

ILCA CONTRACTOR'S GUIDE TO :
***CREATING A
SUSTAINABILITY
ACTION PLAN***



INTRODUCTION

HOW TO USE THE ILCA SUSTAINABILITY ACTION PLAN (SAP) TEMPLATE

This document is intended to help guide landscape companies of all sizes and stages towards a more sustainable future. The SAP template gradually integrates sustainable practices and ethics into all services and operations.

While the template aims to make this as easy as possible, it is not intended to be a stringent exercise in word processing. This template is intended to act as an inspiration and springboard for embarking on a creative journey. The result is a more efficient, profitable, and environmentally responsible business.

Please see the next page for a quick list of the do's and don'ts for creating your own SAP.

DO'S & DON'TS

Do /

Share – With the entire company, clients, friends, and family. The more people who are aware of your specific goals, the more likely you will be to follow through on your ambitions.

Work as a team - This document is best completed as a team, where vested interests will help ensure the success and longevity of the company's sustainability initiatives.

Think big picture - Utilize the ILCA's Sustainability Venn Diagram to help guide and define your goals as being truly sustainable. Consider the interconnectedness of all your goals as one.

Get nitty-gritty - The more details and concrete benchmarks you can create, the more easily you'll be able to track your overall progress.

Start small - Initial successes will be critical.

Don't /

"Set it and forget it" – This is a working document which is to be revised annually. Don't let this become another 3-ring binder on the shelf!

Create your SAP in a vacuum - See what else is out there. Draw inspiration from your peers and other likeminded businesses.

Be afraid to fail – Look for opportunities within your business where calculated risk will not affect your overall bottom line. Failure should be expected, and should be well documented.

A completed, and fully-functioning Sustainable Action Plan begins on page 6 of this guide.

CREATE YOUR OWN: [CLICK HERE TO ACCESS THE WORD DOCUMENT TEMPLATE!](#)

Best of luck,

The ILCA Sustainable Landscape Committee



ABOUT THE AUTHOR



Brandon Losey is a designer and sustainability director with Ringers Landscaping out of Fox River Grove, IL. His original passion for sustainable landscaping was sparked while working his way through the landscape architecture program at Iowa State University, where native plants and sustainable storm water management were at the foundation of all course work. This included a required reading of Aldo Leopold’s “A Sand County Almanac”!

Brandon’s passion for sustainability has continued to grow through the inspirational community he has found throughout the Chicagoland region. He now happily finds himself practicing what he preaches at Ringers, where the SAP has become the driving force behind the company’s mantra of “Landscaping Today for Tomorrow”.

THANKS AND ACKNOWLEDGEMENTS

My dedicated colleagues on the ILCA Sustainable Landscape Committee

Thank you to my parents for everything

My loving and supportive wife

Erik Ringstrand for letting me do what I love

Scott Grams

Tom Lupfer

Ken Williams

The Midwest Ecological Landscape Alliance (MELA)

LANDSCAPING
TODAY
— for —
TOMORROW

Ringers



— 2014 —

VISION

Ringers Landscaping will be a premiere model for sustainability and environmental stewardship throughout our community and the greater landscaping industry.

There is opportunity for the integration of sustainable practices in all of Ringers five main service divisions:

Design/Build, Property Maintenance, Tree Care, Fertilizing, and Snow Removal.

This report will highlight goals and key benchmarks for each division.

As an indicator of our successes and failures a bi-monthly meeting will be held to discuss our progress. Sustainability and environmental responsibility will fall on all employees of Ringers Landscaping, and all are held accountable for the mutual successes of our initiatives. All team members will sign the agreement at the end of this document to ensure a cohesive understanding of our sustainability goals and values is met.

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**Specific goals for 2014 are detailed at the end of each section.*

DESIGN / BUILD

The design/build division of Ringers looks to promote sustainability in all of its design work and operations. This will come in the form of planting and preparation techniques, promoting storm water management systems (rain gardens, bio-swales, rain barrels, permeable pavers, Rain-Xchange system), utilizing sustainable products and materials, improved logistics, and utilizing native plants and local materials.

Specific goals for 2014 are detailed below.

Design / Build Sustainability Goal #1 (Updated! Continuation from 2013)

Certify 5 properties/projects as per the Barrington Area Conservation Trust (BACT) - Conservation@Home guidelines.

Using the points system detailed in the Conservation@Home Certification Criteria we can inform potential Design/Build clients of the possibility that their property can be Conservation@Home certified. This is a very reasonable goal to attain, as we are already meeting many of the criteria on most project and maintenance sites. Informing the client of the benefits of Conservation@Home will be key. Remember: Reward early adopters!

How we will accomplish this goal...

- Bring the Conservation@Home Certification Criteria to all Design/Build meetings
- Bring the sample yard sign we have been given to client meetings
- Introduce it early on in the design process/conversation
- Inform existing clients that they get a Conservation@Home sign in their yard
- Become authorized to certify properties on our own. (Ken) - DONE!
- Host an open house and native plant sale with BACT. (Schedule for April!)
- Certify both District 3 properties

Design / Build Sustainability Goal #2 (NEW!)

Promote our new Smart Backyard food garden service division.

We're very excited to be offering a new service which promotes sustainable home food production. This type of service has taken off in other areas of the country and we feel it's time for the Chicagoland area to get on board with the revolution. The possibilities for integrating edibles into our Design/Build division are endless and strengthen our core values of sustainability and reconnecting our clients with the environment.

How we will accomplish this goal...

- Acquire at least 6 Smart Backyard clients during the 2014 season.
- Build our own demonstration food garden using recycled materials from around the shop.
- Develop clear pricing guidelines for planning, installation, and maintenance services.
- Include promotional materials in all bid packets, and introduce edibles early on in the Design/Build process.
- Approach clients with existing vegetables gardens and see if they would like us to help maximize their efforts.

Design / Build Sustainability Goal #3

Explore alternative methods for preparing a site for new plantings.

Proper site preparation is crucial to a projects long-term sustainability and overall success. Each site has its own unique set of concerns mostly in the form of existing weeds, depleted soils, and the transition from turf to perennial plantings. Our goal to prepare a site in a way which preserves the existing soil, adds organic matter to that soil, keeps as much material on site as possible, and solves immediate and long-term issues with weeds. Chemical applications are often appropriate when dealing with specific weed issues or long neglected sites, but to reduce our dependence on these chemicals we will be exploring new organic options.

- Explore black solarizing plastic as a means of site preparation. This will require a good amount of patience on the clients end.
- Field test **Avenger** as an organic herbicide. **Avenger** is derived from citrus peels and breaks down in the environment very quickly. It works by stripping the plant of its waxy coating, thus dehydrating it within hours. We are curious if this is a long-term solution and how it works on established weed populations.
- Turf to perennial plantings transition. - Kill the grass using either solarizing or chemical controls and after several weeks plant directly through the dead sod. This acts as a natural weed barrier and keeps more material on site.

Design / Build Sustainability Goal #4

Install a LiveWall system.

We have not tapped into the many products and technologies which make green walls and roofs easily accessible to our clients. LiveWall has solved many of the known issues with green wall installations by creating a structure which keeps plants naturally oriented and well irrigated. LiveWalls help transform ordinary spaces into more dynamic, therapeutic environments. The system is highly adaptable and can be used to grow annuals for seasonal color, perennials, or even herbs and vegetables. Now that we are familiar with the system we can begin to offer this exciting new sustainable element which can easily be integrated into our designs and installed at the residential and commercial level.

- Work with FRG District 3 parents, teachers, and staff to build interest in LiveWalls.
- Make the installation accessible both visually and physically to students throughout the day.
- Integrate a LiveWall into the therapeutic garden re-design at Three Oaks Assisted Living. Raised vegetable beds were built last year so the LiveWall can be used for flowering annuals. Explore the mobile setup.
- Install a smaller 4'x4' system outside our shop as a demonstration piece.

PROPERTY MAINTENANCE

There is potential for sustainability in all aspects of Ringers property maintenance division. Conventional maintenance is a standard which has rarely been challenged in the Midwest, and potential for innovation is virtually limitless. Ringers would like to simplify property maintenance with a "back to basics" approach, yet be progressive in terms of new technology and techniques.

Specific goals for 2014 are detailed below.

Property Maintenance Sustainability Goal #1 (Updated!)

Reduce the amount of chemical applications being used for weed control in hardscaped areas and existing planting beds. Explore organic alternatives.

Spraying herbicides in parking lots, sidewalks, and driveways is especially damaging to the environment due to the high rate of runoff directly into storm sewers. We looked at using horticultural vinegar last season, but this was an issue because it stains hardscape surfaces. This year we will demo a product called *Avenger* which is naturally derived from citrus peels and promises not to stain surfaces. In terms of plantings beds; using a hoe for cultivation (especially on perennial weeds like thistle and dandelions), and conducting observational weeding should get us to a point where conventional chemicals are not necessary.

How this goal will be accomplished...

- Field test *Avenger* in hardscape areas.
- Explore *Fiesta* as a spot spray alternative to RoundUp. *Fiesta's* main ingredient is Iron.
- Cultivate planting beds more regularly.
- Create dense plant communities.
- Eliminate turf areas which are susceptible to heavy weed infiltration.

Property Maintenance Sustainability Goal #2 (Updated! Continuation from 2013)

*Convert at least one gasoline powered mower (Scag 48") to run on propane fuel.
Purchase and test a STIHL electric blower/trimmer.*

Small gas-powered two and four stroke engines emit as much toxins as a mid-sized car. Commercial mowers, blowers, and trimmers are ran an average of 5 hours a day causing them to account for 5% of U.S. air pollution. This is an unnecessary evil, as alternative fuel sources are available and more efficient equipment is continuously being developed. Other companies have made the conversion, so we know it is a possibility. Reel mowers and Hand Push Portable Rotor-Tine Aerators are also an option to be explored for very small sites in the city.

How this goal will be accomplished...

- Have our mechanic Jose trained so we can perform our own conversions.
- Talk more with Steve Neuman on possibly converting our backpack blowers to propane. May need to purchase blowers with the correct engine configuration.
- Look into converting our snow blowers to propane. Is temperature an issue?
- Research the legal limitations as to be sure we are in accordance with the law
- Safety must be a top priority

Property Maintenance Sustainability Goal #3 (NEW!)

Document our client Lynn's property as she makes the transition into a demonstration age-in-place sustainable environment.

This property and client can serve as a perfect example of how an existing conventionally maintained property can be transitioned into a sustainable landscape. We began this adventure last fall when we performed a spring cleanup and kept all the debris on site to fill her newly setup compost operation. We also installed native shrubs, and removed buckthorn which we then used to build an organized brush pile for winter bird habitat. Video and photographic documentation will be essential to using this project site as leverage for converting future sites.

How this goal will be accomplished...

- Catalog each project and transitional year on our blog.
- Create a series of videos introduce sustainable maintenance concepts and how we are performing these services.

- Continue to define a long-term game plan for this site and our clients yearly goals.
- Utilize http://www.delafleur.com/168_Elm/ - *The One Drop At A Time Project*. This is a great resource for practical, sustainable residential projects. Create similar documentation at Lynn's residence.

Property Maintenance Sustainability Goal #4

(We'll get there! Continuation from original SAP)

The bicycle idea.

A bicycle equipped with a trailer is used to transport reel mowers, brooms, rakes, electric trimmers, cultivating hoes, and other necessary tools needed to service a client's property. This zero emissions approach eliminates the gasoline powered tools most often used to maintain residential properties, dramatically decreasing the services carbon footprint. This is a quiet, clean approach to servicing a property which will have a dramatic impact on public perception. Given our size and resources, we are in a unique position to launch such an experimental service. This is something that has been done before by Carbon Free Cutters in Toronto, ON Canada. They seem to have faded (website is down, have not been in the news lately) but clues to their service still remain on the internet (see attached articles + YouTube video).

How this goal will be accomplished...

- A prototype bike equipped with a custom trailer will need to be built and tested
- Through testing and experimentation the necessary tool kit will be assembled
- Run the numbers...How long will each lawn take? How often will they need to be cut? How much would we need to charge to make even a minimal profit? (not necessarily looking at this to be a profitable venture for some time)
- Develop maintenance plan, develop branding and marketing tools, secure clients
- Get two of Ringers crew members interested in the program, begin training
- Hire high school students as seasonal employees, which secure clients and operate within their neighborhood while working under the umbrella of RLS. (Educational component)

TREE CARE

Ringers Tree Care division is already a fairly sustainable service. Tree debris is transported back to our yard where it is put through a tub grinder and turned into mulch, which is re-used on other clients properties. When there is access to a woodchipper the debris has sometimes been left on-site. This could be a method we practice more often. For tree care, sustainability will come in the form of tree preservation, proper forecasting of diseases and pests, establishment techniques (irrigation), our tree planting program, and forest preservation/restoration through the removal of invasive species (Buckthorn removal).

Specific goals for 2014 are detailed below.

Tree Care Sustainability Goal #1

Brand and expand our "Tree for a Tree " collaboration with the MCCD .

This was a great accomplishment for us last year, and in 2014 we look to grow support and awareness from our client base and the general public. We feel the program can really take off if our clients are made aware of the potential contributions they are making when choosing to plant native trees and shrubs. We would also like to brand/market this program to build up donations and track the pool of money and numbers of trees/shrubs which will be planted each Fall. This way, we may be able to double our original contribution of 100 trees and shrubs from last year.

How this goal will be accomplished...

- Integrate donation and matching opportunities in new Design/Build estimates.
- Develop a tracking system for our goal of 200 trees/shrubs - This may be a simple graphic which can be updated and shared throughout the season on our blog and newsletter.
- Develop a mapping system of where we are planting, and specifically which varieties of trees/shrubs are planted where. This will require gps photo tagging which can be uploaded to a custom map we have created.
- Create certificate for clients, expressing how they have helped their community and the planet
- Convey why this is beneficial for the community and our overall vision for the program.

Tree Care Sustainability Goal #2 (Ongoing)

Become a premiere resource for EAB (emerald ash borer) information and solutions.

The Emerald Ash Borer is a major issues that most homeowners will need to address in the next several years. Surrounding communities have been hit hard and there are still many homeowners unaware of the invasive species and its implications on the landscape.

How this goal will be accomplished...

- Promote EAB blog post created in 2012 - Update!
- Continue to address the issue on our Tree Care page on the website.
- Offer replacement alternatives with complete removal+replanting package deals.
- Educate clients on the impact of EAB (most financially and environmentally)
- Do not promote removal if there are no present signs of EAB. (pre-removal)

Tree Care Sustainability Goal #3

Offer compost tea applications as an organic alternative to conventional tree and shrub fertilization.

A surprising number of our clients regularly fertilize their trees and shrubs. Compost tea is a great alternative to conventional chemical applications. It can be applied as a soil drench, and as a foliar spray

How this goal will be accomplished...

- Promote the benefits of compost tea applications on trees and shrubs.
- Adjust our brew ingredients to create a more fungal tea for trees and shrubs opposed to the more bacterial brew we are using for turf. This may require a compost which is heavy in woody material or the addition of baby oatmeal.
- Have this alternative brewed tested for fungal activity.
- Document side-by-side examples of trees and shrubs at the shop.

Tree Care Sustainability Goal #4 (Ongoing)

Promote our invasive species removal services.

The restorative power of clearing a forest of buckthorn and other invasives can be astounding. Just by allowing more sunlight to penetrate to the forest floor will promote a new successional growth of native species which have laid dormant for years. This is a first step in restoring a forest's visual quality and overall health. We have conducted several buckthorn removal projects which are still being evaluated. Mature buckthorn trees were cut down and the stumps were treated with a Garlon application. Smaller seedlings were sprayed with Garlon and as many as possible were hand pulled. All three removal projects were done at different points in the season so it will be beneficial to see when the best time for this service will be, or even if there is a best time.

This is a service which is beneficial to the environment and has dramatic visual results. It is also a problem that many clients are not aware they have (or they enjoy the privacy/screening buckthorn provides), so heavily promoting the issue and our services will be necessary.

How this goal will be accomplished...

- Analyze past buckthorn removal projects for successes and failures
- Refine our system, find out more from the local conservation district on recommended techniques and products.
- Scout for potential removal projects on existing clients' properties and the Village of FRG
- Educate clients and employees on the detrimental effects of invasives and how they can be managed
- Express this as a clear sustainable/restorative service under Ringers tree care division
- Educate employees on buckthorn identification
- Show clients before and after photos of past projects.
- Utilize Ken's extensive invasive species removal experience.

FERTILIZING

Fertilizing often gets a bad reputation, and for good reason. Chemicals and toxins are consistently leaching into our groundwater, contaminating our soils, and killing our freshwater ecosystems. This is a constant, and the harmful effects of these pollutants on human health and the environment are costing us hundreds of millions of dollars each year. At Ringers, we do not want fertilizing to be a dirty word. We understand that there is a better way to enhance and manage turf that does not require high inputs of synthetic chemicals. It requires an understanding of soil chemistry / biology, the growth and life cycles of common turf varieties, and their cultural needs. Sustainability in fertilizing comes in the form of slowly weaning turf off of unnecessary additives and eventually eliminating the need for fertilizer at all by creating a self-sustaining cycle. This is not a product-based approach, but becomes a knowledge-based approach. Now that we have made the transition and have had a successful first year, we need to continue to build a body of proof behind our compost tea.

Specific goals for 2014 are detailed below.

Fertilizing Sustainability Goal #1

Continue to build a body of proof for our compost tea.

This will require more lab testing, photographic documentation, and side-by-side comparisons. We have a diverse group of properties and we're getting a good idea of how our organics are working in various turf situations. Sites conditions include: Post construction dump site, Chemically treated for past 10 years, No chemicals used for past 2 years, Close proximity to major road, and Intensive foot traffic.

How this goal will be accomplished...

- Continue to refine and enter data in Google spreadsheet.
- Photographic documentation will be performed 3 times per season.
- Continue to build a case for converting from synthetics. (cost analysis over 10 years)
- Have brew tested for a second time by Soil Foodweb NYC.
- Have biological tests performed on 2 sites.

Fertilizing Sustainability Goal #2

Introduce beneficial nematodes as a means of organic grub control.

Now that grub control is no longer an integrated step in our program, each case will need to be handled individually. Beneficial nematodes look to be a good alternative to Milky Spore. Jeff Swano can offer some guidance on this, as he has experience offering this service.

How this goal will be accomplished...

- Find a quality source of nematodes and other beneficial microbes (other than our compost tea!)
- Find out if the nematodes can be added to the compost tea and applied all as one solution.
- Utilize buglogical.com as a resource and look into introducing predatory insects into gardens as a service.

Fertilizing Sustainability Goal #3

Increase the capacity and efficiency of our rainwater harvesting system.

Each step of the fertilizing process requires 2,000 gallons of water. Last year we used rainwater to offset this need and this year we look to increase the systems capacity and efficiency. Rainwater is more beneficial for plants, and its use increases the sustainability of our fertilizing and plant establishment (watering) operations.

How this goal will be accomplished...

- Purchase a second 2,500 gallon cistern.
- Develop a more efficient transfer and filter system.
- Build a shade structure or screen to keep out sun and reduce heat.
- Create easier access for cleaning out the filter/screen.

Fertilizing Sustainability Goal #4 (Ongoing)

Promote top dressing with compost along with core-aeration and overseeding.

These are key practices when it comes to growing a dense stand of turf. We must create a more efficient method for top dressing which brings down cost and makes it more feasible as a major service. We have the advantage of a nearby high quality compost supplier (Midwest Organics) and we need to get as much of that compost into the landscape as possible.

How this goal will be accomplished...

- Acquire a weeks worth of top dressing / aeration / overseeding this Spring or Fall.
- Perfect top dressing methods (3 man crew)
- Possibly invest in compost spreader
- Promote Compost Tea as a service outside of our fertilizing program. (foliar spray, root injections, Design/Build)

SNOW REMOVAL

There is little room for sustainability to be integrated into Ringers snow removal services without making drastic/expensive changes in equipment. There are however, some things that can be done. Ice melting products have come a long way in terms of environmental responsibility. We need to utilize more cutting edge products and distribution methods in place of rock salt. Once we establish a proven conversion from gas to propane on our industrial mowers we can then begin to think about transitioning our snow blowers over to propane. This would make a huge difference in terms of our snow removal services carbon footprint. De-icing liquid applications also have the potential to reduce costs and are often a more efficient/effective method of de-icing.

Specific goals for 2014/2015 are detailed below.

Snow Removal Sustainability Goal #1 (Ongoing)

Explore sustainable bagged ice melting products to be used in place of rock salt.

Using thousands of tons of rock salt each year is not a sustainable solution for de-icing our roads and walkways. Sodium chloride is a highly corrosive, damaging substance and one that in high levels is contaminating our water supplies. Since it first began being used in the 1950's, few alternatives have been developed. A new awareness for the environmental impacts of over salting have forced the industry to develop new products/solutions which are much more efficient, reducing expenses, and environmental impacts.

How this goal will be accomplished...

- Test new products on a small scale
- Application methods + correct calibration are half the battle. Pre-wetting looks to be a promising way to reduce amount of ice melt material being used.
- Brine mixture seems to be most promising (liquid application)
- Beet juice liquid applications also seem promising, talk to suppliers for their recommendations and pricing
- Purchase proper equipment for applying liquid products
- Market liquid applications as a sustainable service, and a more effective de-icing method

OPERATIONS

Ringers company operations can be improved drastically through sustainability. As of last year, Ringers has made great strides in terms of operating sustainability, but there is still limitless opportunity to start making some major changes. There are several components to the operational side of sustainability; promoting sustainable practices to our employees (leading by example), reducing our carbon footprint, and demonstrating our offered sustainable services. These components are detailed below.

Promoting Sustainable Practices to Our Employees - *Creating an environmentally conscious culture*

Education

- **Turn shop into a demonstration site** - Have our employees be fully involved in the planning, construction and maintenance of the sustainable systems we are promoting.
- **Organic vegetable garden at shop** - Learning by working together, promoting healthy habits, vitamin N (nature), team building exercise
- **Increase employee attendance at MELA and MCC events** - Choose events which are relevant to their daily roles in Ringers.

Provide Incentives for Employees to Make Changes

- **Bringing lunch to work in re-usable containers** - Saves on fuel (not having to go off route to pick up fast food), saves on waste materials, healthier eating habits, incentive is either a bonus base or free lunch/gas card
- **Recycling** - Bringing in recycling from home is encouraged, recycling at shop is strictly enforced. Needs to be better organized.
- **Philanthropy/Volunteer hours** - 1 day of volunteer work (related to the landscape) is now mandatory for all RLS employees.
- **Transportation** - Incentives for riding bike or carpooling to work provided as a monthly bonus
- **Sharing** - Employees will be rewarded for bringing in and presenting information/stories relevant to sustainability and/or educational topics being covered in morning meetings

Reducing Our Carbon Footprint

- **Going paperless** - Printing double-sided, scanning all documents into digital filing system, using recycled paper, digital time-clock, encouraging clients to receive invoices/estimates/newsletters through e-mail
- **Solar Lighting** - Most potential for solar lighting on shop sign (Talk to WaySound in FRG). Skylighting offices will help with heating costs and reduce the need for overhead lights (mirrored system)
- **Fleet Management** - Fleet management programs promise to reduce overall vehicle costs, maximize workforce, improve fleet safety, and cut unnecessary fuel usage. All of which increase revenue and help to obtain accurate labor costs.
- **Toxic Waste Disposal** - Taking the time to properly dispose of toxic materials: oil, paint, fertilizer, insecticide/herbicides, etc.. **A disposal resource sheet will be created for quick reference. This has been a tough one but we are still working on compiling proper disposal facilities.**
- **Weatherizing Shop** - Insulation, sealing/caulking drafts, fix back door
- **Hand Dryer in bathroom** - Reduce the amount of paper towel waste (extreme at this point)
- **Use of environmentally friendly cleaning/hygiene products** - Widely available, no excuse not to be using these products.
- **Scavenger** (i.e. Craigslist) - Buy as little new materials/furniture/equipment as possible.
- **Employee Health** - Install air purification systems in offices and a central exhaust system in garage
- **Outfit our enclosed trailer with solar panels** - This may not be entirely practical until we transition to an entirely electric set of maintenance tools. Great way to visually differentiate our crews from other landscapers.

Demonstrating Sustainable Services (Ongoing)

- **Rain garden / Bio-Swale in front of shop** - We have the perfect opportunity to showcase a bio-swale in front of our shop. We started with a few native plugs from the local MCCD plant sale, but supplemental plantings are still needed.
- **Native landscaping around Rt.22 sign** - Replace the existing turf with a native plant community of grasses, sedges, and forbes. Manage sustainably by planting with bulbs for spring coverage, plants which fully leaf out by May, Dutch+Hula Hoe cultivating, leaf mulching twice a year, and using a mulching mower in fall leaving all plant debris on-site. Possibly burn in the fall once we become more familiar with the process both technically and legally.
- **Rain water harvesting in back of shop** - Collect rainwater to be used on commercial sites. Our 10,000 sqft. roof currently has the capacity to collect 6,000 gallons of water for every inch of rain. Given McHenry County's average rainfall of 36 inches, that equates to 216,000 gallons of water a year! (see Fertilizing Goal #3)
- **Composting operations** - Compost food scraps on a small scale to be used in our organic garden and teach employees/clients about composting.
- **Organic vegetable gardening** - Six 5x5 raised garden beds which will be cultivated, planted, tended to, and harvested by the RLS family. Educational and team building project which will also be used as an educational tool for our clients. 2014 is the year!
- **Bee Keeping!** - This year we have teamed up with Smart Farm of Barrington and we will be keeping two hives at our shop. The bees will be installed late March - Early April. Brandon is learning the ropes and will involve others as much as possible at this point.

Specific goals for 2014 and these sections are detailed below.

Operations Sustainability Goal #1

Continue the process of eliminating the use of chemicals in all divisions and company operations.

The conversion of our fertilizing program is a huge step in the right direction. We must look to further eliminate chemicals in all aspects of the company.

How this goal will be accomplished...

- Explore installing the oil recycling component into our larger equipment. This extends the life of oil in machines significantly.
- Continue to explore organic alternatives in terms of insecticides, herbicides, and fungicides.
- Experimentation and documentation is essential.

Operations Sustainability Goal #2 (2014 is the year!)

Build Ringers organic vegetable garden

Now that we are offering our Smart Backyard service, a demonstration garden is a must. This will be one of our most powerful tools in education, sustainability, and overall company cohesiveness. It is extremely gratifying to grow food, especially in an organic manner. Community gardens have proved to unite neighbors in a common cause and at Ringers our garden will become a source of pride and enjoyment for all employees. From 2013 SAP before meeting Carl Alguire - "This is also a good chance for us to experiment and gain more knowledge on organic gardening as it is a service we will be offering this coming season." It's all happening!

How this goal will be accomplished...

- Garden will be located behind the entry fence on the southeast side of our building
- Give the fence a fresh coat of paint (white)
- Prep garden site by moving all wood chips and building materials, then grading to an even surface.
- If materials in the yard can not be re-used to build raised beds, purchase sustainable materials to do so. These materials should not be treated and FSC (Forest Steward Council) Cedar would be ideal.
- Acquire/purchase enough material to build six - 5x5 raised beds
- Locate planting bed sites on a grid with comfortable walkways wide enough for tending garden
- Fill beds with soil mixture (Midwest Compost)
- Start seeds indoors in March and April
- Plant the garden during the month of May
- Familiarize employees with the garden and how the overall process will work
- Build vertical palette planters as a pilot project for growing strawberries and tomatoes
- Garden strictly watered with harvested rainwater
- Develop maintenance schedule for employees

Operations Sustainability Goal #3

Complete sustainable landscape in front of shop

This includes the bio-swale, a transition from turf to native plant communities, and stone/plant installation around sign. Our prime location on Rt.22 sees an average of 18,000 cars pass by daily. This is a great opportunity to display our sustainable intentions and services.

How this goal will be accomplished...

- Purchasing of materials has been included in the 2013 budget
- Finalize plant list and check with suppliers on availability
- Begin preparation and planting in early spring
- Maintain throughout the season in a sustainable manner - use harvested rainwater to irrigate until full establishment, mow turf with reel mower
- Create small sign which explains and demarcates our sustainable landscape

Operations Sustainability Goal #4

Host a sustainability themed open house at our shop. We are currently in talks with BACT (Barrington Area Conservation Trust) about hosting a possible native plant sale this Spring.

BACT is already proving to be a great ally and this could be the perfect event for both of us to advance our missions. This could easily become an annual event and great kick-off to the landscape season.

How this goal will be accomplished...

- *Get the shop in tip top shape.*
- *Nail down a date with BACT and begin to market the event through the CG Chamber and through our newsletters.*
- *Look into booking Kevin Hebert to speak (and promote the ILCA Rain Garden Guide) about planting natives as a means of stormwater management, and use our front swale as a demonstration piece.*

GENERAL SUSTAINABILITY - Long Term Goals & The Big Picture

A general sustainability ethic will not only be built by executing the provided outline and set goals for each of Ringers five main services, but it will also be built through much broader involvement and the establishment of long term goals. Through involvement in various sustainability driven organizations, getting our HOA and municipal clients onboard with sustainable practices, and becoming certified as accredited professionals will all ensure that we remain on the edge of sustainable practices. This will also ensure that we gain the credentials and vital experience to offer high quality sustainable services, and eventually reach a point where sustainability is second nature. A point where it becomes more difficult to operate unsustainably than it is to operate sustainably.

Specific goals for 2014 and beyond are detailed below.

General Sustainability Goal #1

Submit two projects for the ILCA Sustainable Landscape Award.

We have been building a portfolio of sustainable projects and now that they are somewhat matured we can begin to showcase these as successful examples of our overall approach.

How this goal will be accomplished...

- Survey existing projects to see which fit the ILCA's awards criteria.
- Talk with companies which have submitted in the past.
- Review past winners.

General Sustainability Goal #2

Explore SolarCity as an option for our shop.

SolarCity makes transitioning from current utilities to solar a fairly easy, inexpensive process. Our goal of running facilities solely on renewable energy may be possible sooner than we thought.

How this goal will be accomplished...

- Contact SolarCity to see if their services are available in Illinois. - Not yet!
- Has anyone locally made the conversion?
- Install solar panels in back of shop specifically set up to charge our electric equipment.

Long Term Sustainability Goals for RLS

Whole Foods and other large companies are filling the consumer product void. This is a very good thing for us as it shifts consumer purchasing habits and alters values. Ringers needs to focus on home services and the introduction of sustainable habits/lifestyle choices. We must continue to tap into a values shift towards health, happiness, and creativity as life goals. These are goals which Ringers shares.

Energy (small scale wind+solar)

Water (conservation / reuse)

Food (homegrown, organic, medicinal, alternative food sources (bugs), bees, livestock)

Community Development (schools, Agriburbia concepts - Could Ringers someday become a sustainable community development contractor/builder, with the above sustainable concepts at its core?) Bucking Horse in Fort Collins. Use Community Visioning concepts.

Education (we all need to be teachers / continue to give presentations)

Technology - An App, Commercials (If it's Scott's they see, then Scott's they will get!), Google Glass (huge potential - <http://www.google.com/glass/start/>), Clever places where our brand appears.

Generate content for other sites - Articles. Build brand loyalty through our message.

The Arts - Provide support

Specifics /

- Completely eliminate chemicals by 2016
- Build all electric fleet of maintenance trucks (smithelectric.com)
- Form a large client base interested in sustainable services
- Create educational/demonstration videos to promote our sustainable services (film the installation of a rain garden, and bio-swale installation/native plant establishment in front of shop)
- Become the premiere resource for all things sustainable
- Design/Build a project intended for SITES certification
- The Bike Idea!
- Run the shop completely on renewable energy
- Convert as much equipment to propane as possible
- Achieve recognition / awards / publicity, so others will follow our lead
- Perform sustainable service projects in Cary and FRG
- Grow enough organic food to sell at the Cary Downtown Farmers Market
- Field trial and provide support for Jason Force and EcoMow / Biofuels GPS guided mowing system
- Boost involvement in organic agriculture and alternative food sources (farm bugs!)
- Integrate wearable technologies like Google Glass into our operations - (Taking measurements, plant ID, site documentation, field communications...endless possibilities!)
- Donate and plant 2,000 trees and shrubs at local conservation sites in our efforts with the MCCD - Show specific benefits in numbers and graphics.

RLS General Codes of Sustainable Conduct

- Recycling is mandatory
- Compost food scraps (no fats/meat/dairy!)
 - Use re-usable containers
 - Turn off lights when not in use
- Turn off equipment/trucks when not in use
- Double sided printing...Print on both sides!
- Pick up all trash outside (at shop and on-site) and dispose of properly
- Avoid spilling gas, fertilizer, and oil. If spill occurs, clean up immediately
 - Promote RLS sustainability values daily
- Treat the land with respect (RLS Land Ethics)
- Lead by example - Practice what we preach
 - Vote with your dollar.
 - Go Outside.

I Agree. Let's do this!

I _____, will do everything in my power to achieve the goals and values which have been outlined in the RLS 2013 Sustainability Action Plan. I will periodically reference this document to ensure I am adhering to its codes of conduct and that I am continually working towards its long and short term goals. I will also act as a leader by example and will always promote these values to all members of RLS to ensure a cohesiveness in thought and objectives among the team.

Date : _____

Signature : _____ - *"Landscaping Today for Tomorrow"*