



MEMORANDUM

From the Office of the
Township Manager

TO: BOARD OF SUPERVISORS
FROM: CHRISTOPHER BASHORE
RE: ARBOR DAY PROJECT PROPOSAL FROM THE SUSTAINABILITY ADVISORY
COMMITTEE
DATE: FEBRUARY 7, 2023

Before the Board of Supervisors this evening is consideration to approve a proposal from the Sustainability Advisory Committee for an Arbor Day project at Hamlet Crest Park. The project would involve the planting of approximately 120 trees in the open area of Hamlet Crest Park of various species. By way of background information, the Board previously discussed a proposal for a similar type project in Barker Park. Due to a variety of concerns, members of the Township staff, the Sustainability Advisory Committee, Vice-Chair Gagné, and Supervisor Smith met to discuss avenues in which to adjust the proposal. During the discussion, we evaluated three (3) potential sites and believe that this would be an appropriate location for a project of this type.

The Sustainability Advisory Committee reviewed the proposal and recommended approval at their meeting on December 22, 2022. Additionally, the proposed project was reviewed by the Park & Recreation Board at their meeting on January 18, 2023, who also recommended approval of the proposal. Please be advised that there are few changes in the document before the Board this evening compared to what was submitted to the Park & Recreation Board. These changes primarily pertain to mulching recommendations that were received by the Sustainability Advisory Committee and are noted in the document. These do not change the overall scope of what was reviewed by the Park & Recreation Board. Additionally, the Sustainability Advisory Committee is working on a letter to property owners in the area to alert them of the project.

Please let me know if you have questions. Thank you.

West Goshen Township

Hamlet Crest Park Tree Planting Project

Address: 1225 – 1229 Trafalgar Lane
West Chester, PA 19380

Submitted by West Goshen SAC subcommittee

January 9, 2023

Arbor Day Celebration 2023 Tree Planting Proposal

West Goshen is a designated “Tree City” Township. Every year, re-applying and holding an Arbor Day event is a requirement to maintain this designation. A subcommittee of Sustainability Advisory Committee (SAC) members [Barbara Rinehart, Scott deLone, Susan Charkes], and Tree Tenders, liaised by Board of Directors (BODs) Ashley Gagne and Tinamarie Smith met periodically from March 2002 to the present and have discussed various possible sustainability projects. Additional discussions among Township staff and Parks and Recreation members have ensued.

Priority has been given to maintaining the “Tree City” designation, necessitating planning for a 2023 Arbor Day celebration and native tree planting endeavor. The value of time spent is counted toward the \$2/per capita Tree City requirement.

The SAC-designated Arbor Day for West Goshen Township is Saturday, April 29, 2023.

PROJECT GOALS:

- Educate the public on the benefits of planting trees
- Build community with township residents, government, and businesses
- Reduce turf grass mowing
- Teach “sheet mulching” technique to reduce turf areas, which can be applied at resident homes
- Plant the first phase of a reforestation (~120 plants; ~40 over story trees, ~40 understory trees and ~40 shrubs)
- Increase biodiversity in the park by expanding the woodland habitat
- Set the stage for an ongoing township-wide project of joining **the Homegrown National Park** movement (see <https://homegrownnationalpark.org/> for more detail)

ARBOR DAY EVENT DATE/TIME:

Saturday, April 29, 2023 from 9:30 am to 2:30 pm

BENEFITS OF PLANTING TREES (Reforestation as the goal)

- Improve air quality
- Sequester (store) carbon to reduce the carbon footprint
- Save water by reducing turf grass storm water runoff thus reducing flooding, providing erosion control
- Minimize park care as native trees require less care and have a better chance of survival
- Improve soil and water conservation
- Mitigate weather extremes (e.g., shade, regulate temperature, cool streets)
- Provide food and shelter for local wildlife
- Enhance aesthetics of local

Table 1. ARBOR DAY EVENT AGENDA

Time slots are proposed and subject to adjustment as the volunteer corps materializes.
 Sign-up Genius, an online volunteer management system, will be used to organize people resources.

Time	Activity	Leader(s)
9:30 – 10:00am	Township Supervisor dedication and groundbreaking <ul style="list-style-type: none"> • Recognition of Esteemed Guests • Photo op 	Ashley Tinamarie
10:05 – 10:50am	Volunteer Group #1 Site preparation and tree planting 45 min activity: 10 min education, 10 min demo, 25 min planting (15 min between groups to reorganize)	Scott Barbara
11:05 – 11:50am	Volunteer Group #2 Site preparation and tree planting	Susan Eunice
12:05 – 12:50pm	Volunteer Group #3 Site preparation and tree planting	Scott Barbara
1:05 – 1:50pm	Volunteer Group #4 Site preparation and tree planting	Susan Eunice
2:00 – 2:30pm	CLEAN UP	SAC

PUBLICATION AND INVITED GUESTS

To build enthusiasm and provide awareness of Arbor Day celebration:

- Event will be publicized starting 2023 on West Goshen website and in e-newsletter
- Park & Rec Board members will be invited to attend
- SAC subcommittee should attend; other SAC members if available are welcome
- SAC could invite “esteemed guests” personally. e.g., West Chester -area government officials.
- Local Press will be invited to 9:30am groundbreaking (needs coordinator)
- A photographer will be assigned
- Anyone is invited to attend at any time of day.

CORPORATE SPONSORS

- West Goshen businesses can be approached to sponsor event, bring donuts and coffee, lunch, or other fun things. (organizer needed) as well as be involved in ongoing maintenance
- Shade tent is needed for tree give away. (does township have one?)

PARK & RECREATION DEPARTMENT CONTRIBUTIONS

- Mow grass (scalp it) very low week of April 1 - 7, 2023
- Bring Port-a-potty and install on opposite side of park from work area prior to event.
- Obtain compost (amount to be determined); dump 10' away from curb but in front of tree planting bed. This will hopefully smother grass and will become a future pollinator strip garden in front of trees.
- If available from landfill, obtain mulch (or wood chips) (amount to be determined) Second pile, dump 10' away from curb but in front of tree planting bed. This will hopefully smother grass and will become a future pollinator strip garden in front of trees.
 - Alternatively, hard wood mulch will be purchased and delivered (Weaver suggested)
- Leave large watering container onsite. Fill watering container (weekly?)
- Support SAC in ongoing needs. Site will need to be refreshed with leaves or mulch until they self-mulch.

RATIONALE FOR TREE NUMBERS AND GROUP SIZE

- There is on-street parking for volunteers on Trafalgar Lane in front of the park. Volunteers are requested to park on the Park side of the road. About 20 volunteers per group will plant one tree each. They will learn sheet mulching as the major educational endeavor.
- The phase 1 planting area is 50 feet wide (frontage parallel to the curb) and about 63' long paralleling the chain link fence.
- Planting 5 feet on center in a grid pattern is recommended to provide a fast-growing forest providing a "natural woods" appearance as opposed to "orchard" planting of 10 foot centers. Think forest appearance (e.g., Coopersmith Park) not park look (e.g., Lambert Park).

**Arial View
of planting site outlined in blue**



TREES AND SHRUBS TO BE PLANTED

The (~120) plants have been ordered from the Keystone 10 Million program. Requested plants include: (with the understanding that species actually available at planting time may vary)

40 canopy trees 10 each of the following (or in whatever proportions are available)

- Red Oak
- American Beech
- Shagbark hickory
- Red maple

40 Understory trees 10 each of the following (or in whatever proportions are available)

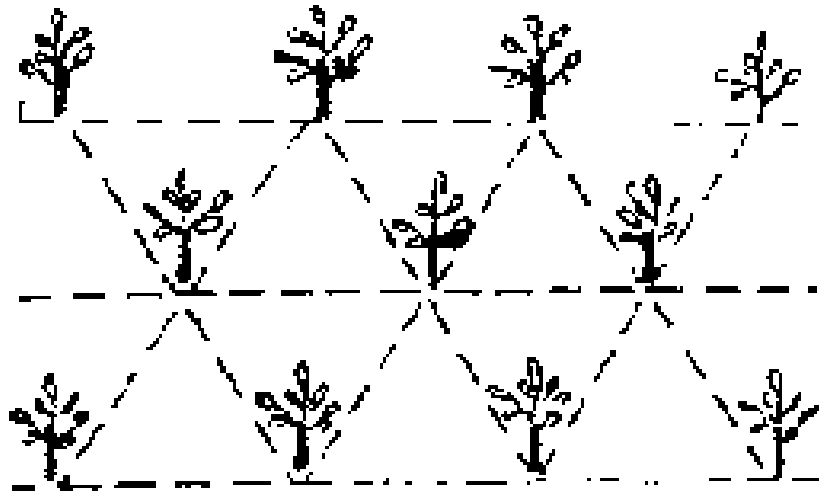
- Eastern Redbud
- Black gum
- Paw Paw
- Flowering dogwood

40 shrubs 10 each of the following (or in whatever proportions are available)

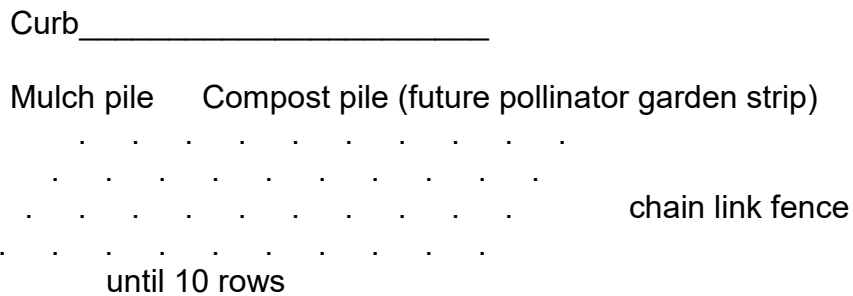
- Witch hazel
- Blackhaw viburnum
- Winterberry
- Red chokeberry

SITE PREPARATION

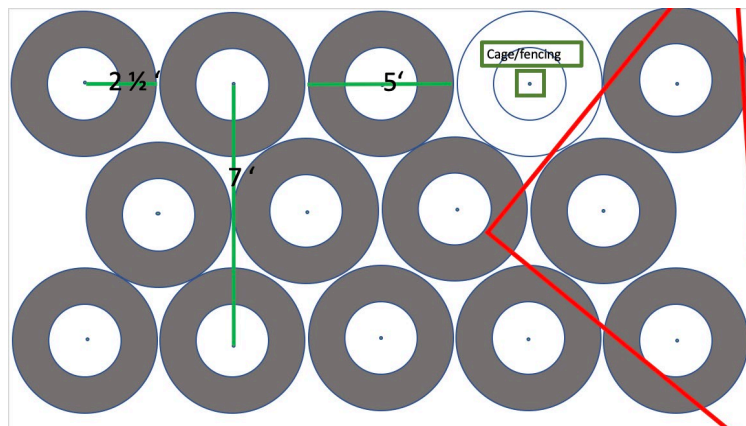
Prior to planting day, the site will be laid out with 5-foot centers in a diamond pattern as follows: Figure 1. The actual site will be a trapezoid shape.



Tree centers will be flagged to help volunteers know where to start. Trees and shrubs will be planted in an area about 45 feet x 63'. In rows of 10 each angled to mimic the fence.



Planting dimensions are as follows: Figure 2.



Three sample single tree plots will be prepared ahead of time to show:

1. Cleared 12" circle with compost amendment
- ~~2. Cardboard sheet area~~
- ~~3. Cardboard mulched area~~

Leaders will do this ahead of time and determine how long it really takes to complete 1 tree site, from prep to labeling. (proof of concept).

TOOLS NEEDED

Each Volunteer to bring

- Shovel or spade
- Claw (optional)
- Trowel
- 2 gallons of water, (milk jug or like)
- Gardening gloves

Some garden tools (on loan) will be provided on site for those not having their own.

Staff to supply

- Hammers to stake cages
- Ballpoint pens for labeling aluminum tags
- Tape measures

VOLUNTEER INSTRUCTIONS on day of event

Scott deLeon is the volunteer coordinator. Starting in January, he will invite and organize 4 groups of volunteers of about 20 people each. Propose using **Signup Genius** to coordinate. Each group will be assigned to an hour of planting. Scott (and Susan) will present 10 minutes of education. Barbara and Eunice will demonstrate tree planting for 10 min. The rest of the hour will be for volunteers to plant one 3-inch saplings or shrub.

1. With edger or shovel edge, cut grass out 12" in center. Put this grass clod UPSIDE DOWN at the area indicated (slope of project with most runoff) to form a very small berm which will be silt socked at end of day by parks department.
2. Dig a 6" deep hole in center of your circle.
3. Amend your hole with a trowel-full of compost. Mix with existing soil.
4. Plant your tree/shrub. Make sure tree flare is showing. Don't plant too high, or too low.
5. Backfill and tamp down with foot.
6. Build your cage and install over plant. Pin down with 2 (4) landscape stakes.
7. Label your plant type.
8. Mulch area with 8 inches of hardwood mulch but only 3 inches near plant. Do not let mulch touch base of plant.
9. Slowly water plant with 1 gal water.

Each volunteer may take home 1.) trees to plant, 2.) written planting instructions, and 3.) a flyer introducing the concept of Homegrown National Park.

~~*Weed pulling and re-cardboard mulch may be required if volunteers do not overlap cardboard by 8" thereby allowing sun to penetrate and encourage grass to grow in cracks.~~

Weed pulling may be required if any pops up from under or on top of the chipped mulch

Watering Following-up

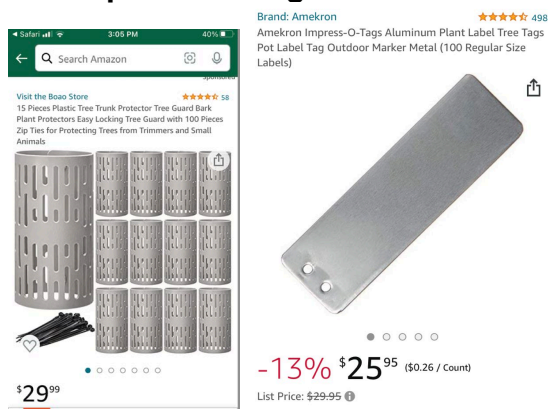
Weekly watering till November will be arranged by SAC, Tree Tenders, and volunteers. Sign-up Genius or the like will help with water management. An Eagle Scout project is proposed to help with teaching and follow-up. (Scott has identified candidate)

Materials and Estimated Budget: Table 2

Item	Estimated Cost	Comments
120 trees/Shrubs (supplied by K 10 program). Must be planted at designated site and photos supplied after planting.	Free	See above. Ordered from PA DCNR/CCCD
150 trees for give-away (supplied by Bartlett)	Free	Susan requested from Bartlett Tree Experts
120 tree protection guards*	Free	Included in K10 order
400 Landscape stakes to hold guards in place	Free	Free
Mulch for 45'x 63' area = 2,835 sq. ft. about 3" 6"-8" deep. 709 cubic feet = 26.25 52-70 cubic yards.	Hardwood mulch or woods chips	Costs to be confirmed ~\$650 ~\$670-\$820 Weaver Mulch suggested as source.
Compost for 100 x 3" trees	to be determined parks to deliver to site	Source: Lanchester Landfill
Tree labels; Impress-O-Tags*	\$50	Aluminum
120 Flags	Melanie Vile has flags	

The following is a change to the plan as originally presented to the Park and Recreation Board regarding the ground cover that will be placed in the area of the tree planting. The original plan called for one layer of cardboard with three inches of compost or woodchips on top of the cardboard. The purpose of this cover is to prevent weeds in the planting area. This cover is being replaced with a six-to-eight-inch layer of woodchips with no cardboard, a method that will allow natural aeration of the soil below. That will increase the amount of woodchips that we need from 26 cubic yards to between 52 and 70 cubic yards. Although more woodchips will be needed, the price is much lower, resulting in an estimated cost of between \$520 and \$670 for 52 and 70 cubic yards, respectively.

*Examples of tree guards and labels



Follow-On maintenance

1. Trees need to be watered for at least 1-2 years after planting. Coordination still pending.
2. As trees grow out of the initially supplied tree guards, they will need to be replaced by larger tree guards. Cost of this needs to be budgeted. Possible future grant.

CONCLUSION

The West Goshen Hamlet Crest Park project will begin with an April 29, 2023 Arbor Day Celebration and tree planting. This project would improve the capacity of the land to adapt to existing and future climate change and would provide numerous other benefits, as detailed herein. Based on the success of this phase 1 planting, the SAC recommends that perhaps three additional phases be implemented over the next 3-5 years.

Beginning the re-forestation of a significant swath of Hamlet Crest Park in the manner proposed would be a valuable contribution to the Township. It would enhance its existing woodland and improve habitat. It would provide public education and hands-on experience, including for young people. This would help to draw the community together in positive action toward stabilization of the climate and spreading the understanding of how to nurture a Homegrown National Park locally.

*Courtesy of Keystone 10 million trees project. <https://tenmilliontrees.org/>

