

Burlington Conservation Board
645 Pine Street
Burlington, VT 05401
<http://www.burlingtonvt.gov/dpi>
Telephone: (802) 865-7188

Zoe Richards, Chair
Rebecca Roman
Don Meals
Miles Waite
Ryan Crehan
Hannah Brislin
Caryn Connolly
Kyle Tansley
Lina Swislocki
Elizabeth Cunningham, Student



Conservation Board Meeting Public Notice

Monday, February 5, 2024, 5:30 PM

645 Pine Street, Front Conference Room or Remote via Zoom

Zoom: <https://zoom.us/j/95590052709?pwd=MlhQcTVTNmUydW5qeIBLeFUwZk9LZz09>

Webinar ID: 955 9005 2709

Password: 346560

Telephone: 1 929 205 6099

1. Minutes

1.1. Accept minutes from January 8, 2024

1.2. Draft minutes from February 5, 2024

2. Board Comment

3. Public Comment

4. Project Review

4.1. ZP-23-545; 245 Appletree Point Rd (WRL, Ward 4) Ramsay Gourd Architects / 507 J, LLC
Demolition of existing residence to construct a new modern residence in the same footprint

5. Update & Discussion

5.1. Conservation Legacy Fund

Preliminary discussion of potential funding request for Elks/Arms

6. Adjournment

7. Informational and Non-Discrimination Statements

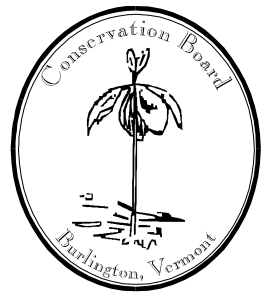
The City of Burlington will not tolerate unlawful harassment or discrimination on the basis of political or religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status, crime victim status or genetic information. The City is also committed to providing proper access to services, facilities and employment opportunities. The programs and services of the City of Burlington are accessible to people with disabilities. Individuals who require special arrangements, auxiliary aid, service for effective communication, or a modification of policies or procedures to participate in a program, service, or activity of the City of Burlington, should contact the office of the Title II

Burlington ADA Coordinator at 802-865-7000 as soon as possible but no later than 48 hours before the scheduled event.

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Conservation Board Meeting Minutes

Monday, January 8, 2024 – 5:30 pm

Remote & In Person Meeting

Attendance

- **Board Members:** Zoe Richards (ZR), Miles Waite (MW), Ryan Crehan (RC), Hannah Brislin (HB), Caryn Connolly (CC), Rebecca Roman (RR), Elizabeth Cunningham (EC), Kyle Tansley (KT), Don Meals (DM)
- **Absent:**
- **Public:**
- **Staff:** Scott Gustin (Permitting & Inspections), Dan Cahill (Parks & Rec), Chapin Spencer and Norm Baldwin (Public Works)

RR, vice chair, called the meeting to order at 5:31 p.m.

Minutes

December 4, 2023 minutes

A MOTION was made by MW and SECONDED by HB:

Approve the December 4 minutes as written.

Vote: 7-0-0, motion carried. (No ZR)

Board Comment

None.

Public Comment

None.

Open Space Subcommittee

1. Legacy Fund Grant

Review and approval of grant awards recommended by the review committee

RR and SG noted the City Attorney's Office recommendation that City Council approval be sought for the expenditure of legacy funds for grants to be acted on by the Board tonight.

DM noted the two December joint committee meetings including Conservation Board and Parks Commission members. They decided to approve and fully fund 3 applications: VYCC, VT Gardening Network, and Burlington Wildways proposals. Total is about \$152,100. He said the committee discussed the degree of overlap between some of the proposals, especially Wildways and VYCC as trails and

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stewardship work in the Intervale. VYCC is more about physical trail work, whereas Wildways is more focused on stewardship.

DM noted need for final reporting. SG said there is a reporting requirement in the grant agreement.

A MOTION was made by DM and SECONDED by KT:

Approve the grant applications by VYCC, VT Gardening Network, and Burlington Wildways for full funding and forward to City Council.

Discussion: DC noted the review committee was a joint committee between BCB and Parks Commission.

Vote: 7-0-0 (no ZR)

Project Review

Deferred.

Update & Discussion

ZR joined the meeting in progress.

1. Champlain Parkway Trees

Chapin Spencer & Norm Baldwin appeared on behalf of this item.

Norm Baldwin, the Parkway has a long history. Numerous people have come and gone during the project lifetime. When the project goes out to bid, there may be some items that are out of date. One of those elements in this case was the trees. They were reviewed and approved following conversations with stakeholders. Changes were not made previously out of caution to limit potential for litigation. At this point, there is opportunity for some changes. We think there is potential now to remove and replace these trees more aligned with what Parks is now seeking. Some of the trees have been replaced already. The permit and costs need to allow for it.

RR, to be clear, all of the pear trees will be removed? Chapin Spencer, yes, all of the pear trees. 26 were planted, and 11 have been replaced. The remainder will be changed in the spring. Our design team is re-reviewing comments from Parks.

ZR said she spoke with VJ Comai (city arborist) today. He felt that he made clear the pear trees should not be installed. Chapin Spencer noted the prior review and comments from Parks at a time when there was risk for litigation. At this stage, we have some flexibility to address the problem with the pear trees.

Norm Baldwin noted ongoing conversations between DPW and the city arborist as to tree plantings and retention. ZR asked if the BCB can see the plans for trees along Pine Street. She said we discount trees as infrastructure. She appreciates the complexity of the Champlain Parkway project. How can we help?

Chapin Spencer noted the incredible partners on Great Streets and other newer projects. The Parkway is a legacy project with parameters defined years ago. We work well with Parks. If there's a role for the Conservation Board, we can have that conversation too. The only trees planted along Pine Street as part of the Parkway are in front of the Maltex building.

RC, thanks for taking on this item. We review major developments, shoreline projects. We frequently look at planting plans. We would love to review project plans and give comment.

ZR, nobody intends to lessen the city's tree canopy, but it happens. How do we deal with green infrastructure impacts of one-off projects like the High School and the Parkway?

Norm Baldwin noted recently adopted engineering standards of practice for city projects. Chapin Spencer said we did work with the arborist as to soil volumes for trees.

ZR, could we see some of the planting plans for the final phase of the Parkway project? Norm Baldwin said the plans are not ready for distribution. We have already found that the lighting at the south end of the project likely needs to be fully replaced. Chapin Spencer said landscaping plans may be ready for viewing sometime in the next few months.

2. 2024 Work Plan

SG noted that the NBS Grant program is underway.

SG said there's been preliminary work on the Comprehensive Forestry Plan – most notably the decision to include forestry within the anticipated 2025 Open Space Protection plan rewrite. We will circle back with the Spatial Analysis lab about expanding their mapping and data analysis work to include open spaces generally as opposed to just trees. Parks is working on an RFP for the effort.

ZR noted the ongoing work with respect to Intervale deer management. It may be addressed as part of the Open Space update. RR noted that in Pittsburg, where there are many more deer, there are specific deer management efforts, included controlled hunts in city parks. HB said Patrick Dunseith's reached out to them and wants to reconvene given the ongoing deer impacts. Distribution of venison will need to involve the state as to distributing hunted vs. farmed meat. HB's plan is to reach out to Patrick soon to get the conversation up and running again.

ZR noted the item as to potential conservation opportunities. This is an ongoing item. RC suggested a yearly check-in with Parks as to this item.

ZR noted the potential for a native species planting standard. One idea she has is to look at what other towns may have in place for similar standards to use as a reference. We want to encourage meeting such a standard. CC, we could use other existing standards as a starting point. RC thinks we'll lose a lot of support if we require only native species. DM, there's a big sector that we can't reach like private homeowners. We can work with local vendors to avoid invasive species. ZR will reach out to the UVM botany class to start moving on this item.

ZR noted need to update BCB application guidelines. SG offered to take a stab at drafting an update.

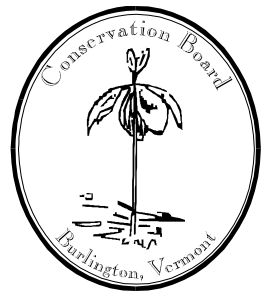
Adjournment

6:43 PM.

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Remote & In Person Meeting

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- **Absent:**
- **Public:**
- **Staff:** Scott Gustin (Permitting & Inspections), Dan Cahill & Cindi Wight (Parks & Rec)

ZR, chair, called the meeting to order at 5:32 p.m.

Minutes

January 8, 2024 minutes

A MOTION was made by MW and SECONDED by DM:

Approve the January 8 minutes as written.

Vote: 8-0-0, motion carried.

Board Comment

ZR suggested that the Conservation Board meeting next month and the following be at 311 North Avenue. Cindi Wight recommended finding out with Meagan if its free. Cindi said it needs to be open for the duration of the meeting. A key card is needed if meeting ends early. MW asked about audio/video. Cindi said its similar to what's in this meeting room.

Public Comment

None.

Open Space Subcommittee

No meeting this month.

Project Review

1. **ZP-23-545; 245 Appletree Point Rd (WRL, Ward 4) Ramsay Gourd**
Demolish existing residence and construct a new residence in the same footprint

The programs and services of the Dept. of Permitting & Inspections are accessible to people with disabilities. For accessibility information call 865-7188.

Patrick King, Ramsay Gourd, Rem Kielman, Shannon Jordan, Seth Goddard appeared

Rem Kielman overviewed the project. Demolition is proposed due largely to existing foundation issues. The existing footprint will be utilized. The entry drive will be realigned. He noted that a lakeshore "low mow" zone is proposed. For the most part, all healthy existing trees will be retained. Proposed regrading will move what is presently pooling water in the northeast corner of the site into a proposed rain garden.

Seth Goddard said there is actually a reduction of ~ 100 sf in impervious surface onsite. Roof runoff will be directed to disconnected grassy areas. The gravel driveway runoff will be directed into meadow plantings for eventual direction into the rain garden. An erosion control plan has been submitted for review by the stormwater program in addition to the post construction stormwater plan.

RC, can you tell us about existing elevation info? Rem Kielman, the residence is at FFE of 104.1'. That will be raised 18" to 105.6'. The garage sits a little lower at 103' – being raised to 103.9'. Seth Goddard said there's not much change in topography across the site.

MW, about the rain garden, is it near any neighboring buildings that may be impacted by overflow? Seth Goddard, the two neighboring buildings are elevated higher than this site. MW, has there been any analysis for infiltration? Seth Goddard, its not designed for infiltration. It will overflow with larger storm events. MW, how did you determine the boundaries of the low mow zone? Rem Kielman, the low mow zone basically blends into the proposed conservation mix plantings. The area relates to the area of the redevelopment.

Patrick King said that a requirement is proportionate to the redeveloped area. In this case, the low mow zone is slightly larger than the area of redevelopment on this site. SG noted the upper limit of the low mow zone requirement is 80% of the lot width and 50' deep.

MW, what is the condition of the sea wall? Any upgrades or changes will require Conservation Board review.

RC, have you considered moving the building back from the lakeshore? Patrick King said, no. We can build within the existing footprint. If we deviate from that footprint, it needs to come into compliance, which would make the site largely unbuildable.

DM, what went into the decision to demolish and replace rather than renovate? Patrick King, the project started as a renovation. Analysis showed that significant water was getting into the basement. There are structural deficiencies that show up as a 4" sag in the floor. We considered how to save what's here now and whether it makes financial sense. Ultimately, it was decided to build to modern standards with a new structure.

Ramsay Gourd said the massing of the new building will be very similar to the existing. DM, when did someone last live in the home? Patrick King, the owner's sister lived there this past summer. Unsure of prior to that. The current owners have owned it for about a year.

ZR can you tell us about the trees you're retaining versus removing? Rem Kielman, we have two cedar trees that are about 6" away from the foundation. Those will be removed. There are 3 ash trees onsite. One close to the rip rap, one south of some shrubs, and one sitting in the NE memo. The owners are working with an arborist to try to save them as long as possible. Some nurse trees are proposed in the NE corner to grow up around the ash tree there.

A MOTION was made by RR and SECONDED by CC:

Approve the application as presented.

Vote: 7-0-1, motion carried.

Update & Discussion

1. Conservation Legacy Fund

Preliminary discussion of potential funding request for Elks/Arms

Cindi Wight & Dan Cahill appeared on behalf of this item.

Dan Cahill overviewed the item. Acquiring the Elks parcel has been a lengthy process with a successful culmination. This is a moment to celebrate. The intent is to return with this item next month as an action item to request funding.

MW asked about the project scope. Cindi Wight said we've had a work estimate put together by Timber and Stone. Informational signage is anticipated a bit further up from the bike path into the property. Dan Cahill noted the need for an ADA compliant access.

ZR, what part of Arms is ADA compliant? Cindi said one set of decking went from 3' to 4.' Dan said about 50% of the trail between the bike path and North Ave meets standard. Discussion about parking and access at North Avenue Alliance Church followed. Cindi said the church is not interested in formalizing access to the property.

MW, is the \$150K donation set in stone? Cindi, that was the amount donated by the Longe family to enable conveyance of the property to the city.

RR requested lot lines on the map for the Board's consideration next month.

Dan, we are re-writing the management plan for Arms to account for this new piece and also changes to access from the High School property.

ZR, the most feasible access into Arms looks like it will be from the bike path.

Dan mentioned an informational kiosk and small locker for Parks' equipment will be included.

RC where is the property line now? Cindi, there was some rezoning done to the parcel. We can show that on a map for next month. Dan, there's a fence in place now.

RC, how did you come up with the cost estimates? Dan, we worked with Timber and Stone to develop some alternatives and estimates. The figures are 2022 figures. Cindi noted a 15% contingency.

RR, why is the kiosk so expensive? Cindi, it includes signage, and there are two of them.

ZR asked that a map with boundaries and location of the trail be provided next month. She likes Dan's idea of asking for an "up to" amount. Dan said the Legacy Fund logo will be included on the signage.

DM asked about status of Legacy Fund grant projects. SG noted the additional review process occurring this month – Parks Commission then Board of Finance and then City Council.

Dan mentioned targeting April for review of how this initial year went and what, if any, adjustments we want to make for future years.

Adjournment

6:35 PM.

PLOT DATE: 12/13/2023 3:05 PM



SYMBOL	ITEM
	EXISTING CONTOUR
	PROPOSED CONTOUR
	STONE PAVING - NATURAL CLEFT FINISH
	STONE PAVING - THERMAL FINISH
	EXISTING WOODS
	PERENNIAL PLANTING
	LAWN
	CONSERVATION SEED MIX
	LOW-MOW SEED MIX
	EXISTING TREE TO REMAIN
	DECIDUOUS TREE - PROPOSED
	EVERGREEN TREE - PROPOSED
	AREA OF REDEVELOPMENT - 1792 SF
	AREA OF LOW-MOW - 1842 SF

- GENERAL NOTES**
- Contractor is responsible for all damage due to his operations inside and outside the contract limit line.
 - Contractor is responsible for checking spot elevations and verifying proposed grades by providing grade stakes. Grades must be approved by Landscape Architect prior to proceeding.
 - Contractor shall blend new work smoothly with existing grades at contract limit line and/or limit of construction line.
 - Contractor to verify that subgrades are 6 inches below finished grade prior to spreading top soil for seeded areas.
 - All walks shall have 2% cross pitch, and all step treads and wall caps shall have 1% cross pitch unless otherwise noted.
 - Light fixture locations may be field adjusted with prior Landscape Architect approval.
 - Walkway layout to be approved by Landscape Architect prior to construction.
 - Site furniture and wall locations to be verified by Landscape Architect prior to installation.
 - General Contractor is responsible for all erosion control measures during construction.
 - It is the intent of this contract to avoid any disturbance to existing trees or shrubs on site other than those specifically designated for transplant or removal.
 - Liquidated damages for trees damaged by construction operation shall be \$500 per caliper inch. Shrubs shall be \$100 each.
 - Base survey prepared by KREBS & LANSING CONSULTING ENGINEERS on July 13, 2022

NO.	DESCRIPTION	DATE
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FEIDELSON RESIDENCE

245 APPLETREE POINT RD
BURLINGTON, VT
05408

LOT COVERAGE PERMIT SET

JOB NO. 22-334
SCALE: 1/16"=1'-0"
DRAWN BY: RK
DATE: 12.13.2023

L000

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PLOT DATE: 12/13/2023 3:05 PM

PROPOSED DECIDUOUS
TREE, TYP.

PROPOSED EVERGREEN
TREE, TYP.

GRAVEL
AUTCOURT

MOW LINE

SEASONAL LAKE ACCESS
STAIRCASE

REFER TO:
L101 LAYOUT, MATERIALS AND
GRADING ENLARGEMENT PLAN

APPLETREE POINT RD

PROPERTY LINE

MEADOW

GARAGE
FFE 103.90

RESIDENCE
FFE 105.6

LAWN

LOW-MOW

LAKE CHAMPLAIN

SYMBOL	ITEM
	EXISTING CONTOUR
	PROPOSED CONTOUR
	STONE PAVING - NATURAL CLEFT FINISH
	STONE PAVING - THERMAL FINISH
	EXISTING WOODS
	PERENNIAL PLANTING
	LAWN
	CONSERVATION SEED MIX
	LOW-MOW SEED MIX
	EXISTING TREE TO REMAIN
	DECIDUOUS TREE - PROPOSED
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WAGNERHODGSON
LANDSCAPE ARCHITECTURE

VT802.864.0010 NYS18.567.1791 wagnerhodgson.com
7 Marble Avenue Burlington, VT 05401
430 Warren Street Hudson, NY 12534

NO.	DESCRIPTION	DATE
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FEIDELSON RESIDENCE

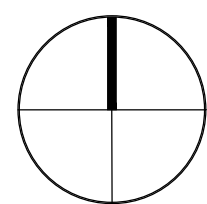
245 APPLETREE POINT RD
BURLINGTON, VT
05408

OVERALL LAYOUT AND MATERIALS PLAN PERMIT SET

JOB NO. 22-334
SCALE: 1/16"=1'-0"
DRAWN BY: RK
DATE: 12.13.2023

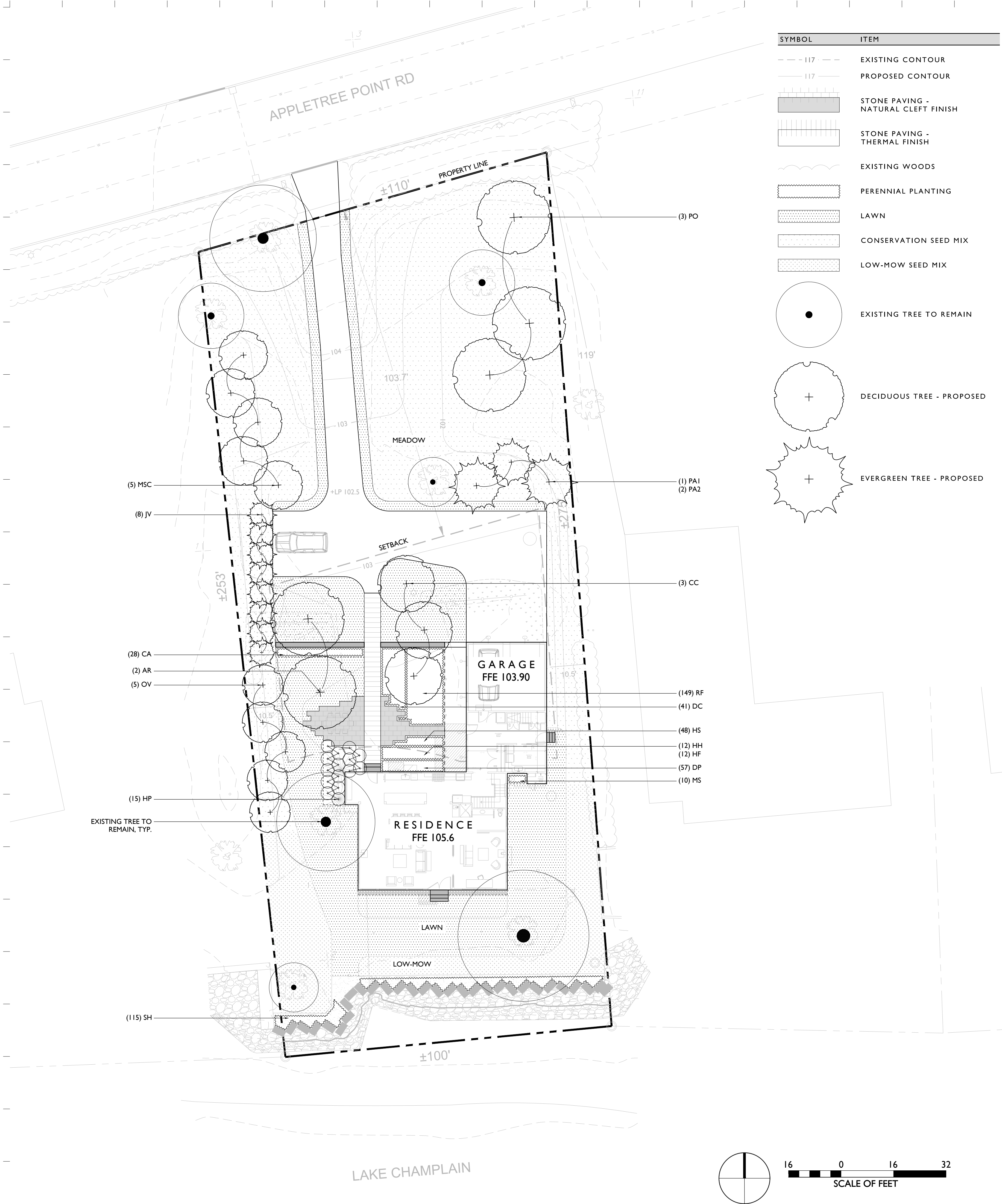
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16 0 16 32
SCALE OF FEET

PLOT DATE: 12/12/2023 3:06 PM



PLANT SCHEDULE

KEY	QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING
TREES / SHRUBS					
AR	2	Acer rubrum 'Red Sunset'	RED MAPLE	5 1/2"-6" CAL.	AS SHOWN
CC	3	Cercis canadensis 'Minnesota Strain'	MINNESOTA STRAIN EASTERN REDBUD	1.5" - 2" CAL.	AS SHOWN
JV	8	Juniperus virginiana	EASTERN RED CEDAR	8'-10' ht	AS SHOWN
HP	15	Hydrangea paniculata 'Little Quickfire'	LITTLE QUICKFIRE PANICLE HYDRANGEA	7 GAL.	AS SHOWN
MSC	5	Magnolia stellata 'Centennial Blush'	CENTENNIAL BLUSH MAGNOLIA	1.5" - 2" CAL.	AS SHOWN
OV	5	Ostrya virginiana	AMERICAN HOPHORNBEAM	3" - 3.5" CAL.	AS SHOWN
PAI	1	Picea abies	NORWAY SPRUCE	8'-10' HT.	AS SHOWN
PA2	2	Picea abies	NORWAY SPRUCE	10'-12' HT.	AS SHOWN
PO	3	Platanus occidentalis	AMERICAN SYCAMORE	5" CAL.	AS SHOWN
PERENNIALS / ORNAMENTAL GRASSES					
CA	26	Calmagrostis x acutiflora 'Karl Foerster'	FEATHER REED GRASS	5 GAL.	24" O.C.
DC	41	Deschampsia cespitosa 'Goldtau'	TUFTED HAIR GRASS	1 GAL.	24" O.C.
DP	57	Dennstaedtia punctilobula	HAYSCENTED FERN	1 GAL.	18" O.C.
HF	12	Hosta 'Francee'	FRANCEE HOSTA	1 GAL.	24" O.C.
HH	12	Hosta 'Halycon'	HALCYON HOSTA	1 GAL.	24" O.C.
HS	48	Heuchera 'Splendens'	CORAL BELLS	1 GAL.	12" O.C.
MS	10	Matteuccia struthiopteris	OSTRICH FERN	1 GAL.	18" O.C.
RF	149	Rudbeckia fulgida 'Goldsturm'	BLACK-EYED SUSAN	1 GAL.	18" O.C.
SH	115	Sporobolus heterolepis	PRAIRIE DROPSOED	1 GAL.	18" O.C.

PLANTING NOTES

- All plant material in the plant schedule shall be nursery grown in accordance with ANSI in accordance with Z.60.1 Standards for measurement of nursery stock.
- All plants shall be guaranteed by the Contractor for a period of one year from date of receipt of Provisional Acceptance of the completed installation by the Owner.
- Replacement plantings will be required prior to Final Acceptance for any plants which are missing, not true to specifications, have died or are unhealthy or uncharacteristic of the species (due to excessive pruning, dieback or other reasons).
- All plant materials shall be selected and tagged at the nursery by Landscape Architect.
- The Landscape Architect's approval is required for any plant material substitutions.
- The Contractor is responsible for immediately notifying the Landscape Architect if any plant quantity discrepancies exist between the planting plan and the plant list.
- All shrubs and trees will be sprayed with the anti-desiccant "Wilt-Pruf" (or approved equal) prior to the first Winter (no later than November 30).
- The Landscape Contractor shall have the General Contractor locate all underground utilities in areas to be landscaped prior to commencing any excavation. Adjustments to tree locations will be allowed where utility conflicts are clearly a problem and with prior site approval by Landscape Architect.
- All plant bed, shrub and tree location shall be staked in the field by Contractor for Landscape Architects approval prior to installation.
- Adjustments to plant beds shall be approved by Landscape Architect.
- General Contractor is responsible for all erosion control measures during construction.
- All disturbed areas are to be topsoiled and seeded or sodded, as indicated in the planting plan.
- Mulch shall consist of double-shredded hardwood mulch or approved equal and Contractor is responsible for providing samples of mulch to Landscape Architect. Mulch plant materials as shown on plan and details.
- It is the intent of this contract to avoid any disturbance to existing trees or shrubs on site other than those specifically designated for transplant or removal.
- Liquidated damages for trees damaged by construction operation shall be \$500 per caliper inch. Shrubs shall be \$100 each.
- During construction, and until the end of warranty period, existing trees that are showing signs of stress as determined by the Landscape Architect are to be deep root fertilized, two injections per caliper inch per tree at 18" - 24" depth with Peter's 20/20/20 fertilizer or Landscape Architect approved equal.
- Contractor is responsible for verifying and confirming all plant counts as supplied by the Landscape Architect with field conditions as constructed. Any discrepancies shall be reported to Landscape Architect for approval and direction.
- Tree transplanting shall be performed by a suitable hydraulic tree spade, sized as necessary to perform the work.
- Prior to commencement of any construction, all existing trees to remain shall receive tree protection fence at outer edge of dripline whenever possible.

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TREE PROTECTION NOTES

- Proposed methods, and schedule for effecting tree and plant protection shall be submitted for approval.
- Proposed methods, materials, and schedule for root pruning, construction pruning, and tree fertilization shall be submitted for approval.
- Certain specimen trees adjacent to construction areas and in other key locations will be identified by the Owner and the Architect, and marked with red tags. Loss of any of these trees will result in fines assessed at \$5,000 per tree. Damage to all other trees on the property will be assessed at the rate of \$500 per inch caliper of the tree.
- A fine of \$1,000 will be levied against the Contractor for each incident of construction inside tree protection areas.
- Damages to trees, shrubs, and other vegetation will be assessed by the Architect and Owner in accordance with the International Society of Arboriculture (ISA) Guide.
- Trees or roots visibly damaged will cause the Owner to withhold from the Contractor an assessed amount conforming to the requirements stipulated above for a period of two years. After that period the impact of the damaged to any tree will be assessed accordingly.
- If any trees or shrubs designated to be saved are damaged and replacement is required, a number and diameter of trees or shrubs of the same species and variety, as specified by the Owner and Architect, shall be furnished and planted by the Contractor. The total inch diameter of the replacement trees or shrubs shall equal the diameter of the tree or shrub to be replaced. The Contractor shall not be liable for any loss or damage which occurs while the Contractor is complying with instructions given by the Owner, Architect, or arborist working on the Project.
- The Contractor's attention is called to the fact that certain areas on the site exist as natural woodland spaces and are to remain as natural woodlands. Therefore, all construction operations must be performed in such a manner, which will preserve these existing natural environments as wood preserves.
- Designated areas of trees, understorey, and wildflowers are to remain untouched and unharmed.
- Clearly mark all clearing limits in the field and accompany Architect on a joint review of clearing limits before clearing operations have commenced. Limit of clearing is generally defined as the limits of grading.
- Galvanized chain link fencing, 4 feet high. Stakes for fencing shall be 8 feet galvanized steel posts, driven a minimum of 3 feet into the ground. Posts shall be spaced 10 feet on center maximum.
- Prior to start of demolition work and clearing and grubbing operations, tree protection fencing shall be installed in accordance with the following:
- Fencing shall be installed at the tree protection areas indicated on the Drawings.
- Fencing shall be installed a minimum of 15 feet beyond the drip line of the trees to be protected, unless otherwise approved by the Architect.
- Where construction will be in close proximity to existing trees designated to remain, roots shall be pruned. Proximity shall be as determined in the field by the Landscape Architect or Arborist.
- Suitable means for root pruning include trenching, vibrating plow, and water jet pruning. Any method which tears roots or disturbs the soil beyond the grading limit is unacceptable.
- Trees to receive root pruning shall be reviewed by an arborist for canopy pruning, fertilization and trench backfill recommendations.
- Selective clearing within tree protection areas shall only be performed when and as directed by the Landscape Architect. Refer to Section 02115, selective clearing.
- Except as otherwise indicated or requested by Landscape Architect, temporary protection devices and facilities installed during course of the work shall be removed only after all work which may injure or damage trees and plants is completed.

NO.	DESCRIPTION	DATE
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FEIDELSON RESIDENCE

245 APPLETREE POINT RD
BURLINGTON, VT
05408

PLANTING PLAN PERMIT SET

JOB NO. 22-334
SCALE: 1/16"=1'-0"
DRAWN BY: RK
DATE: 12.13.2023

L200

PLANT GUIDE FOR STORMWATER BIORETENTION AREAS

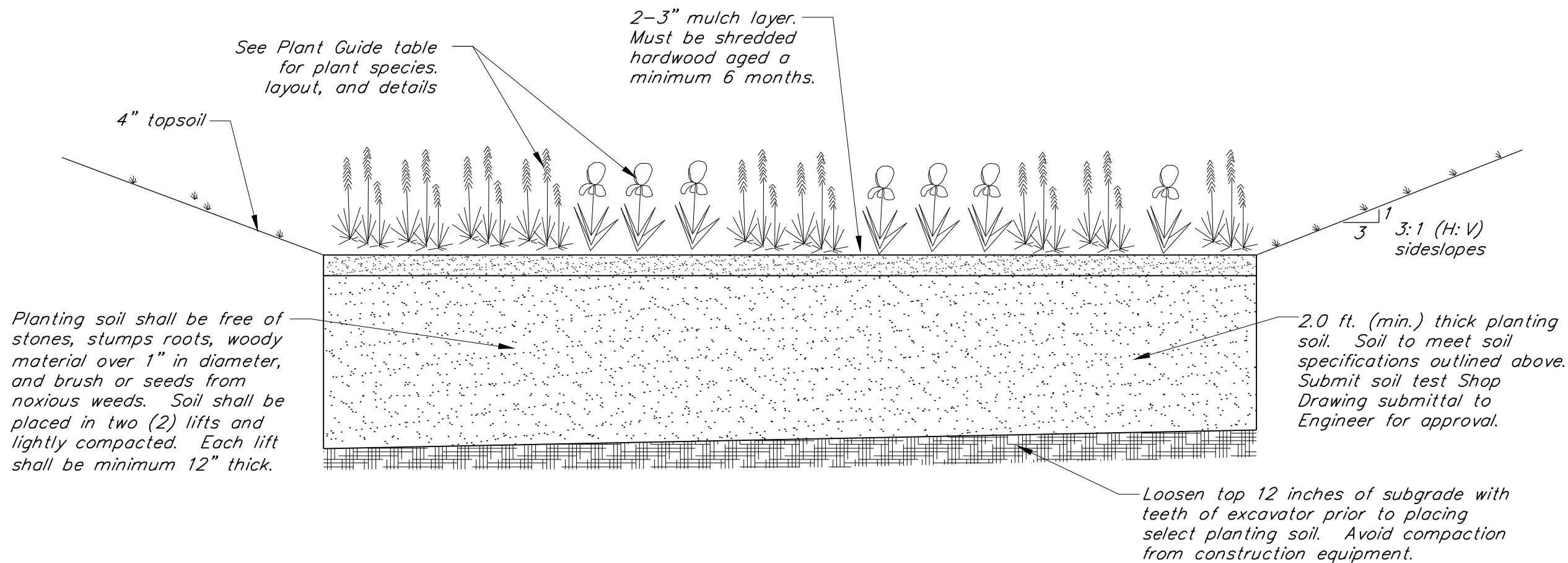
TREES	SHRUBS	HERBACEOUS SPECIES
Acer rubrum (Red Maple)	Hamamelis virginian (Witch Hazel)	Iris versicolor (Blue Flag)
Juniperus virginiana (Eastern Red Cedar)	Ilex verticillata (Winterberry)	Lobelia cardinalis (Cardinal Flower)
Platanus occidentalis (Sycamore)	Viburnum dentatum (Arrowhead)	Rudbeckia laciniata (Cutleaf Coneflower)
Salix nigra (Black Willow)	Alnus serrulata (Brook-side Alder)	Scirpus cyperinus (Woolgrass)
Pinus rigida (Pitch Pine)	Cornus stolonifera (Redosier Dogwood)	Scirpus pungens (Three Square Bulrush)

- From this list at least 8 trees shall be planted above elevation 332.35 (in approximate locations shown).
- Shrubs and herbaceous species shall be plant below elevation 332.35 with a spacing of five feet on center for shrubs and 2.5 feet on center for herbaceous vegetation.
- At least 3 different species of herbaceous perennials and shrubs shall be used.

BIORETENTION SOIL CHARACTERISTICS

Parameter	Value
pH range	5.2 to 7.00
Organic matter	3% maximum by volume
Soil (loamy sand, sandy loam, or loam)	
Sand	85% to 88% passing by weight
Silt	5% to 12% passing by weight
Clay	0% to 2% passing by weight
Mulch	Bark Mulch – Submit sample for approval
Available Phosphorus	0.2%

A dense and vigorous vegetative cover shall be established over all pervious drainage areas upslope of the bioretention areas.



Rain Garden/Bioretention Planting Soil Bed Detail

N.T.S.

WINTER EROSION PREVENTION & SEDIMENT CONTROL REQUIREMENTS

(October 15th – April 15th)

- For areas to be stabilized with vegetative cover, seeding or hydroseeding shall be completed no later than September 15th to ensure adequate growth and cover.
- If seeding is not completed by September 15th, additional non-vegetative protection must be used to stabilize the site for the winter period. This includes the use of rolled Erosion Control Matting or netting of a heavy mulch layer.
- Where mulch is used for temporary stabilization it must be applied at double the standard rate, or a minimum of 3 inches with an 80%-90% cover.
- Stabilized Construction Entrances shall be enlarged to provide for snow stockpiling.
- Limits of disturbance shall be moved or replaced to reflect any revised boundaries of winter work.
- A snow management plan shall be prepared with adequate storage and control of meltwater, requiring cleared snow to be stored down slope of all areas of disturbance and out of stormwater treatment structures.
- A minimum 25 foot buffer shall be maintained from perimeter controls such as silt fence.
- Drainage structures must be kept open and free of snow and ice dams.
- Silt fence and other sediment control practices requiring earth disturbance must be installed ahead of frozen ground.
- To ensure cover of disturbed soil in advance of a melt event, areas of disturbed soil must be stabilized at the end of each work day, with the following exceptions:
 - If no precipitation within 24 hours is forecast and work will resume in the same disturbed area within 24 hours, daily stabilization is not necessary.
 - Disturbed areas that collect and retain runoff, such as house foundation or open utility trenches.
- Prior to stabilization, snow or ice must be removed to less than 1 inch thickness.
- Use stone to stabilize areas such as the perimeter of buildings under construction or where construction vehicle traffic is anticipated. Stone paths should be 10-20 feet wide to accommodate vehicular traffic.

General Grading and Site Work Notes

- All area disturbed and all areas within the clearing limits shall be graded and covered with a minimum of 4" of loam topsoil. The areas to be loamed shall be free and clear of roots, waste material and other deleterious material. Topsoil shall be spread and lightly compacted to a depth of 4". Topsoil shall be approved by the engineer. All side slopes are to be loamed.
- All turf establishment shall be in accordance with Section 651 of the VT standard specifications 2018 and the town's specifications. Mulching shall follow seeding by no more than 24 hours.
- All cut slopes shall be no steeper than 2.0h on 1.0v. All fill slopes shall be no steeper than 2.0h on 1.0v.
- The Contractor shall not disturb any ground between October 15th between April 15th Winter months, unless approved by the Engineer.
- Temporary silt fence shall be erected prior to any clearing or construction. Fencing may be erected in phases, but in no case shall ground disturbance proceed fencing. Special areas may be designated by the owner for preservation of existing trees. These areas shall be the Contractor's responsibility to insure no damage is done to designated trees.
- Existing plantings are located in general areas as shown on this plan. Contractor shall protect plantings so as not to damage these or their root systems.

NOTES:

- Acceptable EPSC Measure details are provided below.
- At a minimum, EPSC measures meet VT DEC Standards and Specifications for Erosion Prevention and Sediment Control or previously approved interchangeable practices.
- Limits of disturbance (or "construction demarcation") shall be installed prior to any earth disturbing activities.
- Barrier Tape/Rope: for use where proposed disturbance borders non-wooded, vegetated areas more than 100 ft from the nearest water resource (stream, brook, lake, pond, wetland, etc.). Barrier tape is high visibility fiber-glass tape, minimum 3" in width commonly used in ski areas for demarcating closed areas. Barrier tape and rope should be attached to stakes, at a minimum height of 4 ft from the ground.
 - Fasten fence to stake
 - Wood stakes driven on outside of fence
 - Orange polyester mesh webbing by World Cup Supply or approved equal (3" wide min.)
 - Wood Stake
 - Orange polyester mesh webbing by World Cup Supply or approved equal (3" wide min.)
 - 4' min.
 - To be installed at the limits of the construction area. See Plans.

NOTES:

- Minimum 1 to 2 rows of mesh barrier tape to be installed along construction perimeter.
- Each row of barrier tape to be 3" wide minimum.
- Barrier tape to be orange.
- Secure barrier tape to stakes or existing tree trunks with bottom row at 4' distance from ground surface (minimum).
- Maintain and replace as needed. Remove at completion of project per OSPC.
- In event the OSPC determines barrier tape is not sufficient, replace with orange construction fence or snow fence.

Typical Construction Limit Barrier

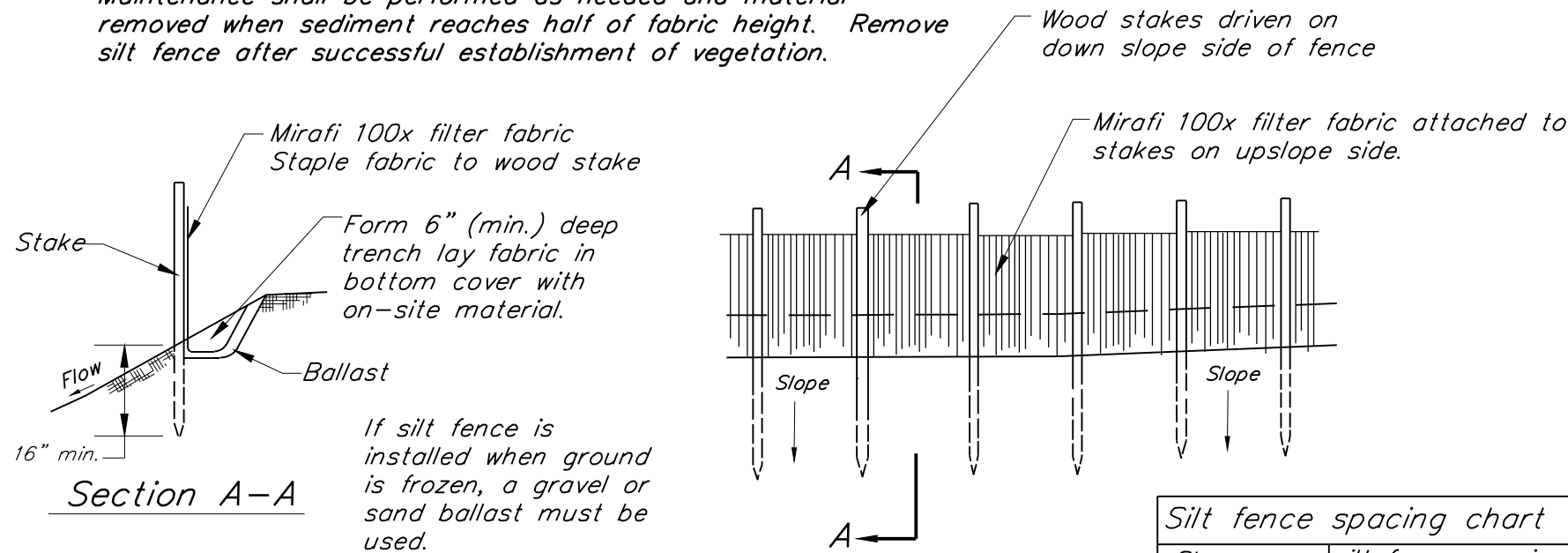
N.T.S.

Straw wattles may be used as as substitute for silt fence for areas approved by the Engineer.

NOTE:

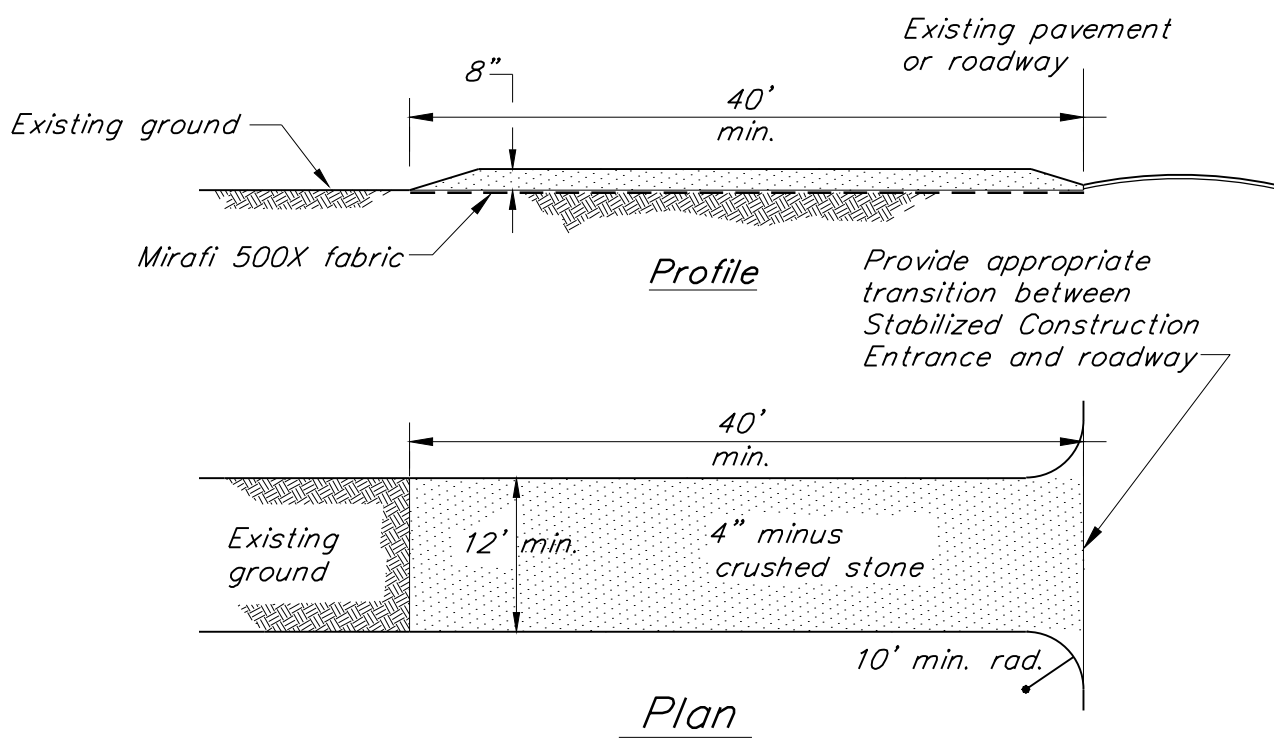
Contractor shall be responsible for the installation, maintenance, and removal of silt fence in all locations shown on the plans.

Maintenance shall be performed as needed and material removed when sediment reaches half of fabric height. Remove silt fence after successful establishment of vegetation.



Typical Temporary Silt Fence

N.T.S.



Note:

- Contractor shall be responsible for the installation, maintenance, and removal of a stabilized construction entrance at each construction entrance for the project. The Construction Stabilized Entrance and its continued maintenance shall be a minimum measure to prevent tracking of sediment off-site.
- Contractor to use Mirafi 500x under stone for temporary construction roads.
- Stabilized construction entrances shall be repaired when voids are 80% filled with sediment. Repair shall include adding additional 4" minus crushed stone and/or removal of contaminated stone.

Temporary Stabilized Construction Entrance & Staging Areas

N.T.S.

<i>Date revised</i>	<i>Description</i>	<i>Checked</i>	<i>Date</i>
Surveyed _____	<i>Stormwater Details</i>		
Drawn <u>SDG</u>			
Checked <u>DMR</u>	<i>245 Appletree Point</i>		
Scale <u>N.T.S.</u>			
Date <u>01/26/2024</u>			
Project <u>22227</u>			
<i>245 Appletree Point Road</i>		<i>Burlington, Vermont</i>	
<i>KREBS & LANSING Consulting Engineers, Inc.</i>		<i>C2.0</i>	
<i>164 Main Street, Colchester, Vermont 05446</i>			



NOTES

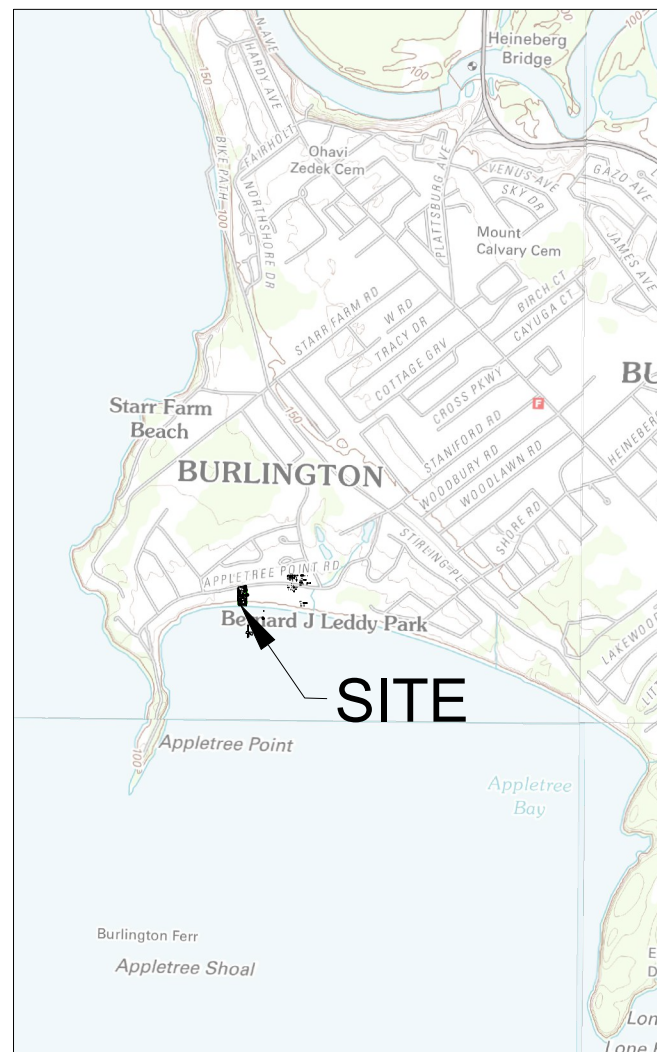
- This plan is not a boundary survey. The property lines shown are based on City of Burlington tax map parcel information and monumentation found in the field.
- The horizontal coordinate system is based on NAD83 Vermont State Plane 4400 (US Survey Feet). Elevations are based on the NAVD88 (US Survey Feet).
- A topographic survey was completed on July 7, 2022 for this project.
- The utilities shown on this plan are based on visible utilities located during a topographic survey performed by Krebs & Lansing on July 7, 2022 and utility mapping from the City of Burlington. Underground utilities are approximate and not warranted to be exact or complete. Dig Safe shall be contacted prior to any excavation.

EPSC NOTES

- Contractor shall comply with the "Low Risk Site Handbook for Erosion Prevention and Sediment Control" (February 2020).
- Contractor shall install a temporary stabilized construction entrance prior to construction and/or cleaning vehicle tires when leaving site to prevent sediment tracking onto roads.
- Contractor shall sweep City streets daily or as needed to remove sediment transported from the project.
- Contractor shall not park construction vehicles on City owned green space. Any green belt disturbance will be permanently stabilized with grass seed and erosion control matting.
- Water from dewatering activities that flows off site must be clear. Turbid, or visibly discolored water must not be pumped into storm sewers. Discolored water must be pumped to a sediment filter bag, DripBag or approved equal, in the location indicated on the plans or other area approved by the Engineer that is located away from exposed or disturbed soil.
- The perimeter of the site and all BMPs will be inspected at the end of each workday to ensure that sediment will not leave the site. If sediment has traveled beyond the site boundary, it shall be swept up or otherwise removed and deposited on-site in an upgradient area at the end of each workday.
- See Landscape Plans for landscaping schedule and details.
- See Sheet C2.1 for EPSC Notes & Details. See Winter Construction Notes if construction occurs between Oct. 15th - Apr. 15th.

LEGEND

- | | | | |
|--|---|--|---|
| | survey control point | | New gravel driveway |
| | iron pipe found | | New building |
| | ex. light pole | | New patio/path/steps |
| | ex. property line (See Note #1.) | | New low mow zone |
| | ex. grade contour lines (5 foot intervals) | | New conservation seed mix |
| | existing grade contour lines (1 foot intervals) | | New perennial planting area |
| | elev. 100' | | New lawn |
| | ex. sanitary line | | Direction of stormwater flow |
| | ex. storm line | | Temporary construction limit fencing and silt fence |
| | ex. water line | | New finish grade |
| | ex. tree/hedge line | | Temporary soil stockpile |
| | ex. rip rap | | New rain garden/bioretentation |
| | ex. crushed stone | | |
| | building setbacks | | |



Location Map
1" = 1/2 Mile



APPROXIMATE RAIN GARDEN/BIORETENTION LOCATION



EX. SWALE/RETENTION AREA ON WESTERN PROPERTY LINE

RAIN GARDEN/BIORETENTION
STORMWATER BMP MAINTENANCE NOTES

- MAINTENANCE: LONG TERM MAINTENANCE OF THE BIORETENTION IS ESSENTIAL TO ENSURE ITS EFFECTIVENESS.
- INSPECTIONS: AT LEAST ONCE A YEAR AND FOLLOWING MAJOR STORMS, THE BIORETENTION BASIN SHOULD BE INSPECTED FOR SAND ACCUMULATION AND DEBRIS THAT MAY REDUCE ITS CAPACITY.
 - SEDIMENT REMOVAL: SEDIMENT BUILD-UP WITHIN THE BIORETENTION BASIN SHOULD BE REMOVED WHEN IT HAS ACCUMULATED TO APPROXIMATELY 25% OF DESIGN VOLUME OR CHANNEL CAPACITY. DISPOSE OF THE SEDIMENT APPROPRIATELY.
 - DEBRIS: REMOVE DEBRIS SUCH AS LEAF LITTER, BRANCHES AND TREE GROWTH FROM THE BIORETENTION BASIN.
 - SNOW STORAGE: DO NOT STORE SNOW WITHIN THE AREA OF THE BIORETENTION BASIN.

Date revised	Description	Checked	Date
Surveyed	JN/CPG		
Drawn	TJB		
Checked	SDG		
Scale	1"=10'		
Date	01/26/2024		
Project	22227	245 Appletree Point Road	Burlington, Vermont
KREBS & LANSING Consulting Engineers, Inc. 164 Main Street, Colchester, Vermont 05446			
C2.0			





MEMO

Date: January 31, 2024
To: Burlington Conservation Board & Burlington Parks Commission
From: Cindi Wight, BPRW Director and Dan Cahill, City Land Steward
RE: Conservation Legacy Fund Discussion - Arms Forest Connection to Greenway

PURPOSE

Initial discussions on a request for Conservation Legacy Funds to support the recent acquisition of the Elks parcel.

BACKGROUND

In the fall of 2022, the Burlington City Council authorized the acceptance of 11.16 acres of zoned Recreation, Conservation and Open Space forested and meadow land from the Elks to add to Arms Park (one of our Urban Wilds). For many years, this parcel has been a high-priority, highly desired conservation property for the City. Not only does this land have significant forest and meadow communities, but it also provides access from the Burlington Greenway to Arms Park. The acquisition was made possible by a generous donation by Irene and Rosaire Longe.

Arms Park is one of three parcels that comprise the area known as Arms Forest, which is managed under one management plan. The property owners include the Episcopal Diocese, Burlington Public Schools (BHS) and the City of Burlington (Arms Park). From 2017 through 2019, the Conservation Legacy Fund supported acquiring two conservation easements on Episcopal Diocese property, ensuring public access to the parcels, and providing the funds to bring the properties up to a standard for public use. One of the project's goals during that time was the acquisition of the Elks' parcel. Due to the generosity of Irene and Rosaire Longe, the Elks agreed to the donation in 2022.

Now that the land has been accepted, the work begins to bring the property up to a standard for safe and inclusive site access. BPRW is seeking the support of the Conservation Board and the Parks Commission for using the Conservation Legacy Fund for two specific baseline improvements at Arms Park to make it a welcoming and open Urban Wild.

- ***Build an accessible entrance off of the Burlington Greenway*** - For years, there has been informal access from the Greenway to Arms Forest through the Elks parcel. This access has been at a steep grade, with uneven tread. The site improvement would support Arms Forest in becoming a natural area in Burlington built to accessible standards and, through design



welcome the public into an Urban Wild, similar to how the improved entrance to Rock Point changed the perception of the open and public access to the property.

- ***Provide Trailhead Amenities to the Most used Entrance to Arms Forest*** - Support the installation of a trailhead information kiosk with signage to tell the story of the natural and historical history of the property and include a map to welcome land use in desired areas.

Funding Request Balance Sheet

Expenses		
EXPENSE DETAIL	AMOUNT	NOTES
In-kind donation of property	\$150,000.00	
Accessible connection from the Burlington Greenway	\$71,000.00	
Kiosk with signage	\$20,000.00	
Feasibility and Design Work	\$1,500.00	
Project Contingency (15%)	\$14,475.00	
Total	\$256,975.00	
Revenue		
SOURCE	AMOUNT	NOTES
Private Funding	\$150,000.00	
Conservation Legacy Fund	\$101,975	39.7% of total project costs
Total	\$256,975.00	

Legacy Fund Request Amount: \$101,975

Impact to Conservation Legacy Fund

- The balance of the Conservation Legacy Fund at the start of the fiscal year was \$981,446, with two outstanding commitments making \$899,784 available. The account will increase by \$188,480 with FY24 funds. This request of \$101,975 makes up 11% of the fund's available balance on 7/1/2023 and 9% when adding the FY24 funds.