonds***
Diamonds will be harrowed in spring and then have a soil sterilant applied to discourage any growth on the diamonds. Diamonds will be monitored throughout year to ensure they maintain a sterile state. Roundup and/or additional sterilant may be required throughout season. Grass shall be mowed as often as is required to ensure it stays under the 15 centimeter guidelines outlined in this policy. Prior to any tournaments, the ball diamonds will be checked to ensure they are in good shape.

d) ***Benches***
At the beginning of the season inspect all benches top and bottom, wash down top and bottom. Ensure if wood construction wood is in good shape with no cracks, rough spots or splinters. Ensure posts/legs are not rotted. Extending the life of the benches with good maintenance practices including refurbishing by sanding down and resealing or painting as required, and replace planks as required.

e) ***Picnic tables***
At the beginning of the season inspect all picnic tables top and bottom, wash down top and bottom. Ensure if wood construction wood is in good shape with no cracks, rough spots or splinters. If plastic construction, inspect for cracks or brittle areas. Picnic tables should be monitored for end of life and placed in budget for replacement. Extending the life of the tables with good maintenance practices including refurbishing in the shop through the winter months by sanding down and resealing or painting as required, and replace planks as required.

4.7. Entrance Sign

a) Flower Beds

At the beginning of the season review the flower bed to ensure it is structurally sound and make any repairs as necessary. Remove all accumulated trash, grass and weeds, being careful not to pull out any perennial flower plants. Perennial flowers will be fertilized and watered by May 1st. Annual flowers will be planted after the long weekend in May. Flowers will be watered using the town water tank. Follow the guidelines for watering, weeding and deadheading outlined in this policy.

b) Signs

The entrance sign is to be monitored and when required, removed in winter to be refurbished in the shop. Posts are to be painted with a metal paint to present a cared for appearance and extend the life of the posts.

c) Grass

Grass is to be maintained at a height of 3 inches for a distance of 10 feet surrounding the sign.

d) Trees

An arch of trees to the south and east of sign are to be replaced with new trees which are to be caged to protect them from deer and mowing. These trees will have a grass free zone surrounding the individual trees of 18 inches. Follow the edging guidelines in this policy. This zone will be mulched and monitored to ensure it remains grass and weed free. Trees are to be watered deeply once per week using the water tank. Follow the guidelines for tree maintenance outlined in this policy.

– Sean.bawn

Sean.bimstead

@bawmc.ca

403-857-9305

STOPDED Alberta Agriculture and Forestry

Dutch Elm Disease Prevention/Control Measures

Under the *Plant Protection Act "Plant Protection Regulation"* of Canada, the movement of the Dutch elm disease (DED) pathogen is regulated. Elms from a DED infected province cannot be shipped to a disease free province. Alberta and British Columbia are classified as DED free.

Under the Alberta *Agricultural Pests Act* (APA) *"Pest and Nuisance Control Regulation* (PNCR)*"* the Dutch elm disease (DED) pathogens, smaller European elm bark beetle (SEEBB), and the native elm bark beetle (NEBB) are named declared pests. All municipalities, counties and MD's in the province of Alberta have the responsibility and authority to prevent and control DED under the APA.

The APA provides a means for enforcement. Several sections of the APA and the Regulation can be applied. It is an offence not to take "active measures" and not to follow an inspector's notice.

If a municipality does not have a local bylaw or policy on a specific pest in place, the municipal pest inspector, bylaw enforcement officer or Agricultural Fieldman could use a notice under the APA to enforce the DED Prevention/Control Measures to the land owner. If a third party has contravened the APA, the Minister may issue a Stop Order.

Section 5 of the APA contains the duties of individuals to take "active measures" with respect to pests.

- **5 (2)** - An owner or occupant of land or property or the owner or person in control of livestock shall take active measures to
  - (a) prevent the establishment of pests on or in the land, property or livestock unless otherwise authorized by the Minister,
  - (b) control or destroy all pests on or in the land, property or livestock unless otherwise authorized by the Minister, and
  - (c) destroy any crop, vegetation or other matter that contributes or may contribute to the maintenance or spread of a pest on or in the land, property or livestock.

Section 6 of the APA identifies the duties of the local authority of a municipality to prevent the establishment of a pest or to control or destroy a pest in a municipality.

- **6** - A local authority of a municipality shall take active measures
  - (a) to prevent the establishment of, or
  - (b) to control or destroy,

  pests in the municipality.

Section 12 of the APA states inspectors can issue notices that specify the measures a person must take to address a pest issue and this section authorizes inspectors to respond to cases of non-compliance

- **12 (1)** When an inspector is of the opinion that land, property or livestock contains or is likely to contain a pest or should be protected against a pest, the inspector may issue a notice in writing directed to the owner or occupant of the land or property or to the owner or person in control of the livestock
  - (a) setting out the legal description of the land affected or a description of the livestock affected and the legal description of the land on which the livestock are located,
  - (b) naming the pest,
  - (c) specifying the measures to be taken and the material, if any, to be used to prevent the establishment of or to control or destroy the pest, and
  - (d) requiring the measures described in clause (c) to be taken within a specified period of time.

Section 4 of the *Pest and Nuisance Control Regulation* prohibits "dispositions" of "infestable" items. Care must be taken when transporting an elm tree positively diagnosed as contaminated with DED to the disposal site. All tree material must be covered and secured, eliminating the chance of contaminating healthy elm trees.

- 4(1) A person shall not import, purchase, sell or otherwise dispose of, transport, distribute or plant any infestable item that is infested or any pest without the prior written authorization to do so of a provincial inspector or, if the article is to be kept in Alberta, of a local inspector who is empowered to act in the local jurisdiction where it is to be kept.

Section 20 of the APA states a Stop Order can be issued if the Minister is satisfied that a person has contravened or is contravening the APA.

- **20(1)** Notwithstanding anything in this Act, if the Minister is satisfied that a person
  (a) has contravened or is contravening this Act or the regulations, or
  (b) owns or operates anything that causes the maintenance or spread of a pest
  the Minister may direct a stop order to that person in accordance with subsection (2).
  (2) In a stop order, the Minister may order the person to whom it is directed to
  (a) cease the contravention specified in the order,
  (b) stop the operation of a plant, structure, equipment or thing specified in the order, either permanently or for a specified period, or
  (c) cease the contravention under clause (a) and stop the operation under clause (b),
  and the stop order shall contain the Minister's reasons for making it.

(3) The Minister shall cause a copy of the stop order to be served on the person to whom it is directed, and that person, on receipt of the copy, shall comply with the stop order forthwith.

(4) A person who is served with the stop order under subsection (3) and fails to comply with the stop order forthwith is guilty of an offence and liable to a fine of not more than $1000 for each day that the offence continues.

(5) If the person to whom a stop order is directed fails to comply with the stop order forthwith on service of a copy of it on the person, the Minister may apply to the Court for an order directing that person to comply with the stop order.

(6) If the person to whom the stop order is directed fails to comply with the Court order,
(a) the failure to comply with the stop order may be dealt with by the Court as a civil contempt of the Court,
(b) an inspector authorized by the Minister for the purpose and persons assisting the inspector may, without notice and without incurring liability, enter on any land and do any acts necessary to carry out the stop order,
(c) a civil enforcement bailiff may assist the inspector and the inspector's assistants in enforcing their powers and duties under clause (b), and
d) the Minister may recover by action any expenses incurred by the Crown in carrying out the stop order from the person to whom the stop order was directed.

(7) The Minister may
(a) amend a stop order if the Minister considers it advisable in the circumstances to do so, or
(b) revoke a stop order
and shall notify accordingly the person to whom the stop order was directed.

(8) Service of the stop order, Court order and notification under subsection (7) shall be effected by any of the methods set out in section 12(3).

A copy of the Alberta *Agricultural Pests Act* (APA) and the *Pest and Nuisance Control Regulation* (PNCR) can be found at: http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/acts6008

Dutch Elm Disease Prevention/Control Measures

1. Elm Pruning Ban

Pruning ban period means the period commencing on April 1 and ending on September 30 of the same year.

Elm bark beetles (EBB), the vectors of DED, are active between these dates and can be attracted to the scent of fresh tree cuts, possibly infecting a healthy tree.

2. Elm Preventive Pruning and Removal

Pruning elms can only be carried out commencing October 1 to March 31 the same year. Elm trees can be removed any time of the year. (see 4. below)

Preventive pruning or tree removal is essential to eliminate breeding material for the elm bark beetles (EBB). Preventive pruning is the systematic removal of dead, damaged, or diseased other than from DED branches from healthy elm trees. If a tree is dead or dying it should be removed. All elm wood must be properly disposed. (See 4. and 5. Below) Keeping elms well-maintained will aid in the control of DED.

Improper pruning techniques and tree topping can weaken the elm tree, creating a hazard and increase the risk of attracting EBBs.

To avoid spreading DED, all equipment must be sterilized before pruning a different elm tree. To sterilize your tools, use methyl hydrate, a 25% solution of bleach and water, or a 70% concentrate of rubbing alcohol. Note that bleach can rust iron-based tools.

3. DED Confirmation

Before any DED suspect tree is removed, the presence of the Dutch elm disease fungus must be confirmed. All DED suspect elm trees must be sampled properly and the samples sent to a lab approved by the Alberta Agriculture and Forestry for confirmation testing. Suspect DED samples are tested at no cost to sender. Suspect DED sample instructions can be found on www.stopded.org and click on "Sampling Procedures". Call the STOPDED hotline at 1-877-837-3567 for more instructions.

4. Elm Tree Removal

An elm tree can be removed at any time of the year as long as it is immediately disposed. (See 5. below) Elm tree removal means to remove the trunk and all other parts of a tree including the stump.

When an elm tree has tested positive for DED, the tree must be removed immediately and properly disposed. (See 5. below.) The stump must also be properly treated. (See 7. below) Prompt removal of infected trees is an imperative first step in slowing down the spread of DED.

To eliminate EBB breeding material, remove all dead and dying elm trees regardless of the reason for their poor condition.

5. Elm Wood Disposal

Elm wood cannot be stored, or transported unless in route to the closest elm wood disposal site. All elm wood must be properly disposed of immediately by either burning of or burying to a minimum depth of 25 cm. If elm wood is uninfected with DED, another option is chipping. (see 6. below) Immediate disposal of the elm wood ensures the destruction of overwintering beetle larval broods and adults and eliminates EEB breeding material.

Every municipality must designate a disposal site where elm wood may be burned or buried.

6. Elm Chipping

If an elm tree is diagnosed with DED, all wood must be burned or buried. It cannot be chipped.

Elm wood not infected with DED may be chipped into pieces not more than 5 cm. Larger elm wood chips can harbor the vector. Chips must be destroyed or stock pile for at least one year before using them in a landscape setting. Elm wood chips give off an odor that will attract the vector, therefore must only be used on trails, shrub beds and as animal bedding in areas where elm trees are not growing nearby.

7. Elm Stump Treatment

All elm stump must be properly destroyed. A freshly cut stump with the bark still intact, gives off the same scent of a dead or dying tree. The remaining stump from a DED infected tree can also produce infected shoots. Remove the stump to a minimum depth of 10 cm below the soil line and fill the hole with soil or treat the elm tree stump in a manner satisfactory to an inspector.

8. Hazard Tree

Hazard elm tree is defined as a stressed tree that has deteriorated to the point of making it capable of supporting elm bark beetle habitation and breeding. There are many reasons why a tree may become a hazard such as environmental causes or improper pruning such as topping. If an inspector has declared an elm tree to be a hazard, the tree must be removed and properly disposed of. (see 4. and 5. above)

9. Dangerous Branch or Whole Tree

Dangerous is defined as a branch or a whole tree that could negatively affect human safety or cause property damage. In the event an elm branch is damaged making it dangerous during the elm pruning ban, corrective pruning can only be done to the dangerous branch with inspector approval. A dangerous tree can be removed at any time of the year without inspector approval. (see 4. above) A dangerous tree is only a concern to DED prevention/control if it becomes a hazard. (8. above) All elm material must be properly disposed of. (see 5. above)

To report a DED suspect elm tree or for more information, call the Society to Prevent Dutch Elm Disease (STOPDED) hotline at 1-877-837-ELMS or check out the web site at www.stopded.org

Components of a DED prevention/control management program

Program Component	Timing	Responsible Agency
Delivery and Administration of the Provincial DED Prevention Program	Continous	STOPDED
Enforce *Plant Protection Act* of Canada	Continuous	Federal
Administration of the APA and PNCR	Continuous	AB Agriculture and Forestry
Enforce Alberta APA and PNCR	Continuous	Municipality, Municpal District, County
Firewood Confiscation	Continuous	Municipality, Municpal District, County
Upgrading Disposal Site	As required	Municipality, Municpal District, County
Site-Specific Elm Inventory	Continuous	Municipality, Municpal District, County
Technical Direction & Information	Continuous	Municipality, Municpal District, County
Monitoring for Vectors	April 1 to Sept. 30	Property owner
Monitoring for DED	Mid-June to Aug. 30	Property owner
Removals - DED infected elm	Continuous	Property owner
Elm Pruning Ban	April 1 to September 30	Property owner/Arborist
Elm Pruning	October 1 to March 31	Property owner/Arborist
Elm Bark Beetle Control	April 1 to September 30	Property owner
Elm Tree Replacements	April to October	Property owner

Updated February 2017

Society to Prevent Dutch Elm Disease (STOPDED)

Agri-News
This Week

Back to Dutch Elm Disease Home Page

Who and what is STOPDED?

STOPDED

The Society To Prevent Dutch Elm Disease (STOPDED) is a non-profit organization whose mandate is to preserve and protect Alberta's elm trees from Dutch Elm Disease (DED). Members include federal, provincial and municipal representatives, nurserymen, landscapers, commercial and municipal arborists, research scientists, and other interested Albertans. STOPDED members from across the province take an active role in the prevention of DED in Alberta and in their communities. STOPDED has a new hotline number *1-877-837-ELMS*.

What is STOPDED doing in Alberta?
STOPDED has an ongoing public awareness campaign focussed on preventing the establishment of DED in Alberta.

In March 1999, STOPDED completed a province wide elm inventory. Location, size and condition information about public and private elms was collected in 529 municipalities. The completed inventory shows that a total of 219,334 elms, valued at $634 million, grow in Alberta's urban areas. The inventory supplies the basic information necessary for an effective management program should DED appear in a municipality. The information also identifies areas where intensive surveillance is necessary due to the number and/or condition of the elm trees.

Funds generated from membership dues and fund raisers are used to provide educational and promotional materials on DED prevention. STOPDED depends on your support and participation in their ongoing prevention program.

What is STOPDED doing in Alberta / Why should we worry about our Elm trees?
Elm tree populations in Alberta are subject to numerous stresses. The most serious threat comes from DED, a fatal fungal disease that infects only elm trees. DED moves rapidly from infected to weakened trees on the bodies of European or native elm bark beetles. The disease can kill an individual tree in as little as three weeks. The whole population of elms in a community can easily be destroyed within a decade.

Currently, Alberta is one of the last two locations in North America that is free of DED. However in 1998, one elm tree in Wainwright was confirmed to have the disease. The tree was immediately removed and burned. This tree was noticed to have typical DED symptoms by STOPDED employees while completing the province-wide elm inventory survey.

Since 1994, the European elm bark beetle have been found throughout the province.

Why do we need to maintain our trees?

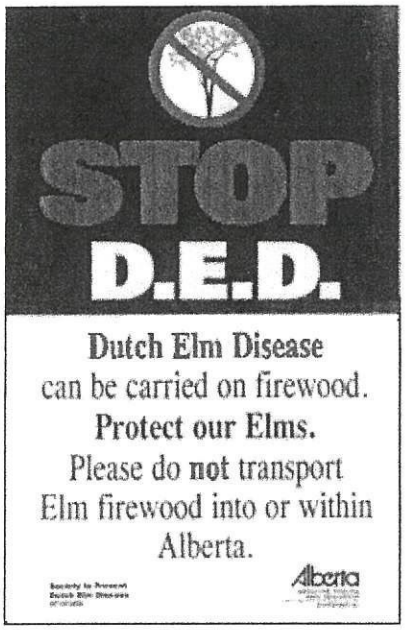
- Trees add beauty and give character to communities.
- Trees reduce heating and cooling costs.
- Trees protect us from dangerous ultraviolet radiation.
- Trees prevent both wind and water erosion.
- Trees convert carbon dioxide into oxygen.
- Trees increase the value of real estate.
- Trees reduce noise, dust and air pollution.

What can you do to help save our Elms?

- Take preventive measures by keeping your elm trees healthy, vigorous and properly pruned.
- Elms should be well watered from April to mid August. To allow the trees to harden off for the winter, watering should be stopped mid August, followed by a good soaking or two before freeze-up.
- Dead and dying elm branches and trees provide an ideal breeding site for the elm bark beetles that spread DED and must be removed. Beetles are attracted to fresh tree wounds, therefore pruning must be done between October 1 and March 31 when beetles are not active.
- Dispose of all elm wood by burning or burying it.
- Learn how to identify the signs of DED and beetle activity. As early as June, the leaves on a DED-infected elm will wilt, turn yellow, then curl and turn brown. This is accompanied by brown staining in the sapwood under the bark.
- Become an active STOPDED member.

Do Not!

- **Do Not** store elm firewood! It is illegal!
- **Do Not** transport elm firewood into or within Alberta!
- **Do Not** prune elms between April 1st and September 30th. The beetles are active during this time, they will
  be attracted to the scent of fresh tree cuts, possibly infecting a healthy tree.



For information about STOPDED or Dutch elm disease contact Janet Feddes-Calpas at STOPDED Hotline: 1-877-837-ELMS (3567)

Other Documents in the Series

Society to Prevent Dutch Elm Disease (STOPDED) - **Current Document**
Dutch Elm Disease Municipal Contact List
Society To Prevent Dutch Elm Disease Bylaws
Objects of STOPDED
Society to Prevent Dutch Elm Disease Members' Meeting Minutes
Society To Prevent Dutch Elm Disease (STOPDED) logo use

For more information about the content of this document, contact Shelley Barkley.
This information published to the web on June 25, 2002.
Last Reviewed/Revised on January 13, 2016.

Phone the Ag-Info Centre, toll-free in Alberta at 310-FARM (3276), for agricultural information.