

UBC Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

The Agronomy Garden: Feasibility Study and Implementation of a Central Community

Gardening Space at UBC Vancouver

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GRS 397B

Themes: Community, Food, Land

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The Agronomy Garden:

Feasibility Study and Implementation of a Central Community Gardening Space at UBC Vancouver

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Executive Summary

Background

The Agronomy Garden is a central community garden space on the campus of UBC Vancouver at the northwest corner of Agronomy Road and Main Mall that was constructed in July 2017 and is currently permitted until September 2018. It emerged out of a shared vision by members of the UBC community to galvanize resources to create a central garden space on campus with the purpose of increasing and diversifying awareness of food production on campus, and to serve as a testing ground for further innovation in the UBC Food System as a living laboratory. As a SEEDS project, there were three main objectives. The first was the exploration and documentation of the level of support for the creation of a new community gardening space on campus. The second was to explore the effectiveness of draft procedure for community garden proposals at UBC outlined in a SEEDS project conducted in 2011 titled “Exploring the Food Garden Movement on the UBC Campus: Engaging with the Growers and Considering the Policy Opportunities” by Meredith Seeton. The third was to create a space where community engagement and social change through community gardening in a university setting could be explored.

This report was produced with two purposes. First, it acts as a resource for campus community members interested in proposing their own community gardens at the UBC Vancouver campus along with the attached development permit application which provides details on garden construction and maintenance. The Agronomy Garden was developed as a key asset to the UBC Food System community as one that will bring the production of food to a central and visible space. Second, it serves as an evaluation for both existing policy and procedure for community garden proposals, and for the potential that exists in the campus food system to engage students, faculty and staff in community gardening initiatives in order to promote values of social and environmental stewardship and well-being.

Principal Findings and Policy Recommendations

There is proven potential in the UBC Food System network to support the stewardship of new community garden spaces. The successful establishment of a coalition of community members for the purpose authorizing the Agronomy Garden demonstrates the potential on campus to create and steward community gardens in the spirit of the campus as a living laboratory. The project proved to be a valuable asset to stakeholders in the UBC Food System eager to support it to realize opportunities emerging from the central visibility of the site.

The Seeton Proposal Process Checklist constitutes a functional procedure for the authorization of community gardens on campus. The Agronomy Garden serves as a case to demonstrate this, and to support the formalization of this procedure to facilitate participatory uses of campus landscapes.

Central garden landscapes can serve to foster engagement of the campus community in environmental stewardship. The Agronomy Garden succeeded in attracting diverse students, faculty and staff into the coalition of community members who supported its cause. Its location in a highly-frequented pedestrian area of the campus contributed to increased awareness for community gardening on campus, and fostered spontaneous community involvement and innovation that manifests the campus as a living laboratory model

Introduction and Background

The Agronomy Garden project began as a feasibility study for a community garden on Main Mall as a temporary installation whose purpose would be to demonstrate how central landscapes on campus could become spaces which contribute meaningfully and deeply to UBC's sustainability goals and to the enhancement of campus community and sustainable culture. Two sets of ideas led me to consider that this was not only a worthy ideal to pursue, but one that was imminently demanded and feasible.

The first is that language in a few overarching policy frameworks, such as the UBC's *Place and Promise*, the 20-year sustainability strategy (Robinson, 2014), and the Public Realm Plan align strongly with participatory and innovative uses of campus space (Campus and Community Planning, 2009). In proposing a "societal test bed" (UBC, 2012; p.27; p.6) to catalyse interdisciplinary collaboration on innovations in participatory food gardening, the project vision was pursuant to mandates such as "campus as a living laboratory" that are present in both *Place and Promise* and the Sustainability Strategy. The Public Realm Plan objectives also aligned with the proposed project as one that "animates" the campus and "promotes the sharing of ideas, creative expression, and interaction across disciplines" (Campus and Community Planning, 2009; p.6).

The second is that the network of spaces and communities which constitute the UBC Food System is one that fosters social impact and optimism for future changes. One space in this network, the UBC Farm, began as a student project less than 20 years ago and is now a research and community space of the University and specifically the Centre for Sustainable Food Systems ("History of the UBC Farm"). Another, Roots on the Roof, is a student-run rooftop garden on the Nest which was built in 2015 and won the AMS Best New Club award in 2015 and has created opportunities for learning and rich student experiences ("We are – Roots on the Roof").

Two broad initiatives have sought to integrate UBC campus food growing spaces into knowledge and connection-generating activities. One is the UBC Food System Project, which started in 2001 and seeks to use the campus food system as a living laboratory to explore innovative partnerships that pursue the creation of a model sustainable community and enrich campus experience and well-being (Rojas et al. 2007). Another is the [Cultivated Learning Network](#), based between the Intergenerational Landed Learning Garden and the UBC Orchard Garden, which seeks to apply the living laboratory model to explore innovative pedagogies and community engagement strategies through gardening. The achievements of these projects that connect campus community members through common experiences engaging in a sustainable food system indicated a key opportunity to follow the avenue of developing spaces of the UBC food system. This work builds upon the vision for an innovative and environmentally-conscious campus community outlined in the Sustainability Strategy and in *Place and Promise*.

At the outset of this SEEDS project, my proposition was that the next step in seizing the potential to raise the profile of food gardening projects on campus was to create one visible in a central space. Based on informal conversations prior to pursuing this project, I understood that while such projects as Roots on the Roof, the UBC Farm, and the Orchard Garden were powerful teachers and conveners, there was a gap in awareness and engagement between these initiatives and the campus community outside of the

established campus food system network. One reason for this gap could be the lack of central visibility on campus for this network. Given the enthusiasm that I sensed about such projects, I proposed that a food garden in the centre of the academic core on campus would not only promote broader engagement, but that it would be feasible given the expectation of commitment and support from a broad network of campus food system actors. Thus, one objective of this SEEDS project was to confirm and demonstrate this potential for social organization and for value-shifts on campus through the creation of a visible and aesthetically pleasing space demonstrating environmental and social stewardship through a food garden.

The other primary objective of this project was to demonstrate and describe the process of the implementation of a new garden space on campus. While there is a history of the construction and operation of student or faculty-led food production spaces on campus, and even a previous SEEDS project which outlines a proposed procedure for the implementation of community gardening spaces on campus by students (Seeton, 2011), there is gap in terms of understanding this implementation process in practice. This would constitute valuable knowledge for other students and faculty interested in proposing, constructing, and operating a community garden space on campus, and for campus planners seeking to support and regulate the implementation of these projects.

The proposal and permitting of the Agronomy Garden closely followed the draft procedure for proposing community gardens in the form of a proposal checklist outlined in Meredith Seeton's 2011 SEEDS project ([see p.13](#)). After describing the methods used in this process, the following sections of the report will firstly serve to outline how the points on this checklist were completed, and how the proposal for the Agronomy Garden proceeded through the Development Permit process to receive a one-year temporary permit. It will also cover the outcomes of the construction and operation of the Agronomy Garden, and proposed next steps for the project itself and for the Campus and Community Planning in supporting the campus food gardening movement.

Methods

As a research project, this project applies a community-based action research methodology to answer the research questions that emerge out of the project objectives:

1. Given the requirements for support from faculty and the general public, commitment to maintenance from community members over the summer, and resources, what is the feasibility of a community garden that would positively contribute to the public realm in the campus core?
2. What is the implementation process for student or student groups to propose and implement a new community garden on the UBC Vancouver campus?
3. How does a community garden in the campus core contribute to community engagement in the campus food system?

In the spirit of community-based action research methodology, the investigation phase of was one in which some participants were simultaneously providers of information – about best practices for gardening or farming at UBC and their experiences – and active partners in contributing to the case-building and operating phases of the Agronomy Garden's life. Four methods were applied to answer the research questions.

The first method was a literature review of two categories of documents. The first category was UBC policy documents including UBC's *Place and Promise*, the 20-year Sustainability Strategy, and the UBC Public Realm Plan. The second was of non-academic documents that provided me with a foundational understanding of the challenges regarding implementing and operating community garden projects that informed my questions directed at gardeners and farmers in the UBC food system and in Vancouver. One specific set of helpful non-academic documents on community gardening practices was the various documents created by Foodshare, a Toronto-based non-profit organization (see "[How-to Guides](#)").

The second method was semi-structured interviews with individuals involved in the campus food system and in community gardening projects at UBC or in Vancouver. These interviews had the following objectives: to identify best practices for constructing and managing community gardens in urban settings; to identify the unique challenges and opportunities inherent to community gardens at UBC; to confirm and understand the interest in the implementation of a community garden on a central UBC landscape; to learn about the social network of potential supporters of this project on campus; and to build and affirm this network of support. Excluding meetings with the SEEDS project coordinator and the staff stakeholder, I met with over 20 individuals in the exploratory and case-building stages of this project. This process was also beneficial in generating awareness about the project and building informal social license. Snowball sampling was applied as interviewees were identified largely through the recommendation of other interviewees.

The third method was focus groups (in other words, workshops) to develop a collective vision and sense of purpose, and to develop specific ideas and support for these ideas. Before the construction of the garden, I held one stakeholder meeting in March 2017 to convene eight community members (faculty, staff, and students) to develop a community-based vision to inform the final proposal, and two visioning sessions following the construction of the garden to generate ideas for future projects in that space. The set-up and outcome of the former will be described in the next section of the paper under "Building a Multi-Stakeholder Committee," and the ideas for future developments at the Agronomy Garden emerging from all of these visioning sessions will be described before outlining next steps for the project in a section titled "Vision for the Agronomy Garden."

The fourth method consisted of the application of the knowledge gained and network of support developed through the previous methods to apply for a development permit within the scope of this research project. The objective of this was to directly test the feasibility of the Agronomy Garden concept. The use of this experiential method also created the opportunity to draw important insights about the permitting process regarding participatory gardening projects like the Agronomy Garden.

[Exploration and Case-building for the Agronomy Garden \(October 2016 – July 2017\)](#)

In this section, the insights gained from the four methods and their applications in action to build a case for the Agronomy Garden are organized below under the subsections of first the Project Proposal checklist in the campus food garden proposal Process Checklist, and second the Development Permit section that I was required to complete.

Project Proposal Process Checklist

The draft procedure created by Meredith Seeton in 2011 for the proposal of community gardens on campus property was followed upon the recommendation of the Campus Landscape Architect when the project was first presented in December of 2016. The use of the items on this checklist as goals guided the process of gaining the insights, making the connections, and drafting the plans necessary to build a successful case for the Agronomy Garden. Pursuing this process for developing the project proposal was also beneficial in guiding the formation of most of the necessary components of the final development permit application (see Appendix: The Development Permit). The proposal was reviewed in an in-progress stage by the Campus Landscape Architect in January 2017, and in a first draft stage in March 2017 to provide direction on all aspects of the project and especially on the site selection process. The site selection and changes in project timeline that were made in March would lead the decision to pursue a [Development Permit](#), issued by Campus and Community Planning for more long-term projects. Initially, when the working idea was a temporary garden installation on Main Mall, the anticipated step following the completion of a proposal was to seek a [Streets and Landscape Permit](#), issued for temporary uses of campus landscapes. In receiving direction and feedback from the Campus Landscape Architect in these instances, I completed two items on the [Process Checklist](#) (p.13).

I will detail the process of completing the remaining items on the checklist which required extensive support and involvement from project collaborators and participants. For each item, I will provide an evaluation of the procedure based on the experience of applying it, and in some cases I suggest amendments. Most of the final proposal was included in sections of the final development permit application (Appendix), especially in the Written Description section.

Consider speaking with groups who have successfully created food gardens on campus, such as the MacMillan Orchard Garden group

Other very resourceful on-campus groups who created and currently manage food gardens on campus that I spoke to early in this process were Roots on the Roof, the UBC Farm, the Intergenerational Landed Learning Garden, and the Geo Garden.

Consult the Campus Landscape Architect at Campus + Community Planning with your initial garden idea and suggested site. Initial feedback can help shape your proposal into a successful one. Campus + Community Planning will also decide at this point whether a Development Permit will be required in addition to a Streets and Landscaping Permit.

Finalizing a proposal before working on pursuing a permit was beneficial my case. In my case, the final recommendation to pursue the Development Permit instead of the Streets and Landscape Permit followed the process of developing a draft proposal. The reason is that the final site selection and project plan, which inform the appropriate permit to pursue, emerged towards the end of the combined stakeholder network-building and proposal drafting process. Thus, I recommend that the decision indicated here on the part of Campus and Community Planning take place under the checklist item following the last Draft Proposal component.

Build a multi-stakeholder steering committee: support from staff, faculty and graduate students can ensure that garden projects continue to thrive as students graduate.

The outcomes of this item were essential to writing a meaningful purpose statement in the draft proposal reflecting the collectively agreed-upon mission of the partners and participants of the Agronomy Garden project. My approach was to seek to establish a coalition of student groups who would commit to the construction and maintenance of the project, and a network of faculty and staff stakeholders active in the UBC Food System to provide advice regarding the project. I made first contact with many of these individuals in the process of better understanding the motivations of community members surrounding the expansion of gardens, and in collecting best practices to apply in the development of the maintenance and management plan. I convened 8 of these individuals at a stakeholder meeting in March of 2016 to develop a set of guiding principles and unified purpose for the garden. I've outlined these principles and the unified vision in the "Collaborating groups and collective vision" subsection of the Written Description of the Development Permit (Appendix).

Develop a draft proposal, including the following:

Purpose Statement

For crafting the purpose statement and for each of the items constituting the project proposal in Meredith Seeton's checklist, further guiding questions and details were provided on pages 14 and 15 (see Seeton, 2011). The purpose statement sought to answer those questions and was crafted through the involvement of all the stakeholders to give it validity. An important piece of this purpose statement for Campus and Community Planning was the description of how the project will align with the six objectives of the Public Realm Plan (see Campus and Community Planning, 2009; p.6). I suggest that the Public Realm Plan objectives be mentioned in the guiding questions for this section.

Site Selection Description

To address the guiding questions in Meredith Seeton's report, this section was completed through the reference to the UBC Land Use Plan, through ongoing conversation with UBC Building Operations about the feasibility of using various proposed spaces for gardening and with the Campus Landscape Architect about the appropriateness of each site, and through consultation with the stakeholders regarding the objectives and timeline of the garden. Initially, the objective was to find a site on Main Mall that would fulfill the vision of a showcase model community garden that could deeply impact community perspective on the role of participatory urban gardening on our campus and in our global future. A partner on this project, Chris Son, supported the ongoing site exploration process by producing renderings of proposed sites that could be used to communicate our vision to other potential stakeholders, to UBC Building Operations, and to Campus and Community Planning. The main criteria for an ideal site in our case were the following:

- Centrality in the campus core and visibility
- Access to sunlight
- Access to available hose-bib or proximity to a site where a new one could be installed
- Proximity to key stakeholder groups on campus (i.e. the Faculty of Land and Food Systems, the Orchard Garden)



Figure 1 (top): The blue polygons indicate an early proposed site for the "Main Mall Garden" in Main Mall lawn just north of Main Mall and Agronomy Road. The site was sunlit, central, adjacent to the central administration of the Faculty of Land and Food Systems (the MacMillan Building), but had no potential for water access. (Print-screen from Google Earth, accessed January 20, 2018).



Figure 2 (centre): A rendition of the Main Mall Garden concept in the grassy lawn on Main Mall adjacent to the Forestry Sciences Building (looking south). This site was sunlit, central and visible, adjacent to a potential hose-bib installation site, near the Land and Food Systems core, but was already slated for the installation of the Reconciliation pole on April 1, 2017, with which the garden could not interfere. (Credits: Chris Son)



Figure 3 (bottom): Another rendition of a proposed site in the grassy lawn on University Boulevard near the Martha Piper fountain (looking west). This site was sunlit, central and visible, adjacent to a potential hose-bib installation site, but exceedingly distant from the core of the Faculty of Land and Food Systems. (Credits: Chris Son)

To evaluate the availability of a hose-bib (i.e. access to water), the Irrigation Technicians of UBC Building Operations provided generous support by indicating which sites along Main Mall could support the installation of a hose-bib. The Municipal Landscape Architect of UBC Building Operations provided cost estimates for such an installation.

The site at the northwest corner of Main Mall and Agronomy Road was suggested by Campus and Community Planning as an alternative and agreed-upon by the project stakeholders. More details on selection process of this site are provided in the Development Permit in the Appendix.

I suggest additionally that a verification of underground utilities be undertaken during the completion of the Proposal Process Checklist for future gardens as it is a requirement in the Development Permit. The purpose of this is to ensure that there is awareness of where it is appropriate to excavate in the site. This information can be provided by staff in the department of Sustainability & Engineering.

Garden Layout, Materials and Construction Plan

Components required for the garden that informed the materials and layout were determined through the process of collecting ideas for best practices and seeking feedback on draft designs and plans from stakeholders. I received generous support from project partners in creating designs that could communicate these plans to project stakeholders and to Campus and Community Planning. The Campus Landscape Architect provided guidance in generating a garden layout and use of materials that abided by the minimalist surrounding landscape of South Main Mall. In this case, this meant that the layout aimed to be simple and neatly organized.

The construction plan was also developed with the support of project participants.

Appropriate signage was stressed as an important component of the project. It was not only “desirable” as written in the Proposal Process Checklist used, but imperative. I recommend that this be amended in a finalized Proposal Process guideline. As a SEEDS project, a required piece to add to the sign was the following statement: “This is a student-led collaboration with faculty and staff in the SEEDS Sustainability Program.”

Budget (construction and on-going, source of funds)

The budget reflected the necessary components of the proposed garden as determined through the on-going process of seeking best practices and receiving feedback from project stakeholders and campus gardeners regarding these plans. Funds from the AMS Sustainable Projects Fund were secured well before the proposal was finalized such that it was possible to demonstrate readiness to construct the garden as part of the proposal. In this case, funds were confirmed by March 2017 whereas the proposal was finalized in May 2017

Maintenance and Management Plan

This section was also informed greatly by my acquisition of insights about best practices, and from feedback received about drafts of this plan. On the recommendation of many interviewees, a collective

gardening model was incorporated in the management plan (as opposed to a plot-allocation system to individuals) to align with the project's emergent mission to build community around plants and food.

Campus and Community Planning stressed that this section demonstrate a system for accountable management. I was able to implement an LFS 496 for-credit internship position in which a student was responsible for managing the operation of the team and of the site. I suggest that a future version of this procedure provide additional guiding information to outline criteria for what constitutes accountable management.

Development of a successful management plan required consultation with UBC Building Operations through the Municipal Landscape Architect such that they could be made aware of the project activities and that their concerns could be addressed. From the perspective of Building Operations, the most important component of the Agronomy Garden was the physical delineation between the lawn and the student stewarded space, which is already expressed as a requirement in Meredith Seeton's Process Checklist guidelines.

Demonstration of support:

Support, in the form of Letters of Support from the Dean of the faculty and the head of the department associated with the landscape proposed for food production. These letters should express a commitment to provide financial resources to Plant Operations for restoring the landscape should the project be abandoned or unsightly.

Description of community consultation (if conducted)

Support from the Dean of the Faculty of Land and Food Systems was sought once a demonstrable coalition of caretakers of the space was established. Five letters of support from prospective collaborating student groups were also sought as a way of demonstrating community commitment to stewardship and community support. These were attached to the submitted Development Permit but are not included in the version attached to this document in the appendix.

Set up a meeting with the Campus Landscape Architect for input on your proposal, and refine it accordingly.

As mentioned above, the final recommendation to pursue a Development Permit instead of a Streets and Landscape Permit came after the review of the proposal in a draft stage and preliminary approval of the project site. This is ultimately decided after the proposal (and thereby the proposed site) are deemed appropriate, and not before.

Complete a Streets and Landscaping Permit application and the Terms and Conditions form

I suggest that a system for determining whether a Streets and Landscape Permit or a Development Permit should be pursued for a community garden proposal be outlined (e.g. in the form of a flowchart) to standardize this determination. Creating a guideline for the development permit for community gardens can also be based partly on the sections that I followed. I outline these in the next section.

Development Permit Application

When it was determined that I would apply for a development permit to authorize the construction of the garden, I met with the Development Services Manager at Campus and Community Planning to establish which sections of the [Development Permit Application](#) I would complete. I outline these below, including the sub-components I addressed for each section. I omit any section or sub-requirements that I did not have to complete. Under each section, I describe how it was completed. I submitted the finalized Development Permit Application on June 1, 2017, then presented to the Development Review Committee on June 22, 2017 to seek approval for the project.

Application Form

I listed the SEEDS Coordinator as the “Architect.” Note that because this was a SEEDS project, application fees were waived.

Written Description

The Purpose Statement, Site Selection Description, and Maintenance and Management Plan from the Proposal were used to complete this section.

Tree Survey

The Building Operations Arborist was invited on-site to provide information about trees surrounding the site and to confirm appropriate siting of the garden with respect to the surrounding trees.

Photos

Taken from all cardinal directions surrounding the site, and including the relevant view from Main Mall.

Context Plan

Completed as shown in the Appendix.

Site Plan

- **Street names**
- **Dimensions of the site**
- **Location and dimensions of all buildings with north arrow**

Incorporated in the site plan/landscape plan/tree survey as shown in the Appendix.

Utilities

- **Site Plan showing the adjacent existing utility lines**

Incorporated in the site plan/landscape plan/tree survey as shown in the Appendix. The utilities plan at the site was provided by staff in the department of [Sustainability & Engineering](#).

Landscape Plans

- Proposed plant material, paved surfaces and materials, other landscape elements and existing/proposed trees must be shown on Landscape Plan
- Existing site contours, landscaping and material to be removed, include size, common name and location
- All landscape elements and details, including new/existing surfaces to be retained, enclosures, site furniture, fences and structures.

In addition to incorporating these elements into the site plan/landscape plan/tree survey, landscape plans were completed by creating sections to describe the components of the garden and site furniture, as well as the construction plan.

Construction and First Season (July 2017 – December 2017)

The development permit issued in July 2017 is valid until September 2018. The garden was constructed over the weekend of July 7, 2017, generally following the construction plan indicated in the development permit. The construction of the garden itself was an important community-building process that led to the identification of stewards for the space. While the management plan specified specific meetings at specific intervals with specific attendees, what emerged naturally was a group of committed students who wanted to partake in managing the site and cultivating crops. I formalized a “steering committee” consisting of myself, the LFS 496 garden coordinator, and members specifying in domains of activity that were identified to require a degree of leadership: design and development, community engagement and education, and food cultivation and agronomy. This small community of site caretakers differs from the proposed steering committee in the management plan, which included members from the student groups that had expressed interest in the site. However, one member on the de facto steering committee was the student representative of one of the groups on the proposed steering committee, and members of these student groups did support in construction and in managing the site at times.

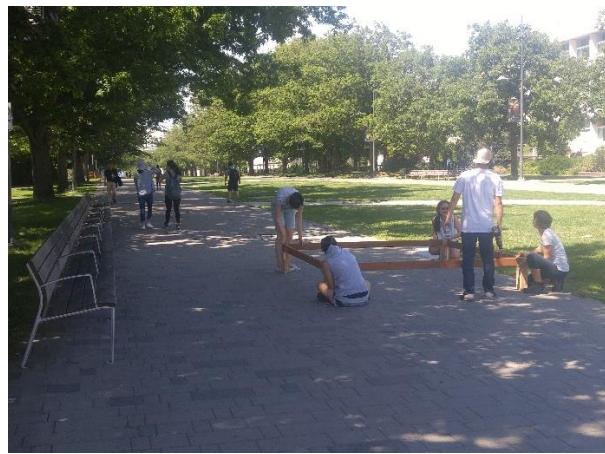


Figure 4 (left): Agronomy Garden under construction on July 8, 2017. Figure 5 (right): construction of the cedar platform on July 9, 2017.

Other than the construction of the garden, a sense of community was created through approximately weekly gatherings to tend to the garden and harvest food. The current steering committee members emerged among the students who would regularly attend the weekly gatherings. While many participants in these gatherings, all students, were already engaged in other gardening projects, many were planning students, geography students, and architecture students for which the Agronomy Garden was a point of introduction to engagement in food gardening at UBC. For all of us, including myself, this was an opportunity to learn about the cultivation of food and sustainable agriculture.

The project succeeded in inciting public curiosity in community gardening initiatives and in contributing to the diversification of student engagement in the campus food movement. This is due to the visibility of the garden that was conducive to spontaneous engagement and innovation, which I can illustrate in two anecdotes. One of the steering committee members, an undergraduate student in environmental design, first interacted with the garden community during its construction while he was walking between home and work. A faculty member passing by on another occasion while we were tending to the garden stopped to ask about the site, and offered apple saplings should we want to integrate an orchard into a future expansion.

Numerous other individual interactions, which took place between passing pedestrians and the gardeners on site, all contributed to the awareness of campus gardening. On days where gatherings took place at the garden, it was inevitable that curious pedestrians, regardless of age or affiliation, would ask questions about the garden and the initiative, almost always responding positively to its cause. The presence of the garden has served as a source of inspiration for at least one student leader who has approached me, asking what steps she could take to construct a community garden on campus for her student organisation.

Vision for the Agronomy Garden

On three occasions – the stakeholder meeting in March 2017, at a visioning session among Agronomy Gardeners two weeks after the garden was constructed in July 2017, and at a final visioning session among Agronomy Gardeners in October 2017 – ideas were collected for the future development of the Agronomy Garden. I will briefly outline the results for all three of these meetings before discussing the next steps, which will include exploring these ideas and hopefully realizing some of them.

At the stakeholder meeting in March 2017, stakeholders were divided into three groups to collectively build a vision for the garden. One group emphasized the Agronomy Garden as a central hub of food production spaces on campus that could build on innovations that manifest this characteristic. They put forward ideas such as constructing an artistic sign with arrows pointing in the directions of all of these sites, establishing the practice of annual themes and collaborations around these themes (e.g. dyes and fibre garden, First Nations foods, and a theme raising awareness of the AMS Food Bank), and creating a system to allow different groups on campus to use this space in order to unify them and promote interdisciplinary collaboration. The second group stressed the importance of the site as one that expands its network of spaces to normalize the cultivation of food on campus landscapes. The third group focused on the opportunities for the creation of cultural and celebratory practices at the

Agronomy Garden, such as weekly gatherings to tend to the site (which was implemented), cooking workshops, and a yearly harvest festival.

At the visioning meeting in July 2017, the group of gardeners that attended put forward ideas for engaging placemaking projects such as community construction and decoration of a new sign and the construction of trellises that could be used for flowers and peas. There was distinct interest in using the beech tree as the centre of future placemaking projects, including birdhouse painting, and lantern constructions that would be hung from the tree above the platform.

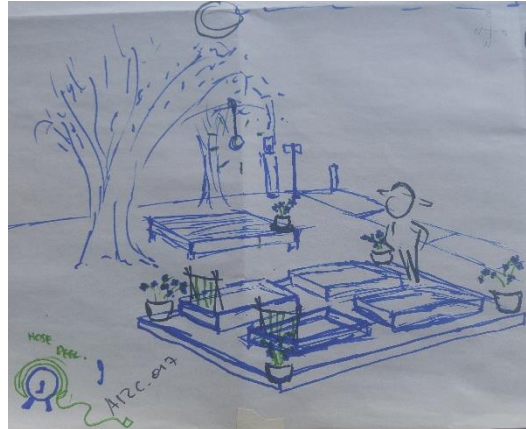
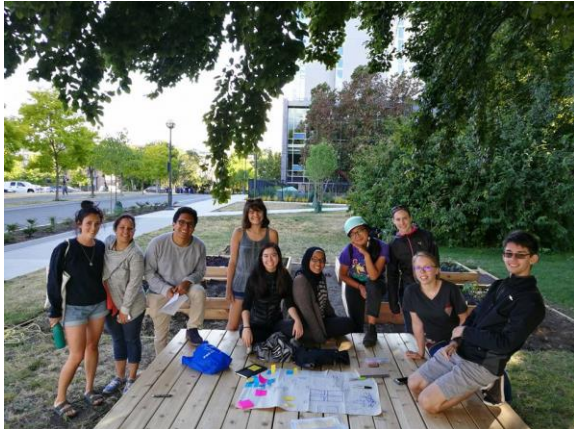


Figure 6 (left): Participants of a visioning session, July 20, 2017. Figure 7 (right): Illustration incorporating some of the ideas that emerged at the visioning session on July 20, 2017

At the visioning meeting on October 12, 2017 (affectionately titled “Lettuce Create a Dream Garden”), functional and placemaking projects proposed for the garden included a water capture apparatus for irrigation, hammocks, arches with trellises, a gazebo/ pergola, a tea hut in which tea is consumed with garden produce (e.g. mint, lavender, camomile, lemon balm), bird houses with solar roofs, a swing from the beech tree, and a wind garden to produce a musical atmosphere. New food production systems proposed included mushroom growing under the platform, and a mason beehive. Finally, in terms of activities, the participants suggested workshops in collaboration with the UBC Farm and Roots on the Roof, and re-iterated the suggestion of a birdhouse construction/painting event.



Figure 8 (left): Participants tending to the garden before Lettuce Create a Dream Garden on October 12, 2017. Figure 9 (right): Participants of Lettuce Create a Dream Garden on October 12, 2017.

Next Steps and Recommendations

The most immediate next step is for the Agronomy Garden steering committee team, including myself, to prepare a new development permit application before June 30 to extend the current one that applies to the garden in order to permit long-term unfolding of the possibilities at this site. The two main tasks to prepare for this are to establish a reliable strategy for continuity and to incorporate well-conceived and planned ideas that seize this opportunity to propose expansion. In this section of the report, I will firstly detail recommendations for these two short-term tasks for the Agronomy Garden team, then provide more long-term recommendations directed at campus food system innovators (i.e. SEEDS, food system actors), and finally provide recommendations to Campus and Community Planning in supporting the campus food movement in the long-term.

Strategies for continuity

One of the most important tasks for the Agronomy Garden is to establish how it will persist as a project in the future. As a student-organized initiative, what systems would be in place to ensure that not only knowledge is adequately transferred to succeeding teams, but that momentum and enthusiasm for spearheading further innovation are maintained? While the garden is officially being managed by a steering committee consisting of motivated students, some formalized ties to other organizations and to more permanent faculty and staff could ensure continuity. Suggested pathways to establishing stability of this project within the systems of student organizations have included making this a formal part of the Land and Food Systems Undergraduate Society, or of Roots on the Roof. The steering committee could also explore formalizing a club structure, either under the AMS or as an independent organization defined by principles and procedures outlined in a constitution. The method of recruitment of new leaders and core members must also be explored.

A possibility that will be explored in the coming few months is creating an advisory board with staff and faculty stakeholders who may be willing to invest their time and energy in ensuring that the project remains viable for future innovative and pedagogical purposes. This advisory board would work with the student steering committee to inform and pursue such opportunities.

In any case, demonstrating that the project is socially stable and safeguarded from the risk of abandonment by the fleetingness of students will be critical in advance of the review of this project by the Development Review Committee. Involvement and commitment from staff and faculty as a critical component for continuity was stressed by several individuals that I spoke with during the implementation of this project.

Imminent Renewal and Expansion

In early 2018, exploring which of the ideas put forward by stakeholders and student gardeners in 2017 can be implemented and integrated into the expansion of the garden space will be another critical task. The Design & Development and Community Engagement teams of the Agronomy Garden Steering Committee will each be working with a LFS 450 SEEDS project team to develop an expansion plan and to implement a project that imparts food literacy, respectively. My recommendation is that these projects

are pursuant to the following principles. To build on the work and accomplishments of the Agronomy Garden project, the proposed expansion projects will seek to:

- Showcase a model for environmental and social stewardship through plants and food
- Impart awareness of community gardening practices, native agroecosystems, and the network of campus foodscapes and community gardening opportunities
- Promote interdisciplinary connections between students, faculty, and staff
- Promote innovative, long-lasting, and strong partnerships with organizations of students, faculty, and staff interested in engaging with the campus food gardening
- Generate new connections between campus food system actors and other organizations, and enrich existing ones
- Animate the site in a way that is pursuant to the objectives of the Public Realm Plan

Future Research and Innovation: The Agronomy Garden as a Living Laboratory

In this section, I have listed two inquiries that I suggest have imminent value to the UBC Food System Project and could benefit from dedicated SEEDS projects in the short-term. I have also listed additional ideas for inquiry projects and innovations that could be pursued by SEEDS student researchers, or actors in the Campus Food System on their own initiative.

Evaluating the perception of the role of community gardens in campus landscapes

Initially, one of the main interests of the staff partner on this project was to discern what the public perception was of Main Mall. It could be useful to use the Agronomy Garden as the object of such a study: do community gardens contribute positively to people's perceptions and experiences in the public realm? Such a study could inform campus stakeholders of the role of community gardens in an evolving public realm that itself can constitute the campus living laboratory. Perhaps, if the results suggest positive perceptions and support, this study could produce insights that could empower the campus food movement and catalyze the paradigm shift in the use of campus landscapes towards participatory stewardship of an expansive campus foodscape that is alluded to in insights from Meredith Seeton's interviews (2011; p.8).

Evaluating the community impact of the Agronomy Garden

Another important question that could be explored in the same instance or in a separate instance as the above inquiry is whether the Agronomy Garden is reaching its goals of changing public perception of food growing in a positive way. Does a garden in the centre of campus encourage engagement with the food system, and if so how? Does it change public perceptions of local food and sustainable agriculture?

Additional inquiry projects at the Agronomy Garden

- The Agronomy Garden as a pedagogical tool: how can the site impart knowledge about plants, food, and the relationship between these and people, using exhibits and signage on site?
- Explorations of the application of technologies which maximize yields sustainably or reduce resource use.
- Which modifications to this site should be made to permit accessibility to the disabled and elderly?

- (Two separate projects) How can the Agronomy Garden:
 - maximize its spatial potential as a gateway to engagement in the UBC Food System?
 - Promote intergenerational engagement and learning?
- What is the role of the Agronomy Garden in the process of Reconciliation? Can new partnerships and practices be established to pursue that role?
- Whereas some community members envision the proliferation of campus food gardening through the re-purposing of grassy areas and the generation of a campus culture of environmental stewardship (see Seeton, 2011; p.8), could a model for co-stewardship of these envisioned spaces between students/faculty/staff and UBC Building Operations be piloted at the Agronomy Garden?
- Can the contributions of this foodscape to changing sustainability culture be measured?

Recommendations to UBC and Campus and Community Planning

From the perspective of the applicant, the Seeton Garden Proposal Process Checklist proved to be a functional procedure. Perhaps following the inclusion of the proposed amendments to this process above, I would recommend formalizing this process for the proposal of community gardens by student groups.

If a final evaluation of this project deems that it has made positive contributions to the public realm, to student engagement, and to innovative learning and research, then formalizing a procedure by which students, faculty, and staff can propose to activate spaces on campus with community gardens and contribute to the construction of campus as a living laboratory in this way is a next step. In addition to formalizing the Seeton Process Checklist, it may also be worth considering formalizing the use of a Development Permit Application form for small community garden projects. The required components of this could be based on the components required for the Agronomy Garden development permit.

Conclusion

The potential for activating campus landscapes in the academic core of UBC through the installation of community garden spaces has been demonstrated by the Agronomy Garden. The existing draft procedure produced by Meredith Seeton proved to be functional for the purpose of this project. I invite students in the future to continue working to explore and realize the potential of social change through visible community gardening spaces like the Agronomy Garden. I hope that faculty members, as they are today, will continue to be supportive of students by providing them with guidance and knowledge. I hope that staff will work with both faculty and students in the future to create policy and practice that is reflective of the advancement of UBC's Sustainability Goals through the campus food system. Finally, I hope that this project contributes to putting participatory foodscapes at the centre of a larger vision for UBC's future as a sustainable campus as well as a regional and global leader in social innovations that generate values of social and environmental stewardship and interdisciplinary collaboration.

Acknowledgements

This is a report about a place-based project conducted at the University of British Columbia in Vancouver. As such, I acknowledge that this has taken place on the unceded, traditional, and ancestral territory of the Musqueam First Nation. Learning, innovation, and cultivation of relationships among people and between people and the land have taken place long before the existence of this project, and the existence of the University which permitted it.

While I am the only author of this report, I owe the accomplishment of this project to the generous support and commitment of many people to whom I am deeply grateful. I want to thank David Gill for his assistance in navigating the systems of placemaking at UBC, strategizing to make this project an operational success, and for always having been an advocate for the vision of the Agronomy Garden. I want to also thank the staff partner for this project, Dean Gregory, for his critical input that ensured this project would be well-received, and that it was a formative challenge for me. I am also grateful for the guidance and patience from Dr. Brent Skura, the faculty supervisor for this project.

The initial vision for this project was not only mine. I owe plenty of my initial persistence for this idea to Michael Moll, Mik Narciso, and Kasha Foster from MyGreenSpace who believed in the idea of a community garden on Main Mall, and in my ability to leverage such a transformation. My friend Lucas Worsdell, who wrote a term paper about the idea of a garden-transformed Main Mall, was instrumental in providing me with inspiration and motivating me to pursue some form of that vision.

Nothing would have materialized if it were not for the invaluable and generous advice of those from across the UBC Food System and from community gardens in Vancouver. For guidance on building and managing community gardens at UBC and beyond, I thank Dr. Susan Gerofsky and Stacy Friedman from the Faculty of Education, Scott Bell, Wegland Sit from the University Neighbourhood Association, Kaylie Higgs and her friends from Capilano University, Hannah Lewis from the UBC Farm, and Joyce Liao from Roots on the Roof.

For his contributions to so many designs and renderings that were critical pieces in the permitting process, for his continued advice on fostering an intentional and cohesive community around the cultivation of food, and for his moral support as this project passed through the permitting stages, I am deeply grateful for the involvement of Chris Son, a fellow student, who invested tremendously in the project and was instrumental to its success so many ways. I am also grateful for the investment of time and energy into this project made by another student, Brenna Han, who supported this project as the official garden coordinator through its most challenging phases during the summer.

This project is meaningful because it provides the opportunity for the formation of student community and expressions of creativity. I thank all the fellow students and friends who worked with me in building a vision in the developing stages of the project, in building the garden itself over the summer, and on the steering committee this season to animate the space, collect and create brilliant ideas, and create memorable experiences together.

I am fortunate to have received the support of the Faculty of Land and Food Systems to pursue this project, and the advice of faculty members, especially Dr. Will Valley and Dr. Hannah Wittman.

I would also like to thank Meredith Seeton, a former Planning student at UBC whom I have never met, for laying critical policy groundwork on the procedure for authorizing student community gardening projects at UBC.

Finally, I want to express gratitude to the AMS Sustainable Project Fund and the UTown Community Grant for having supported this endeavour financially.

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Appendix: Development Permit

DEVELOPMENT PERMIT APPLICATION – MAY 31, 2017

Agronomy Garden Project

1. APPLICATION FORM

	THE UNIVERSITY OF BRITISH COLUMBIA Campus and Community Planning 2210 West Mall • Vancouver, B.C. • V6T 1Z4 ☎ 604.822.8228 • ☎ 604.822.6119		
	DP # _____		
Development Permit Application Form Complete application form and prepare associated materials prior to scheduling an application intake meeting with the UBC Manager, Development Services.			
Project Address and Building Name: <i>Agronomy Garden</i>			
Description of Area: <i>Open space at the intersection of Main Mall and Agronomy Road, adjacent to the Landscape Architecture Annex</i>			
Description of Project: <i>Collaborative food garden to be stewarded principally by student groups to build interdisciplinary community</i>			
Applicant (authorized agent):			
Contact name: <i>Julian Villafuerte Diaz</i>			
Mailing address: _____		Email: _____	
City: <i>Vancouver</i>	Postal Code: _____	Phone: _____	
Architect: (SEEDS Coordinator)			
Contact name: <i>David Gill</i>			
Mailing address: <i>Main Office # 3331 - 3rd Floor CIRS Building 2260 West Mall</i>		Email: <i>david.gill@ubc.ca</i>	
City: <i>Vancouver</i>	Postal Code: <i>V6T 1Z4</i>	Phone: _____	
Landscape Architect: N/A			
Contact name: _____			
Mailing address: _____		Email: _____	
City: _____	Postal Code: _____	Phone: _____	
I, THE AUTHORIZED AGENT, GIVE CONSENT FOR CAMPUS & COMMUNITY PLANNING TO POST DIGITAL DRAWINGS AND SUPPORTING TEXT FOR PUBLIC VIEWING ON THEIR WEBSITE. I HEREBY AGREE THAT I WILL COMPLY WITH ALL RULES, BYLAWS, REGULATIONS AND POLICIES OF THE UNIVERSITY OF BRITISH COLUMBIA AND ALL OTHER STATUTES, RULES, BYLAWS, POLICIES AND REGULATIONS OF OTHER AUTHORITIES IN FORCE AT THE UNIVERSITY OF BRITISH COLUMBIA RELATING TO THE WORK, UNDERTAKING OR PERMISSION IN RESPECT OF WHICH THIS APPLICATION IS MADE AND THAT I WILL INDEMNIFY AND SAVE HARMLESS THE UNIVERSITY OF BRITISH COLUMBIA, ITS OFFICIALS, EMPLOYEES AND AGENTS FROM ALL CLAIMS, LIABILITIES, JUDGEMENTS, COSTS OR EXPENSES OF EVERY KIND, INCLUDING NEGLIGENCE, IN RESPECT OF ANYTHING DONE OR NOT DONE IN CONSEQUENCE OF ANY PERMISSION, PERMIT OR LICENSE ISSUED AS A RESULT OF THE APPLICATION OR THE FAILURE TO OBSERVE COMPLETELY ALL STATUTES, RULES, BYLAWS, POLICIES AND REGULATIONS RELATING TO ANY WORK OR UNDERTAKING IN RESPECT OF WHICH THIS APPLICATION IS MADE.			
SIGNED AT VANCOUVER, B.C. THIS <u>16th</u> DAY OF <u>MAY</u> , 20 <u>17</u>			
SIGNATURE OF AUTHORIZED AGENT: 		Please continue application on reverse	
Revised August 2015 1/5			

FEES WAIVED AS SEEDS PROJECT

2. WRITTEN DESCRIPTION

The community garden that we propose seeks to generate visibility to the campus food system as an opportunity to create a sustainable and lively campus future through food. It addresses the demand from groups like the Land and Food Systems (LFS) graduate students, Roots on the Roof, the Forestry Undergraduate Society and others for collaborative gardening by students within the campus core. The only community gardening effort on campus truly open to all students are a few plots at Roots on the Roof on the fourth floor of the AMS Nest, but a lack of awareness about this effort fails to connect groups like the Land and Food Systems Graduate students with the space on the roof of the Nest. Already, the Agronomy Garden as a vision has gathered passionate support from student groups across campus, as I will detail in later sections of this document, indicating the demand and drive to realize this ambitious endeavour.

The garden will be the object of something much larger, which will be a network of campus community members with the common objective of creating and pursuing opportunities to grow food on campus. At the northwest corner of Main Mall and Agronomy Road, the space will act as a node for these various groups, and as a visible invitation to the rest of the campus community to partake in this movement. It will also be a space invigorated with energy, animating its surroundings, inspiring those who pass by.

Visibility at this site will also generate awareness about the vibrancy that already exists in the campus food system and for outreach by initiatives such as Roots on the Roof and the community garden plots that they already have. As a demonstration of gardening as a sustainable behaviour that promotes physical, social, and mental well-being, the garden will inherently promote food as a centralising element of our campus as a sustainable community and an imperative consideration in future advancements towards sustainability on campus and beyond.

The most important outcome we hope to generate is a network of committed students, faculty and staff who have within them the capacity and drive to expand the food production network on campuses. This site is intended to not only animate the space around it but also empower the community of people dedicated to its stewardship in the medium term.

Collaborating groups and collective vision

The current groups committed to this collaboration are the Land and Food Systems Graduate Student Association, the Forestry Undergraduate Society, Roots on the Roof, Planning Student Association, and Geering Up, Landscape Architecture Student Association has indicated interest in joining the collaboration in the near future. Stakeholders from the Faculty of LFS, the UBC Farm, the Orchard Garden, and the Geo Garden have all been involved in conceiving the vision and central principles of this project.

The engagement of groups that will persist at UBC as stakeholders in this project is critical to ensure its longevity and for cultivating a sense of ownership and community early on. A facilitated meeting was held on March 16 to formulate a collective vision among currently involved stakeholders. Our collective vision for this project is that it will generate a persisting community that will:

- Strive for sustainability of relationships among stakeholders and with the garden itself.
- Involve members of the community in exploring the significance of this land (e.g. as unceded Musqueam territory, as land previously cultivated by the University, as part of a local and regional ecosystem, etc.)
- Utilize the garden as a tool for innovative and interesting methods for learning and student engagement.
- Promote the garden as a space for positivity and well-being.
- Encourage use of the garden for expressing creativity and prioritize community members' freedom in using the space.

In sum, we envision this garden as one that fosters a visible and accessible community space that models social and environmental stewardship by UBC student groups through plants and food.

Alignment with UBC's Academic Priorities

The project supports the academic goals outlined in UBC's Plan: Place and Promise (2012) in supporting student learning by providing an opportunity for one or two students to pursue an "enriched educational experience" in the form of an LFS 496 internship to coordinate garden functions over the summer and into the fall. The garden will also support student learning by creating a space for informal learning, and creating a culture of involvement, thereby fulfilling Place and Promise's goal of "supporting student well-being, personal development, and outstanding campus life" (p.11). Other concrete educational opportunities in this space will emerge as the project grows. Students enrolled in the SEEDS program, in Community Based Engaged Learning (CBEL) courses like LFS 450, in applied biology courses, and perhaps even business management courses can seize the opportunity to study this space and community and provide recommendations through the lens of their field of study.

This project will also advance UBC's strategic goals towards sustainability in advancing the institution towards the goal of making "UBC a living laboratory in environmental and social sustainability" by addressing two of the outlined actions therein, being firstly the demonstration of "leading edge solutions by deploying innovative technologies and testing social acceptance," and making UBC "an agent of change through innovation integration, demonstration and inspiration" (p.27). Projects like the Arbutus Collaborative Community Garden advance UBC towards the vision for 2035 outlined in the 20-year Sustainability Strategy (2015), in which UBC in 2035 is envisioned as "a thriving lab, treated as a societal test bed" (p.6). In promoting collaboration through community gardening and food, the project also moves towards the 2035 vision of UBC as a "resilient and engaged community that addresses change collectively and collaboratively" in which "intercultural fluency, diversity and equality are fully integrated into UBC's social sustainability efforts" (p.7).

Contribution to the Public Realm

To align itself with the principles of the design policy framework of UBC, the project has been guided in its vision by the six objectives of the Public Realm Plan (Campus and Community Planning, 2009). The first – to animate, invigorate, and bring life to campus – will be fulfilled and advanced through the cultivation of fruits and vegetables but most importantly in being a highly frequented and interactive space that promotes engagement between community members and the landscape, and

among community members. The second – to enhance the educational experience with outdoor formal learning – will also be advanced every day that the community collaboratively stewards the space together. The third – to promote the sharing of ideas, creative expression, and interaction across disciplines – will take place between the gardeners and the campus at large in their demonstration of gardening as a sustainable and intercultural activity, and also between the gardeners as they share knowledge in every day management of the garden and at monthly gatherings. The fourth – to nurture the physical and mental health of students, faculty, and staff – will be fulfilled for the gardeners as the activity of gardening and managing this space will promote healthy eating, connections among between people and between people and the land, and outdoor activity. The fifth – to instill pride and a strong sense of place – will manifest as this space takes shape as a result of student effort and as it serves as a testament to the power of student collaboration. The sixth objective, concerning the economical sustainability and community support, will demonstrate itself in its short and long-term payoffs to the local gardeners and passerby pedestrians who will be able to enjoy this animated space as it evolves through the seasons.

Site Selection Description

While the main purpose of the garden is to provide gardening space for student groups on campus, its visible and accessible central location at the northwest corner of Main Mall and Agronomy Road will serve to advocate for the campus food system as a builder of connections and sustainability on campus, to invite the campus at large to the movement towards powerful and rich food systems at UBC through expanded community gardening, to generate momentum towards this ambition, and to animate space around the experience of cultivating food. Activating this site is pursuant to these goals and can serve to captivate the full energy and potential that exists in the UBC community towards this social change. The project initially sought a space on Main Mall, but the only site appropriate given its proximity and potential for a hose-bib installation was ultimately inappropriate as a site that interferes with the dignity of the new Reconciliation Pole that was raised on April 1st of this year. The site at the northwest corner of Main Mall and Agronomy Road, adjacent to the Landscape Architecture Annex building, was chosen as the best alternative given its access to sunlight and to the existing hose-bib on the Landscape Architecture Annex.

The UBC Land Use Plan lists this space under academic land use, like Geo Garden, therefore food gardens are not prohibited under the plan. Being in the vicinity of Main Mall, which the Public Realm Plan describes as a simple, formal landscape, an enhanced pedestrian realm and a ceremonial route, we believe it will be imperative to retain a high aesthetic and functional standard in this garden by ensuring uniformity in materials, and regulations regarding the tidiness of the space in order to respect the aesthetic integrity of surrounding spaces. The management plan outlines how this will be ensured.

The Public Realm Plan in 2009 listed the Orchard Garden as a site of informal learning. In moving further away from the centre of campus, to Totem Field, it has arguably lost its full capacity to that end. The proposed Agronomy Garden would fill that gap and provide a site with many opportunities for informal learning on the south side of campus. It would be appropriately co-stewarded by the Forestry Undergraduate Society, housed in the nearby Forestry Sciences Centre and by the LFS Graduate Students who are nearby in the MacMillan building. Representatives of the Landscape Architecture

Student Association have also indicated their interest in collaborating. Storage space for this garden will be located in MacMillan room 94, which was formerly the tool shed of the Orchard Garden.

Maintenance and Management Plan

This section of the document outlines firstly the metrics of success towards which the management plan aims, secondly the management structure outlining the purpose and responsibilities of the new actors and bodies, and thirdly a detailed timeline. The appendix includes drafts for garden contracts.

Metrics of Success

This garden will be successful when:

- It creates a community out of the space that is well-connected in itself and with the campus at large.
- It is a place of daily learning for the garden members as they gain gardening, cooperation, and leadership skills, and as they share and learn from each other.
- It is a space of social support and interaction contributing to well-being in addition to the healthy food that is harvested from it.
- It is meaningful to not only the garden members but to all those who pass by the space and can enjoy the life that emanates from it daily.
- It is tidy, well-maintained, and pleasing to the eye, such that it is a point of pride on our campus.

The management structure detailed below is intended to foster maintenance of a space that abides by these metrics of success. It is critical that these are met so that this project may contribute meaningfully to student learning, the UBC Strategic Plan, and the Public Realm Plan. It will require diligence and organization on behalf of the garden coordinators to facilitate positive community experiences out of this space, and it will require a form of leadership that empowers garden members and galvanizes engagement among members of the UBC community.

Management Structure

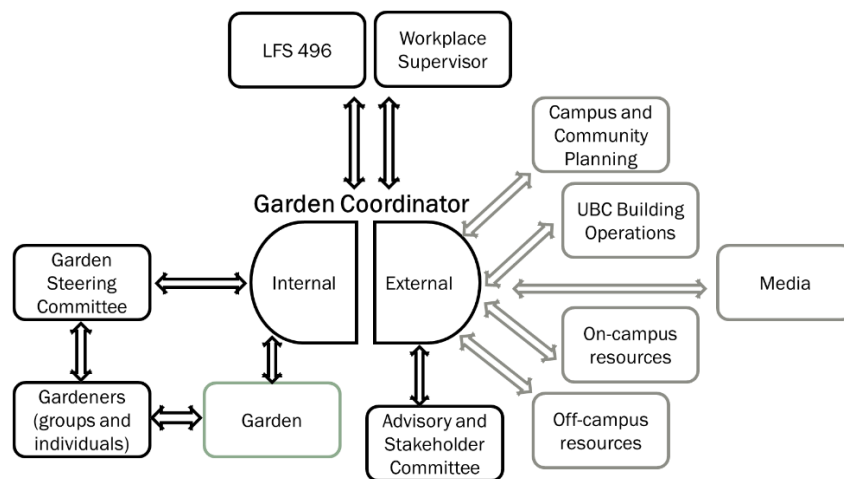


Figure 1: Diagram of Agronomy Garden actors

The following section is divided into descriptions about the roles and responsibilities of the workplace supervisor, the garden coordinator, the gardeners, the garden steering committee, and the advisory and stakeholder committee.

LFS 496 and the Workplace Supervisor

The for-credit internship in which the garden coordinator will be enrolled is LFS 496, which focuses on career development and provides resources such as workshops to that end. It is instructed by Dr. Hannah Wittman and Veronik Campbell. The garden coordinator intern for this season is Brenna Han, who was recruited to this role in March 2017.

Dr. Will Valley has agreed to be the workplace supervisor. While the garden community contains in itself already ample resources, support, and sources of mentorship for the garden coordinator and the community gardeners, the workplace supervisor is in the position to provide mentorship to the garden coordinator, especially with questions relating to fundamental garden infrastructure and communication with external organisations. The workplace supervisor provides assistance in the case of an emergency.

The Garden Coordinator

The garden coordinator will be responsible for external and internal communication, project management and planning, and administrative duties such as financial resource allocation. In terms of external communication, the garden coordinator will have the significant responsibilities of both representing the garden and managing its resources. She will have to make informed and calculated decisions and ought to communicate extensively with the steering committee members to adequately address their needs.

As for project management and administration, the coordinator must exert a form of leadership which is effective in delegating and enforcing responsibility, but also in creating a sense of genuine community, cohesion, and fulfillment for each of the gardeners. While the coordinator will naturally be concerned about the growth of the plants, as the gardeners will be, they should be most concerned about the growth of the garden participants and of the community.

Below is the list of tasks for which the garden coordinator would be responsible, sorted in order of frequency:

Ongoing Tasks/Responsibilities

- Fulfill duties and responsibilities as an LFS 496 intern
- Create and administer a garden email address to be posted on official signage and media
- Serve as the main point of contact for the media and coordinate all media relations and represent the garden in media appearances and other events
- Serve as the main point of contact for all research projects on the garden and any collaborations with other organisations within UBC
- Manage all donations and relationships with sponsors

- Serve as the main point of contact for Campus and Community Planning and communicate their requests to the garden community appropriately.
- Serve as the main point of contact for UBC Building Operations and forward concerns regarding irrigation/the hose-bib to them if necessary
- Notify the acting workplace supervisor if there is an emergency or to troubleshoot other serious management issues and challenges.
- Be prepared to mobilize members of the garden for emergency repairs and maintenance
- Keep the padlock code and distribute the new code to garden members if the lock is changed
- Be thoroughly familiar with all the garden community members and the plots for which they are personally or collectively responsible
- Be the main point of contact for garden concerns (pests, diseases)
- Optionally operate the *Mygreenspace* app as a resource for garden planning and troubleshooting
- Connect the gardeners with other resources for horticultural information
- Ensure that all groups involved are participating sufficiently and that no gardening group or individual is inhibiting opportunities for others to engage equitably.

Daily/approximately daily

- Respond to all inquiries about community garden membership
- Check on the garden daily **in the morning** to verify that the garden is in good shape (ie. is not in need of watering, pruning, or weeding, and the site is generally neat and tidy), that there have been no acts of vandalism overnight that would need to be promptly dealt with, and that the compost has been adequately dealt with by the community member delegated to that task
- Report the need to maintain a plot to the garden plot leader in question and send reminders when necessary
- Verify that the garden members have adequately followed up on maintenance concerns,
- Moderate and administer the Facebook group in which garden members can collaborate and coordinate amongst each other
- Administer a Google Drive folder open to all garden members with garden plot maintenance schedules, plans, and member contact information. It is important to ensure that garden members are frequently present in the space throughout the day in order to have an animated space.
- Enforce the responsibilities (eg. composting, toolbox cleaning, etc.) that garden members agreed to at the most recent monthly general meeting

Weekly

- Maintain a photo diary (an Instagram account, for example)
- Maintain a blog or public Facebook page that is accessible to the public
- Manage funds, make necessary purchases for the garden
- Chair the steering committee and coordinate the weekly steering committee meeting for thorough check-ins and take meeting minutes
- Do an inventory check on tools
- Provide orientations for new members

Monthly

- Coordinate any workshops requested by the garden community
- Construct hand-painted signs with community garden members at monthly general meeting. Verify that these are acceptable with Neal Wells
- Chair the monthly garden general meetings with the entire garden community and facilitate garden planning and re-formulation of garden plot management structures if necessary and take meeting minutes
- Book spaces for the monthly general meeting and advisory and stakeholder committee meetings.
- Ensure that official signage is presentable and up to date. Contact Neal Wells (Neal.Wells@ubc.ca) for changes.

Collaborating organisations

Roots on the Roof, the Landscape Architecture Student Association (LASA), the Forestry Undergraduate Society (FUS), Geering Up, and the Planning Student Association have all agreed to the collective management of the garden. Given the space it occupies, it would be appropriate for them to join. In the short term, we may be able to welcome other groups, including those of faculty and staff, to join in stewarding this space.

Garden participants must be made aware that while they may consist of their own unit as a group, they will also become part of a collective unit as the community garden and will be expected to share responsibilities with the community at large to maintain a healthy garden and community over the season.

Collaborating organizations will:

- Abide by the conditions in the contract
- Nominate one person to serve as the steering committee member and main point of contact with the garden coordinators
- Attend the monthly general meeting
- Be involved in the planning of the garden at the beginning of each month, and in the process of establishing timetables, maintenance schedules, and the establishment of the terms and conditions of involvement with the entire garden community.
- Ensure that the organisation is meeting its responsibilities agreed upon during collective garden planning at monthly meetings

Garden Steering Committee and Meetings

These should take place at an agreed time weekly to troubleshoot persistent or new issues with the garden plot leaders/steering committee members. This will be chaired by the internal coordinator but the external coordinator will also be present to share information

The agenda for these meetings will include:

- Check-ins for all of the garden plot leaders
- Address concerns that are appropriate to resolve with the garden as a whole
- Plans to resolve internal management and gardening issues
- Updates from the coordinator

- Delegation of responsibilities from the garden coordinator to the committee members
- Requests for resources from gardeners

The committee is also there to provide advice to the garden coordinator(s) on their next steps and in their management planning.

Garden Community and Monthly General Meetings

These are the meetings of the entire garden community which may exceed 50 people. They will be organized by the external coordinator. The role of this meeting is to firstly provide an opportunity for people to plan their harvests together and devise the allocation of resources and time, and secondly to celebrate the community that exists.

The agenda for this meeting will include:

- Announcements from the coordinators
- Any workshops or special guests invited by the external coordinator
- Planning and scheduling for the next month in each gardening plot, seed ordering
- Steering committee member changes if and when necessary
- Hand-painted sign-making when necessary and permissible
- Celebration and potluck

Advisory and Stakeholder Committee and Meetings

This meeting, co-chaired by the two coordinators, will take place approximately monthly as an opportunity for stakeholders to provide their input on the project. The Steering Committee would attend to represent the garden and meet with the stakeholders.

In addition to the steering committee – which will include representation from the FUS and Roots on the Roof – the advisory and stakeholder committee can include representatives from:

- The Orchard Garden
- The UBC Farm
- The Intergenerational Landed Learning Garden
- Campus and Community Planning and SEEDS
- UBC Building Operations
- AMS Sustainability
- The Faculty of Land and Food Systems
- Any other group that has a reasonable stake in the effects and outcomes of this project

Maintenance and Management Agreement

The following points are taken from the maintenance and management agreement that was provided by Campus and Community Planning to UBC Human Resources for the Healthy Initiatives Program Community Garden Document. The restrictions herein will be respected through garden management and it will be my personal responsibility, with the assistance of the garden coordinator, to ensure that these are respected and enforced.

1. *Individuals or groups who have established an approved food garden are responsible for cultivating, weeding, fertilizing, watering, and otherwise caring for their food garden. Approved food gardens must be cultivated by individuals or groups to prevent the weeds from taking over.*
2. *Individuals or groups who have established an approved food garden are responsible for maintaining gardens in an orderly condition at all times. At the end of the summer growing season gardeners must clear the plots of dead vegetation, stakes, cages and other encumbrances not required for the fall/winter/spring growing season. Gardeners are required to clear their garden completely before abandoning them. If a plot is not completely cleared, the Department or Faculty will be assessed any cost associated with restoring the landscape area to its previous condition.*
3. *Gardeners are required to follow organic cultivation practices that preclude the use of pesticides and chemical fertilizers in the Garden. Organic fertilizers such as manure, peat, seaweed, compost, bone meal and limestone are permitted.*
4. *Open containers of water are not permitted. These are perfect breeding grounds for mosquitoes which may carry and spread viruses that are dangerous to humans.*
5. *Structures like trellises or cages, inside a garden must not be higher than 5 feet. If there is a complaint about a structure, C+CP will decide what, if any, action is required. Structures 10 m² and larger will require a Building Permit.*

Long-term stewardship

There are several potential avenues for growth and maintenance of this project and what it upholds. The exact structure of this will be contingent on the connections that are built, the challenges that are met, and the opportunities that arise as we execute this project. Below I outline three potential options for future stewardship of this community and space.

- 1) The garden will be stewarded as a collaboration indefinitely. Collaborating groups, of students, faculty, and/or staff, would each delegate a garden representative to form a steering committee. These representatives would meet at the beginning of the year (in the winter) to discuss the year's budget based on expansion projects, operations, and maintenance costs, and these delegates would coordinate contributions of their own group's budget to the garden, or collectively apply for grants. The benefits of this are that this is non-hierarchical and advances the communal land management experiment this project is effectively creating on campus, and that it would not feel exclusive to students. The downfalls are that individuals not affiliated with a group cannot involve themselves easily, that there is no formally responsible entity for this space, and that the project could easily dissolve without a structured and clear sense of responsibility and leadership.
- 2) The garden will become its own club or organisation, perhaps affiliated with the AMS. This maintains the positivity of community and grassroots sentiment attached to this space, while providing the opportunity for clear leadership and management structures. The benefits of this model are that the organisation could reflect and collaborate deeply with organisations like Roots on the Roof. The downfalls are that defined collaborations may become less important, and that it would be less welcoming to non-student groups.

- 3) The garden becomes a managed collaboration as a satellite organisation of the Land and Food Systems Undergraduate Society (LFS|US) to maintain its current management structure. In this model, the LFS|US, which is a permanent student organisation, would organise the hiring of a for-credit garden coordinator each year in the same way that I did. Each garden coordinator would receive a transition report from the previous one. This model would provide the flexibility for growth and innovation in this collaborative garden management plan that I have outlined, maintaining a sense of ownership and identity in each collaborating group, while maintaining the clear sense of accountability and leadership that the current garden coordinator and I provide. The benefits of this model are that the LFS|US would provide a strong base of support with their resources. The challenges might be with regards to fine-tuning a comfortable sense of ownership that the LFS|US has over the space. With too much prominence, collaborating groups may lose a sense of ownership. With too little, the LFS|US may lose interest and abandon this model.

3. DESIGN POLICY COMPLIANCE

As part of the Campus Core character district outlined in the Vancouver Campus Plan part 3, the arrangement of the garden will seek to maintain the formality and symmetry that is central to the aesthetic of this part of the campus. The materials used will generate a simple and clean landscape that is legible as a community space and a space of informal learning. Rigorous management will ensure that the plant material is maintained in a tidy manner.

5. DIGITAL PHOTOS



Northwest from the corner of Main Mall and Agronomy Road



North from Agronomy Road



West from the Eastern edge of the site



East from West of the site

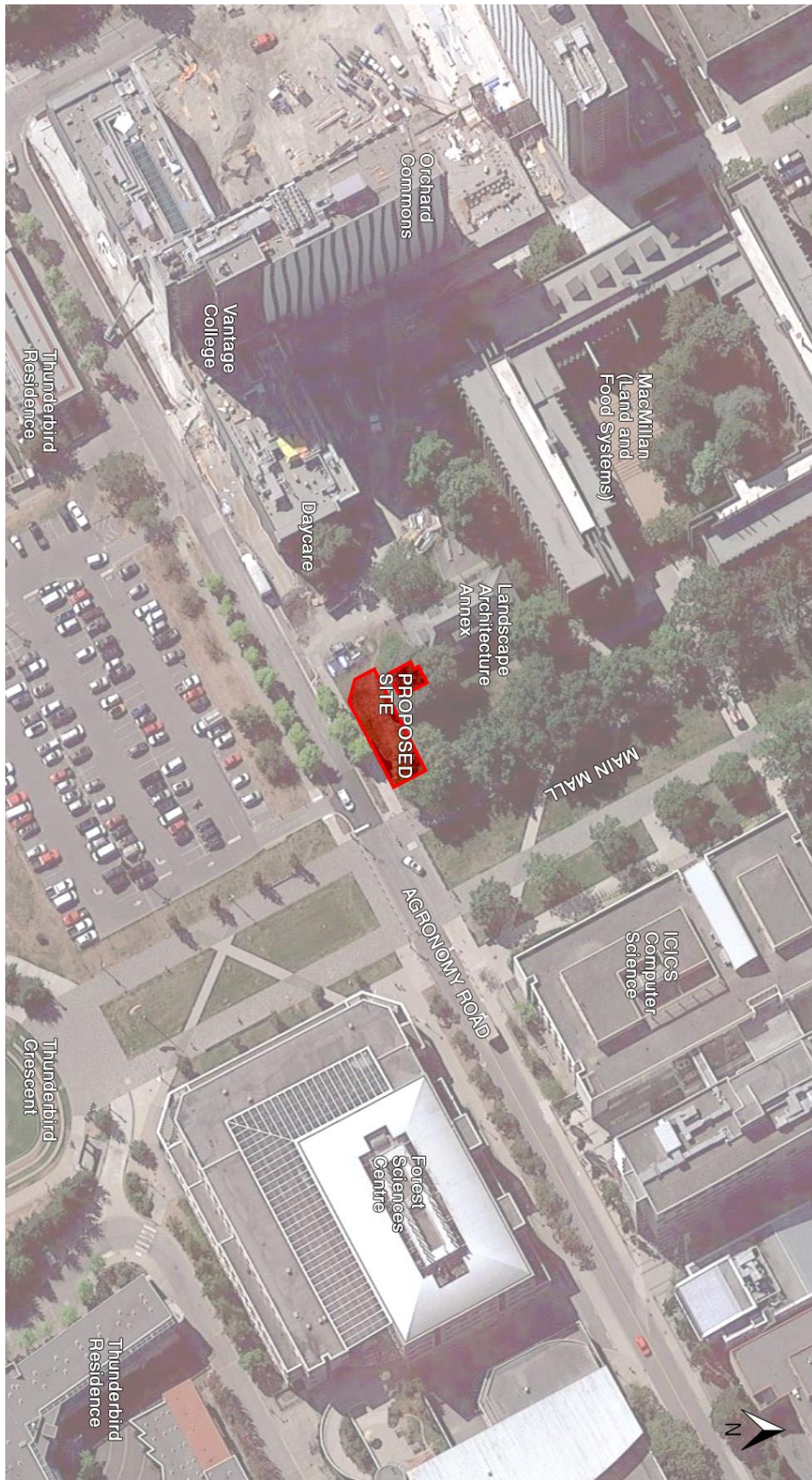


South from North of the site

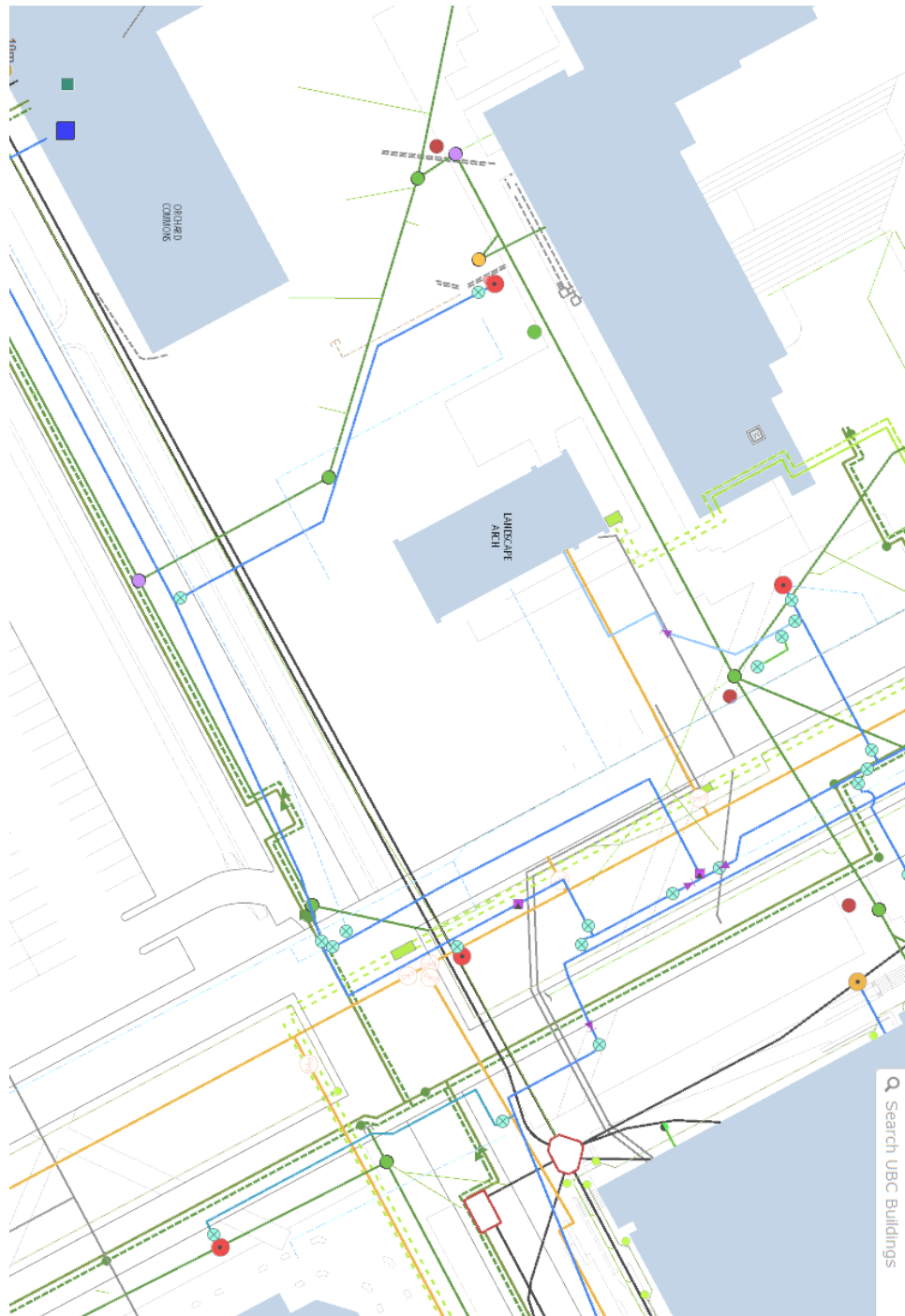


Southwest from Main Mall

6. CONTEXT PLAN (authored by Chris Son)



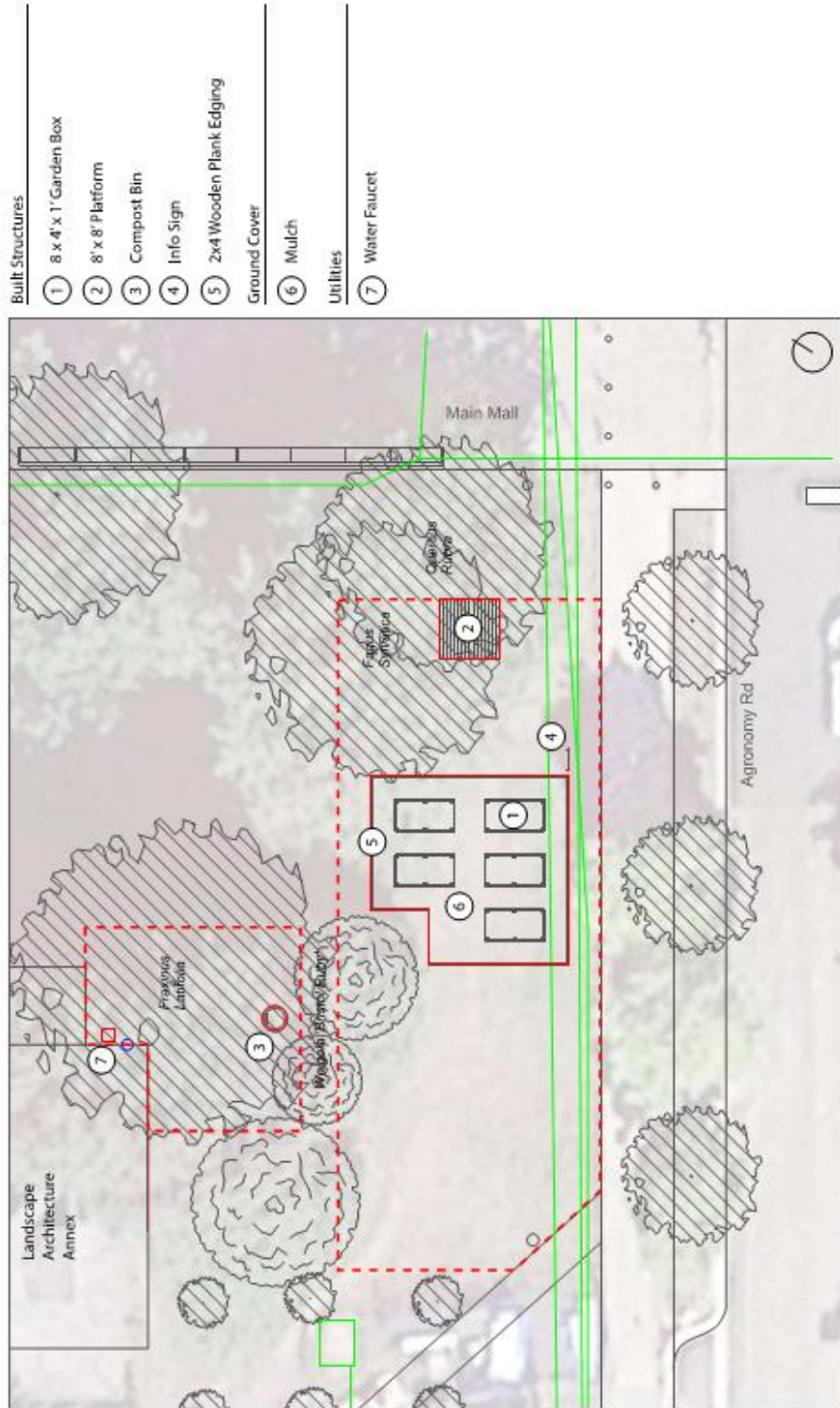
7. UTILITIES PLAN (provided by Doug Doyle)



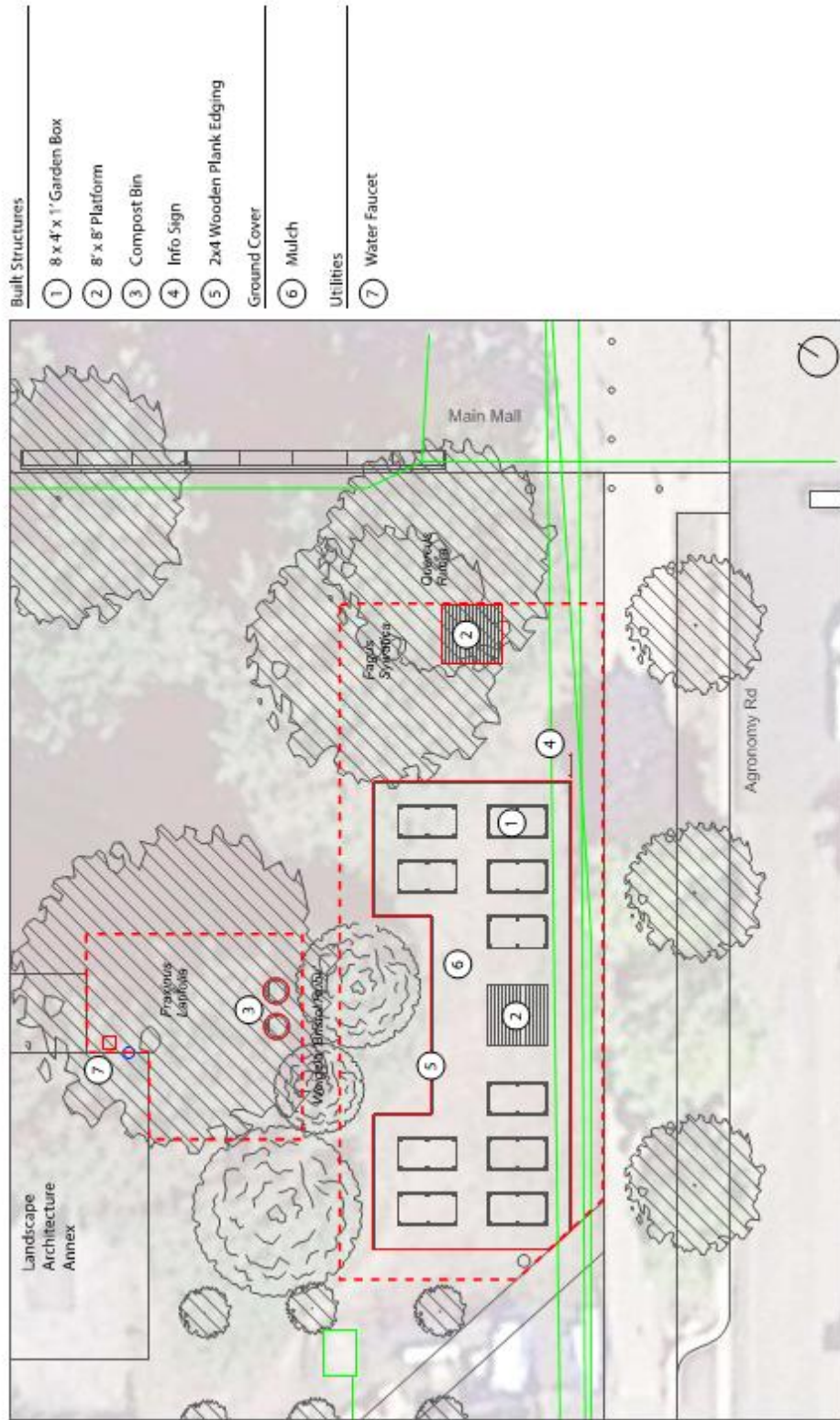
8. SITE PLAN/LANDSCAPE PLAN/TREE SURVEY

Authored by Chris Son and Jaclyn Simon. Trees identified by Collin Varner.

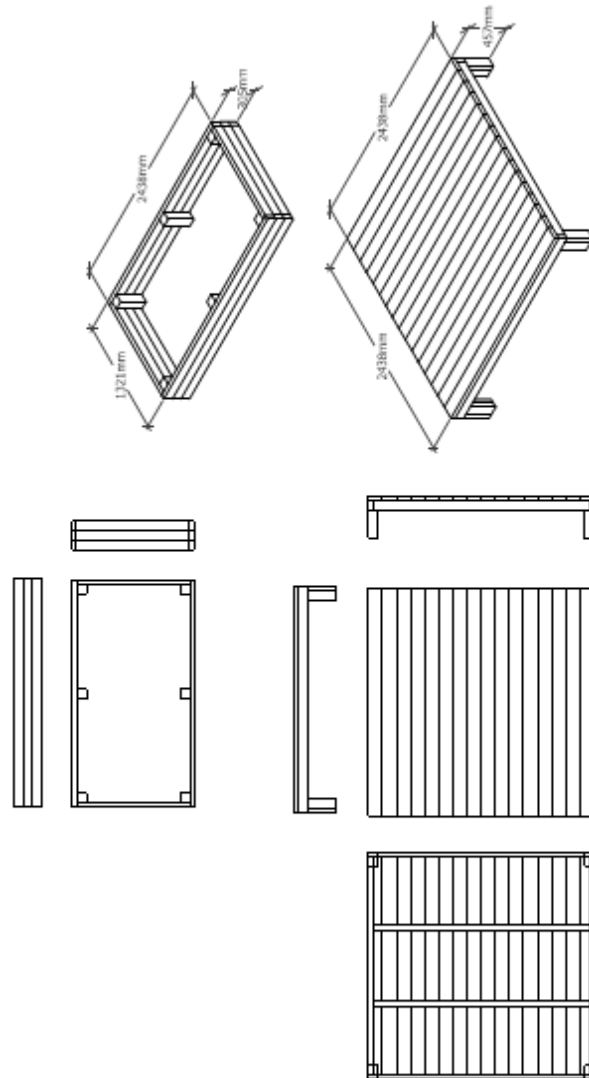
1. Plan for Summer 2017



2. Plan for Future Expansion



3. Furniture Plans



4. Description of components

- 1) **8'x4' Raised-Bed Planters:** These will be constructed out of rough cut cedar, which is naturally rot resistant, but will deteriorate after 10 years and will require replacement in the medium term.



Precedent from online source.

- 2) **8'x8' Platform:** This will also be made from cedar.



Precedent from online source.

- 3) **Compost bin:** This will be located out of view from the street, behind the Weigela 'Bristol Ruby' bush. We will invest in a pre-made bin that will be resistant to pests.
- 4) **Signage:** Neal Wells of Campus and Community Planning has been contacted to assist with signage.
- 5) **Edging:** Staked-in cedar planks (2x4s) will match the materials of the box planters and the platform
- 6) **Mulch:** This will be made of fir, or hemlock, or a mix of both, to cover the approximately 390 square feet of area within the perimeter of edging, not including the surface areas of the raised-bed planters that will be filled in with soil.
- 7) **Water faucet (hosebibb):** This already exists on the southeast corner of the Landscape Architecture Annex and will serve as our access point for water/irrigation.

5. Construction Plan

The Agronomy Garden, following the confirmation of the permit, will be constructed over a weekend. Materials will have to be purchased in advance to construct the garden in a timely manner. Once the permit has been confirmed, we will recruit volunteers for the day on construction who will consist primarily of members of the student organisations primarily involved in this project. Below I outline how the garden would be constructed on a weekend following the approval of a development permit, the collection of all necessary materials to build the garden (including power tools and shovels which can be borrowed from other groups on campus such as the Orchard Garden), and the outreach necessary to gather the amount of labour necessary to execute the below plan in two days.

Day 1 (Saturday)

- 1) The site will be raked and leveled in preparation for the later stages of construction.
- 2) The corners of the central area with the planters would be indicated on-site according to the landscape plan. Trenches about 4 inches deep will be dug by volunteers along the edges of the central area, in which cedar 2x4s (and additional cuts of wood to cover the entire length of the edges in the plan) will be inserted to serve as edging.
- 3) Another group of volunteers, under the direction of Chris Son and instructions provided, will simultaneously construct the platform behind the Landscape Architecture Annex or behind MacMillan to have access to flat surfaces to facilitate construction. This will be moved manually to its final site, whose corners will have been previously identified using a measuring tape and the landscape plan for reference.

Day 2 (Sunday)

- 1) Two groups of volunteers will work on building the five 8'x4'x1' planter boxes with plans and direct instructions off-site, to then move them to the site once assembled.
- 2) The corners of each of the planters will be identified on site using a measuring tape and the landscape plan. Volunteers will dig areas 3 inches deeper than the rest of the site in which the raised-beds will be inserted and filled with soil.
- 3) The area within the perimeter of the wooden plank edging inserted previously will be filled with mulch.
- 4) Seedlings will be planted on the same day.

6. Equipment Storage

We have access to a storage room on the rear of MacMillan which was formerly used by the Orchard Garden. It will serve as a storage location during our procurement of materials prior to construction and as a location to store large tools during the operation of the garden.

APPENDICES

Appendix A: Budget

Construction Costs	
Item	Budget
Lumber for raised-bed planters, platform, and edging	1000
Toolbox	250
Hose	75
Composter	70
Soil and Mulch and Delivery	750
Mileage/gas fees for vehicle	120
Miscellaneous tools	100
Signage material	90
TOTAL	2455
Running Costs (monthly)	
Seeds	100
Stakes, Trellises	20
Material replacement	20
Mygreenspace subscription	2.8
Mileage/gas fees	30
TOTAL	172.8
TOTAL for 3 months	518.4
GRAND TOTAL	2973.4