Year 5 Monitoring Report
Final

RES Randleman Group A
Riparian Buffer Mitigation Project

DMS Project # 100046 (Contract # 7427)
DWR Project # 2018-1330
RFP #16-007242

Randolph County, North Carolina
Cape Fear River Basin HUC 03030003

Data Collection: September/October 2023

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1 PROJECT SUMMARY

1.1 Project Overview

Environmental Banc & Exchange, LLC (EBX), a wholly-owned subsidiary of Resource Environmental Solutions (RES), is pleased to provide this Monitoring Report for the RES Randleman Group A Riparian Buffer Mitigation Project (Project) as a full-delivery buffer mitigation project for the Division of Mitigation Services (DMS) (DMS #100046). The RES Randleman Group A includes three sites: Pequod, Schmid Creek, and Sunbeam. These sites provide riparian buffer mitigation credits for unavoidable impacts due to development within the Randleman Lake Watershed of the Cape Fear River Basin, United States Geological Survey (USGS) 8-digit Hydrologic Unit Code (HUC – 03030003). The Mitigation Plan was approved in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 and the Randleman Lake Water Supply Watershed Buffer Rule 15A NCAC 02B .0250.

The Project provides significant functional uplift to the watershed and assists DMS with achieving its mitigation goals in the Randleman Lake Watershed. The Project provides up to 1,665,425.934 ft^2 (38.23 acres) of riparian buffer mitigation assets. These are derived from restoration, enhancement, and preservation of riparian buffers in the Randleman Lake Watershed.

1.2 Buffer Credit Adjustment

Pequod

In MY5, it was found that there was an error in the conservation easement survey that overlapped the conservation easement with a Duke powerline easement. The Duke easement is located along Huff Rd and is adjacent to Reaches BF1 and BF5. The area within the conservation easement totals 0.16 acres. Buffer credits were removed from the overlapping area and buffer credit tables were updated accordingly. This results in an overall credit reduction from 812,085.766 to 806,687.401 which is a loss of 5,398.365 riparian buffer credits (BMU) (**Table 1a**).

Sunbeam

In MY5, it was found that there was an error in the conservation easement survey that overlapped the conservation easement with a DOT easement. The DOT easement is located between I-74 and Reach ZF3. This area within the conservation easement totals 0.02 acres. Buffer credits were removed from the overlapping area and buffer credit tables were updated accordingly. This results in an overall credit reduction from 586,003.039 to 585,000.988 which is loss of 1,002.051 riparian buffer credits (BMU) (**Table 1c**).

Overall, this results in a reduction from 1,671,826.350 ft^2 (38.38 ac) to 1,665,425.934 ft^2 (38.23 ac) which is a loss of 6,400.416 (0.15 ac) riparian buffer credits.

Site	Riparian Buffer Credits
Pequod	806,687.401 ft^2 (18.52 ac)
Schmid Creek	273,737.545 ft^2 (6.28 ac)
Sunbeam	585,000.988 ft^2 (13.43 ac)
Total	**1,665,425.934 ft^2 (38.23 ac)**

The conservation easement of the three sites combined totals approximately 50 acres. Primary land use within the watershed is largely residential, agricultural, commercial, and forested. The goal of the Project is to restore, enhance and preserve ecological function to the existing stream and riparian buffer by establishing appropriate plant communities while minimizing temporal and land disturbing impacts. Buffer improvements and the removal of livestock, helps to filter runoff from agricultural fields, thereby reducing nutrient and sediment loads to Project channels and the overall watershed. Restoration, enhancement, and preservation of the Randleman Lake riparian buffer (as defined in 15A NCAC 02B .0250) results in a reduction of the water quality stressors affecting the Project: livestock access and a lack of riparian buffer. Immediate water quality benefits and pollutant removal within the vicinity of the Project include the exclusion of livestock access to streams and reduction in nutrient loads from agricultural land-uses. This Project is consistent with the management strategy for maintaining and protecting riparian areas in the Randleman Lake watershed.

1.3 Monitoring Protocol and Project Success Criteria

Annual vegetation monitoring and visual assessments are to be conducted annually throughout the five-year monitoring period. Riparian buffer vegetation monitoring for all three sites is based on the "Carolina Vegetation Survey-Ecosystem Enhancement Program Protocol for Recording Vegetation: Level 1-2 Plot Sampling Only Version 4.2". Monitoring plots are to be installed a minimum of 100 meters squared in size and cover at least two percent of the planted mitigation area. These plots are to be randomly placed throughout the planted riparian buffer mitigation area and be representative of the riparian buffer restoration and enhancement areas where applicable (i.e. when enhancement credit is being generated from supplemental planting under 15A NCAC 02B .0295 (n)). The following data is to be recorded for all trees in the plots: species, height, planting date (or volunteer), and grid location. All stems in plots are to be flagged with flagging tape. The Pequod Site has 17 monitoring plots (16 designated to restoration, one designated to enhancement), the Schmid Creek Site has eight monitoring plots, and the Sunbeam Site has 12 monitoring plots.

Photos are to be taken from all photo points each monitoring year and provided in the annual reports. Visual inspections and photos are to be taken to ensure that enhancement areas are being maintained and compliant. The measure of vegetative success for the Project Sites is the survival of at least four native hardwood tree species, where no one species is greater than 50 percent of the established stems, established at a density of at least 260 planted trees per acre at the end of

Year 5. Native volunteer species may be included to meet the performance standards as determined by NC Division of Water Resources (DWR).

A visual assessment of the conservation easement is also to be performed each year to confirm:

- Fencing is in good condition throughout the site (if applicable);
- no cattle access within the conservation easement area;
- no encroachment has occurred;
- no invasive species in areas were invasive species were treated,
- diffuse flow is being maintained in the conservation easement areas; and
- there has not been any cutting, clearing, filling, grading, or similar activities that would negatively affect the functioning of the buffer.

Component/ Feature	Monitoring	Maintenance through project close-out
Vegetation	Annual vegetation monitoring	Vegetation shall be maintained to ensure the health and vigor of the targeted plant community. Routine vegetation maintenance and repair activities may include supplemental planting, pruning, mulching, and fertilizing.
Invasive and Nuisance Vegetation	Visual Assessment	Invasive and noxious species shall be monitored and treated so that none become dominant or alter the desired community structure of the site. Locations of invasive and nuisance vegetation will be mapped.
Site Boundary	Visual Assessment	Site boundaries shall be identified in the field to ensure clear distinction between the mitigation site and adjacent properties. Boundaries will be marked with signs identifying the property as a mitigation site and will include the name of the long-term steward and a contact number. Boundaries may be identified by fence, marker, bollard, post, tree-blazing, or other means as allowed by site conditions and/or conservation easement. Boundary markers disturbed, damaged, or destroyed will be repaired and/or replaced on an as-needed basis. Easement monitoring, and staking/signage maintenance will continue in perpetuity as a stewardship activity.
Road Crossing	Visual Assessment	Road crossings within the site may be maintained only as allowed by conservation easement or existing easement, deed restrictions, rights of way, or corridor agreements. Crossings in easement breaks are the responsibility of the landowner to maintain.
Livestock Fencing (if applicable)	Visual Assessment	Livestock fencing is placed outside the easement limits. Maintenance of fencing is the responsibility of the landowner.

2 PEQUOD SITE

2.1 Project Location and Description

The Pequod Site is within the Randleman Lake Watershed of the Cape Fear River Basin within the 8-digit Hydrologic Unit Code (HUC) 03030003, 14-digit HUC 03030003010060 and DWR Subbasin Number 03-06-08.

The Pequod Site is located in Randolph County approximately five miles northwest of Archdale, North Carolina (**Figure 1a**). To access the Site head South on Main Street from I-85 and turn immediately left on Aldridge Road, after about a half mile turn right onto Huff Road, in about 0.4 miles the Site is on the left. The coordinates are 35.9107 °N and -79.9381 °W.

The easement, approximately 22.14 acres in size, is comprised of three sections, separated by two crossings, one of which is co-located with a gas easement. There is also an existing sanitary sewer easement within the Site area. The Pequod Site is composed of six stream channels: BF1, BF2, BF3, BF4, BF5, and BF6. BF1 flows directly into Muddy Creek approximately one mile downstream of the site. Reaches BF2, BF3, and BF5 drain to BF1. Reach BF6 drains to Reach BF2 and Reach BF4 drains to reach BF3. BF1 is a perennial unnamed tributary that is the primary feature onsite and has a drainage area of approximately 2,295 acres. The channel runs through pasture from the northern property boundary to the south before entering a culvert under Huff Road. BF1 is approximately 1,047 linear feet. A sanitary sewer easement runs parallel to this channel along the right bank. BF1 exhibits portions of bank instability and erosion from continued cattle access and the lack of a riparian buffer. BF2 is a perennial tributary that flows into BF1. This channel runs from the west to east for approximately 1,455 linear feet. BF2 has a drainage area of approximately 34 acres. BF3 is a perennial tributary that flows from northeast to southwest across the Site property and empties into BF1. A sanitary sewer easement runs parallel to this channel along the left bank. BF3 is approximately 1,463 linear feet and has a drainage area of approximately 65 acres. BF4 is an ephemeral tributary that runs through pasture from the northern property boundary to the south before draining to reach BF3. BF4 is approximately 233 linear feet and has a drainage area of approximately 11 acres. BF5 is a perennial tributary that originates at the southern property boundary before flowing north to its confluence with BF1. BF5 is approximately 328 linear feet and has a drainage area of approximately 10 acres. Reach BF6 is an intermittent stream that originates just downstream of a farm pond and drains to the north to its confluence with Reach BF2 just upstream of an existing gas easement. BF6 is approximately 418 linear feet and has a drainage area of approximately 11 acres. Stream identifications were verified by the DWR site visit on March 26, 2018.

2.2 Project Components

This Site generates approximately 761,803.459 ft^2 (17.49 acres) of riparian buffer restoration credits on existing non-forested pasture and 44,883.943 ft^2 (1.03 acres) of buffer enhancement credits. The riparian buffer restoration and enhancement adjacent to the ephemeral Reach B4 comprises 1.32 acres (57,464 ft^2) which is in compliance with 15A NCAC 02B .0295 (o)(7) in that it is only 6.5 percent of the total area of buffer mitigation, which is less than 25 percent of the total area of buffer mitigation (20.45 total acres) that is allowed. The riparian buffer mitigation credits generated will service Randleman Lake buffer impacts within the USGS 8-digit HUC 03030003 of the Cape Fear River Basin. The total mitigation credits that the RES Randleman Group A - Pequod Site will generate are summarized in **Table 1a**.

2.3 Riparian Restoration and Enhancement Approach

Since this Site was mostly non-forested pasture, per 15A NCAC 02B .0295 (n), buffer restoration activities occurred in the majority of the Site with a few patches of enhancement. Along the upstream left bank of BF3, the densely populated cluster of tree-of-heaven was removed, and the area was replanted with hardwoods. Large individual tree-of-heaven trees were cut down and smaller trees or saplings had herbicide applied to the foliage. A rigorous invasive management plan for these areas is to be followed during the following monitoring years. There is a fixed vegetation monitoring plot located in this area so that any re-sprouts can be identified and treated.

Some additional restoration activities were conducted along BF2 to address the observed trash, pipes and culverts found in the streams and a side gully with no flow that enters the stream. These activities included upgrading the crossing, removing an old box culvert, removing other debris within the buffer, and bank stabilization and grading where banks were compromised. Other restoration activities included the removal of the small non-subject pond above reach BF6. The pond was drained, filled, and planted.

A sanitary sewer easement runs parallel to reaches BF3 and BF1 and crosses reaches BF1, BF2, and BF5. The sewer easement along the left bank of BF3 is located outside of Zone 1 and in full compliance with 15A NCAC 02B .0295 (l)(4)(A-C), and therefore was included in the buffer restoration activities. Pursuant to 15A NCAC 02B .0295 (l) (4), sewer easements in Zone 2 may be suitable for buffer mitigation credit if: the applicant or mitigation provider restores or enhances the forested buffer in Zone 1 adjacent to the sewer easement, the sewer easement is maintained in a condition that meets the vegetative requirements of the collection system permit, and diffuse flow is provided across the entire buffer width. As part of the restoration approach, all of these criteria were met. Due to bank instability and erosion there are sections of the sewer easement along the left bank of BF1 that are now within Zone 1, along with the section of the sewer easement that crosses BF1, BF2, and BF5. These 0.1 acres are not viable for buffer credit.

Enhancement occurred in the limited forested areas within the Site, found in small patches along BF1, BF3, BF4, and BF5, in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 (n). These areas include supplemental planting. Enhancement also occurs in BF3 per 15A NCAC 02B .0295 (n) where there are currently clumps of densely populated early-successional (two to four year) sweetgum saplings combined with invasives. The enhancement activities included thinning the sweetgums to the extent necessary, treating the invasives and planting hardwood stems to add diversity to the riparian buffer. There was also a small area along BF1 that was considered enhancement after further site evaluation conducted by RES on December 4th, 2018. After further discussions with DWR, it was agreed upon that these areas could be used for enhancement under 15A NCAC 02B .0295 (n) with supplemental planting.

Reach BF4 was classified as an ephemeral stream (per Buffer Viability) and, therefore, the restoration and enhancement of this channel do not comprise more than 25 percent of the total area of buffer mitigation per 15A NCAC 02B .0295 (o)(7). In response to comments from DWR, RES conducted vegetation transect surveys on December 4th, 2018, to ensure that this area was indeed eligible for restoration credit. It was determined that the areas that were already

enhancement should remain as enhancement, at the confluence of BF3 and BF4, and the other areas that were determined to be restoration should remain as restoration.

2.4 Construction and As-Built Conditions

Revegetation of the site included treating invasive species and planting native hardwood bare root trees. Prior to planting, RES prepped the site by spraying and ripping the easement as well as thinning sweetgum in enhancement areas. The planting of bare root trees occurred in April 2019. Deviations from the initial planting plan were due to bare root availability. A list of the planted species can be found in **Table 5a**. The other construction work included removing debris, an old culvert, and a farm pond as well as improving a crossing. This work was also completed in April 2019. The conservation easement is marked every 150-200 feet with NCDEQ Stewardship Program signs attached to either fences or t-posts. There was no easement change between the final mitigation plan and as-built, however there was a change in credits. This change was a result of an error in the buffer zones submitted with the mitigation plan. The result was an increase in 750 ft^2 (0.02 ac).

3 SCHMID CREEK SITE

3.1 Project Location and Description

The Schmid Creek Site is located in the Randleman Lake Watershed of the Cape Fear River Basin within the 8-digit Hydrologic Unit Code (HUC) 03030003, 14-digit HUC 03030003010060 and DWR Subbasin Number 03-06-08.

The Site is located in Randolph County approximately five miles northwest of Randleman, North Carolina (**Figure 1b**). To access the Site head West on Cedar Square Road from I-74 and turn right on Davis Country Road, after about a mile turn right onto Gilbert Davis Drive, in about 0.4 miles the Site is on the left. The coordinates of the Site are 35.8726 °N and -79.8726 °W.

The conservation easement totals approximately 9.99 acres. The majority of the Site was grazed, non-forested pasture. The riparian buffer was devoid of trees or shrubs and cattle were allowed access within the existing channels

The easement is comprised of two sections, separated by one farm access crossing. The Schmid Creek Site is comprised of one stream channel, SC1, which begins downstream of a pond and then flows from northeast to the southwest eventually draining directly into Randleman Lake approximately 1,500 feet downstream of the site. SC1 is an intermittent unnamed tributary that is the primary drainage feature onsite and has a drainage area of approximately 57 acres. This channel begins downstream of an existing culvert at the eastern property boundary and runs through active pasture before passing through two more culverts on the property. SC1 is approximately 1,022 linear feet. This channel is mostly stable throughout, however, it does exhibit some areas of active erosion from cattle access. There is one linear wetland onsite that drains directly to SC1. DWR Stream Identification Forms were completed and verified by DWR during a site visit on April 12, 2017.

3.2 Project Components

This Site generates approximately 273,737.545 ft^2 (6.28 acres) of riparian buffer restoration credits on existing non-forested pasture. The riparian buffer mitigation credits generated will service Randleman Lake buffer impacts within the USGS 8-digit HUC 0303003 of the Cape Fear River Basin. The total mitigation credits that the RES Randleman Group A – Schmid Creek Mitigation Site generates are summarized in **Table 1b**.

3.3 Riparian Restoration Approach

Since this Site was all non-forested pasture, per 15A NCAC 02B .0295 (n), buffer restoration activities included planting throughout the entire Site. Some additional restoration activities included the removal of debris found within the Site and updating the farm crossing culvert. Specifically, the debris removal included the removal of a drain tile and culvert at the most upstream section of the Reach SC1 and removal of a culvert and earthen berm at the downstream section of Reach SC1. The crossing was improved with properly sized and embedded corrugated pipe, and embankment stabilization to facilitate future landowner access to both sides of the property. These areas were stabilized with coir matting, permanent and temporary seeding, and live stakes after culvert removal.

3.4 Construction and As-Built Conditions

Revegetation of the site included planting native hardwood bare root trees. Prior to planting, RES prepped the site by spraying and ripping the easement. The planting of bare root trees occurred in April 2019. Deviations from the initial planting plan were due to bare root availability. A list of the planted species can be found in **Table 5b**. The other construction work included removing debris (culverts, drain tile, and earthen berm) as well as improving a crossing. This work was also completed in April 2019. The conservation easement is marked every 150-200 feet with NCDEQ Stewardship Program signs attached to either fences or t-posts. There was no easement or credit change between the final mitigation plan and as-built.

4 SUNBEAM SITE

4.1 Project Location and Description

The Sunbeam Site is within the Randleman Lake Watershed of the Cape Fear River Basin within the 8-digit Hydrologic Unit Code (HUC) 03030003, 14-digit HUC 03030003010060 and DWR Subbasin Number 03-06-08.

The Site is located in Randolph County approximately six miles southeast of Archdale, North Carolina. The easement is located on both sides of Interstate Highway 74. To access the Site from Interstate Highway 85 travel south on US 311 (toward Asheboro), then take exit 79 for Cedar Square Road, then turn right. Travel on Cedar Square Road for approximately a quarter of a mile,

then turn left onto SR 1009. Travel on SR 1009 for approximately one and a quarter mile, and the Site will be on the right. The coordinates are 35.8631 °N and -79.8911 °W.

The Sunbeam Site easement, approximately 18.4 acres in size, is made up of four sections, separated by two farm access crossings and a highway, and is comprised of four stream reaches: ZF1, ZF2, ZF3, and ZF4 (**Figure 1c**). ZF1 flows directly into Randleman Lake approximately 5,500 linear feet downstream of the Site. Both ZF2 and ZF3 flow into ZF1 near the downstream end of the Site. ZF1 is a perennial unnamed tributary that is the primary drainage feature onsite and has a drainage area of approximately 540 acres. This channel runs through pasture from the western property corner to the east side of the Site before entering a culvert under I-74. ZF1 is approximately 1,614 linear feet. This channel is mostly stable throughout, however, it did exhibit portions of vertical banks and erosion from cattle. There is also a ditch that discharges into ZF1. The ditch was graded out and a diffuse flow structure was built on the easement boundary to ensure that diffuse flow of runoff is maintained within the riparian buffer. ZF2 is an intermittent to perennial tributary that begins downstream of a farm pond, roughly 260 linear feet off the Site property and then flows into ZF1. This channel runs from the south to north for approximately 1,530 linear feet. ZF2 has a drainage area of approximately 55 acres. This stream channel is stable and exhibits bedrock features at the downstream end. The stream channel was bound by active cattle pasture on the right bank and agriculture hay fields on the left bank. There is currently an existing fence line along the stream channel of ZF2 to prevent cattle from crossing into the left bank riparian buffer. ZF3 is an intermittent to perennial tributary that flows from northwest to southeast across the Site property and empties into ZF1. ZF3 has a drainage area of approximately 98 acres. ZF3 exhibits multiple segments of bedrock providing grade control and streambed stability. This stable tributary lies within a valley bottom and is bound by active cattle pasture. The channel is approximately 1,224 linear feet. ZF4 is an intermittent tributary located on the Site east of Interstate 74. This channel runs from north to south for approximately 529 linear feet before draining to ZF1 downstream of the Site. The drainage area is approximately 16 acres. This stable channel is bound by a mature forest on the left bank and hay field on the right. Stream identifications were verified by the DWR site visit on March 26, 2018.

4.2 Project Components

This Site generates approximately 576,096.382 ft^2 (13.22 acres) of riparian buffer restoration credits on existing non-forested pasture, 3,311.971 ft^2 (0.08 acres) of buffer enhancement credits via cattle exclusion, and 5,592.634 ft^2 (0.13 acres) of riparian buffer preservation credits on subject streams. Due to the removal of a small section of the easement, a very small piece of the buffer along ZF1 now has a buffer that is less than 30 feet but greater than 20 feet and therefore only receives 75 percent of the credit in that area. The riparian buffer mitigation credits generated, service Randleman Lake buffer impacts within the USGS 8-digit HUC 03030003 of the Cape Fear River Basin. The total mitigation credits that the RES Randleman Group A – Sunbeam Site generates are summarized in **Table 1c.**

4.3 Riparian Restoration, Enhancement, and Preservation Approach

Since a majority of the Sunbeam Site was non-forested actively grazed pasture, per 15A NCAC 02B .0295 (n), buffer restoration activities occurred throughout the Site. Some additional restoration activities included minor bank stabilization and grading where needed based on compromised banks and where erosional rills and gullies were observed. Minimal grading and benching was performed to stabilize the confluence of ZF1 and ZF3, and to provide spot stabilization along ZF1. Stabilizing these areas provide functional uplift to the stream system by stopping the mass bank wasting that is currently a problem and by reducing instream sediment loads. In order to maintain diffuse flow in the riparian buffer, the ditch that drains to ZF1 was graded out and a diffuse flow structure was built along the boundary of the easement. Another restoration activity was the upgrading of the existing crossing This crossing is necessary for property access and is fenced to prevent cattle access. The crossing was constructed such that farm equipment has access and to prevent future degradation. These areas were stabilized with coir matting, permanent and temporary seeding, and live stakes after culvert removal.

Enhancement occurred in the very limited forested areas within the Site, found in small patches along ZF1, where grazing occurred adjacent to the stream in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 (o)(6). All livestock were removed from the easement and the fence was installed to exclude access to riparian areas and their associated streams.

Buffer preservation was performed along Reach ZF4 in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 (o)(5). The current land use in this area is mature hardwood in the forested area on the left bank of ZF4. Preservation activities consist of permanently protecting the buffer from cutting, clearing, filling, grading, and similar activities that would affect the functioning of the buffer through a conservation easement that has clearly visible easement markers and signs.

4.4 Construction and As-Built Conditions

Revegetation of the site included planting native hardwood bare root trees. Prior to planting, RES prepped the site by spraying and ripping the easement. The planting of bare root trees occurred in April 2019. Deviations from the initial planting plan were due to bare root availability. A list of the planted species can be found in **Table 5c**. The other construction work included bank stabilization and spot treatments on ZF1 and improving the crossing on ZF1. The crossing on ZF1 was originally planned to be a culvert crossing but due to the bedrock in the proposed area, the crossing was installed as a ford. Additionally, a rill entering the easement at the top of ZF1 was graded and planted. This work was also completed in April 2019. A Buffer Impacts Authorization was approved in January 2019 for the temporary impacts in Zone 1 from the bank stabilization work on ZF1 (**As-Built Report**). The conservation easement is marked every 150-200 feet with NCDEQ Stewardship Program signs attached to either fences or t-posts. Fences were installed in the western portion of the site where livestock is present. There was no easement or credit change between the final mitigation plan and as-built.

5 YEAR 5 (MY5) MONITORING PERFORMANCE

The RES Randleman Group A Year 5 Monitoring activities were completed in October 2023. All Year 5 Monitoring data is present below and in the appendices. The Site has met success criteria and is recommended for closeout. In MY5, one area at Pequod and one area at Sunbeam were found to have overlapping easements. RES had the areas surveyed and removed from crediting (**Section 1.1** and **Figure 2**).

Monitoring of the 37 permanent vegetation plots was completed during September/October 2023. Vegetation tables are in **Appendix B** and associated photos are in **Appendix C**. At Pequod, 17 of 17 plots exceed the success criteria of 260 planted stems per acre. Planted stem densities ranged from 364 to 971 planted stems per acre with a mean of 643 planted stems per acre across all plots. The average planted stem height was 7.9 feet. At Schmid Creek, 8 of 8 plots exceed the success criteria and the planted stem densities range from 405 to 1,012 with a mean of 764 stems per acre across all plots. The average planted stem height was 5.2 feet. At Sunbeam, 12 of 12 plots exceed the success criteria and the planted stem densities range from 405 to 850 with a mean of 647 stems per acre across all plots. The average planted stem height was 10.8 feet. A total of 17 tree species were documented within the plots. Volunteer species were more abundant across the sites in MY5.

Visual assessment of vegetation outside of the monitoring plots indicates that the herbaceous vegetation is becoming well established throughout all three Sites. Bradford pear invasive areas at Pequod were treated in April 2023. Chinese privet and Bradford pear invasive areas at Sunbeam were treated in July 2023. Recently observed areas of invasive species are illustrated on the MY5 CCPV Figures and will be treated in early 2024 before monitoring closeout.

Agricultural encroachment was observed at Pequod in June 2022. The area was planted in December 2022, and no further encroachment was identified. Also, driving paths to the adjacent sewer easement were observed within the conservation easement during MY4. RES met with the City of Archdale onsite and cleared two paths outside of the conservation easement that allows access the sewer easement. Additional easement signage and horse tape was installed to prevent future encroachment in these areas. No additional encroachment occurred in MY5.

The upgraded crossing on Pequod is stable. The culvert removals and crossing upgrade on Schmid Creek are stable. Crossing improvement and brush-toe bank stabilization at Sunbeam are stable. The grading work that was completed on Reach ZF1 in 2019 is also stable.

6 REFERENCES

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Appendix A

Project Background Tables and Site Maps

Table 1a. Pequod Mitigation Site Buffer Project Areas and Assets

RIPARIAN BUFFER (15A NCAC 02B.0295)

Location	Jurisdictional Streams	Restoration Type	Reach ID/Component	Buffer Width (ft)	Creditable Area (acreage)	Creditable Area (sf)*	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Riparian Buffer Credits (BMU)	Riparian Buffer Credits (acreage)	Convertible to Nutrient Offset (Yes or No)	If Converted to Nutrient Offset: Nutrient Offset: N (lbs)	If Converted to Nutrient Offset: Nutrient Offset: P (lbs)
Rural	Subject	Restoration	BF1	20-29	0.00	0	1	75%	1.33333	0.000	0.00	No	0.000	0.000
				30-100	3.29	143,270		100%	1.00000	143,269.732	3.29	No	0.000	0.000
				101-200	0.22	9,640		33%	3.00000	3,181.194	0.07	No	0.000	0.000
		Enhancement		20-29	0.00	0	2	75%	2.66667	0.000	0.00	No	0.000	0.000
				30-100	0.05	2,032		100%	2.00000	1,016.084	0.02	No	0.000	0.000
				101-200	0.00	0		33%	6.00000	0.000	0.00	No	0.000	0.000
Rural	Subject	Restoration	BF2	20-29	0.00	0	1	75%	1.33333	0.000	0.00	No	0.000	0.000
				30-100	5.49	239,201		100%	1.00000	239,200.774	5.49	No	0.000	0.000
				101-200	0.18	7,966		33%	3.00000	2,628.839	0.06	No	0.000	0.000
		Enhancement		20-29	0.00	0	2	75%	2.66667	0.000	0.00	No	0.000	0.000
				30-100	0.00	0		100%	2.00000	0.000	0.00	No	0.000	0.000
				101-200	0.00	0		33%	6.00000	0.000	0.00	No	0.000	0.000
Rural	Subject	Restoration	BF3	20-29	0.00	0	1	75%	1.33333	0.000	0.00	No	0.000	0.000
				30-100	4.88	212,393		100%	1.00000	212,392.571	4.88	No	0.000	0.000
				101-200	0.99	43,258		33%	3.00000	14,275.279	0.33	No	0.000	0.000
		Enhancement		20-29	0.00	0	2	75%	2.66667	0.000	0.00	No	0.000	0.000
				30-100	0.64	27,860		100%	2.00000	13,930.039	0.32	No	0.000	0.000
				101-200	0.00			33%	6.00000	0.000	0.00	No	0.000	0.000
Rural	Subject	Restoration	BF5	20-29	0.00	0	1	75%	1.33333	0.000	0.00	No	0.000	0.000
				30-100	1.05	45,860		100%	1.00000	45,860.309	1.05	No	0.000	0.000
				101-200	0.03	1,183		33%	3.00000	390.386	0.01	No	0.000	0.000
		Enhancement		20-29	0.00	0	2	75%	2.66667	0.000	0.00	No	0.000	0.000
				30-100	0.08	3,320		100%	2.00000	1,659.96	0.04	No	0.000	0.000
				101-200	0.00	0		33%	6.00000	0.000	0.00	No	0.000	0.000
Rural	Subject	Restoration	BF6	20-29	0.00	0	1	75%	1.33333	0.000	0.00	No	0.000	0.000
				30-100	1.85	80,603		100%	1.00000	80,602.565	1.85	No	0.000	0.000
				101-200	0.24	10,290		33%	3.00000	3,395.723	0.08	No	0.000	0.000
		Enhancement		20-29	0.00	0	2	75%	2.66667	0.000	0.00	No	0.000	0.000
				30-100	0.00	0		100%	2.00000	0.000	0.00	No	0.000	0.000
				101-200	0.00	0		33%	6.00000	0.000	0.00	No	0.000	0.000
			SUBTOTALS		**18.98**	**826,876**				**761,803.459**	**17.49**		**0.000**	**0.000**

			ELIGIBLE PRESERVATION AREA								
Location	**Jurisdictional Streams**	**Restoration Type**	**Reach ID/Component**	**Buffer Width (ft)**		**Creditable Area (sf)***	**Initial Credit Ratio (x:1)**	**% Full Credit**	**Final Credit Ratio (x:1)**	**Riparian Buffer Credits (BMU)**	**Riparian Buffer Credits (acreage)**
Rural	Subject	Preservation		20-29			10	75%	13.33333	0.000	0.00
				30-100				100%	10.00000	0.000	0.00
				101-200				33%	30.00000	0.000	0.00
	Nonsubject			20-29			5	75%	6.66667	0.000	0.00
				30-100				100%	5.00000	0.000	0.00
				101-200				33%	15.00000	0.000	0.00
			SUBTOTALS			**0**				**0.000**	**0.000**

**Area eligible for preservation may be no more than 25% of total area, where total area is back-calculated with the equation R+E/0.75.*

**All buffers eligible for credit must be at minimum 20' wide*

**When preservation areas exceed the total eligible preservation area, select the areas with the best credit ratios as the creditable areas.*

			ELIGIBLE EPHEMERAL AREA*		**6.33**	**275,625**					
Location	**Jurisdictional Streams**	**Restoration Type**	**Reach ID/Component**	**Buffer Width (ft)**	**Creditable Area (acreage)***	**Creditable Area (sf)***	**Initial Credit Ratio (x:1)**	**% Full Credit**	**Final Credit Ratio (x:1)**	**Riparian Buffer Credits (BMU)**	**Riparian Buffer Credits (acreage)**
Rural	Ephemeral	Restoration	BF4	20-29	0.00	0	1	75%	1.33333	0.000	0.00
				30-100	0.87	37,838		100%	1.00000	37,838.047	0.87
				101-200	0.37	16,278		33%	3.00000	5,371.771	0.12
		Enhancement		20-29	0.00	0	2	75%	2.66667	0.000	0.00
				30-100	0.08	3,348		100%	2.00000	1674.124	0.04
				101-200	0.00	0		33%	6.00000	0.000	0.00
			SUBTOTALS		**1.32**	**57,464**				**44,883.943**	**1.03**
			TOTALS		**20.30**	**884,340**				**806,687.401**	**18.52**

MY5 riparian buffer credit deductions on Reach BF1: Restoration 30-100 (2,635.199 BMU), Restoration 101-200 (196.913 BMU)

MY5 riparian buffer credit deductions on Reach BF5: Restoration 30-100 (2,235.132 BMU), Restoration 101-200 (219.974 BMU), Enhancement 30-100 (21.148 BMU)

** The area of the mitigation site on ephemeral channels shall comprise no more than 25 percent of the total area of buffer mitigation. Total area is back-calculated with the equation R+E/0.75.*

Regulatory direction for Riparian Buffer in this table follows NCAC rule 15A NCAC 02B .0295, effective November 1, 2015.
Regulatory direction for Nutrient Offset in this table follows Nutrient Offsets Payments Rule 15A NCAC 02B. 0240, amended effective September 1, 2010 and
DWR – 1998. Methodology and Calculations for determining Nutrient Reductions associated with Riparian Buffer Establishment.
N.O. calculation based on effectiveness in 30 years, with 146.40 lb/ac P; and 2,273.02 lb/ac N. The N credit ratio used is 19.16325 sf per pound. The P credit ratio used is 297.54098 sf per pound.

Table 2a. Project Activity and Reporting History
Pequod Site

Elapsed Time Since grading complete: **NA**
Elapsed Time Since planting complete: **4 years 8 months**
Number of reporting Years[1]: **5**

Activity or Deliverable	Data Collection Complete	Completion or Delivery
Restoration Plan	NA	Mar-19
Final Design – Construction Plans	NA	NA
Stream Construction	NA	NA
Site Planting	NA	Apr-19
As-built (Year 0 Monitoring – baseline)	Apr-19	May-19
Year 1 Monitoring	Oct-19	Nov-19
Invasive Species Treatment	NA	Aug-20
Year 2 Monitoring	Oct-20	Nov-20
Year 3 Monitoring	Oct-21	Oct-21
Invasive Species Treatment	NA	Nov-21
Year 4 Monitoring	Oct-22	Oct-22
Invasive Species Treatment	NA	Apr-23
Year 5 Monitoring	23-Oct	Dec-23

1 = The number of reports or data points produced excluding the baseline

Table 3a. Project Contacts Table Pequod Site	
Planting Contractor	H&J Forestry
Planting contractor POC	Matt Hitch
Nursery Stock Suppliers	Claridge Nursery 1-(888) 628-7337
Monitoring Performers	RES / 3600 Glenwood Ave, Suite 100, Raleigh, NC 27612
Vegetation Monitoring POC	Ryan Medric (919) 741-6268

Table 4a. Project Background Information			
Project Name	Pequod		
County	Randolph		
Project Area (acres)	22.14		
Project Coordinates (latitude and longitude)	Latitude: 35.9107 N Longitude: -79.9381 W		
Planted Acreage (Acres of Woody Stems Planted)	19.6		
Project Watershed Summary Information			
Physiographic Province	Southern Outer Piedmont		
River Basin	Cape Fear		
USGS Hydrologic Unit 8-digit	03030003	USGS Hydrologic Unit 14-digit	03030003010060
DWR Sub-basin	03-06-08		
Project Drainage Area (Acres)	2,295		
CGIA Land Use Classification	Forest; Agricultural; Residential		

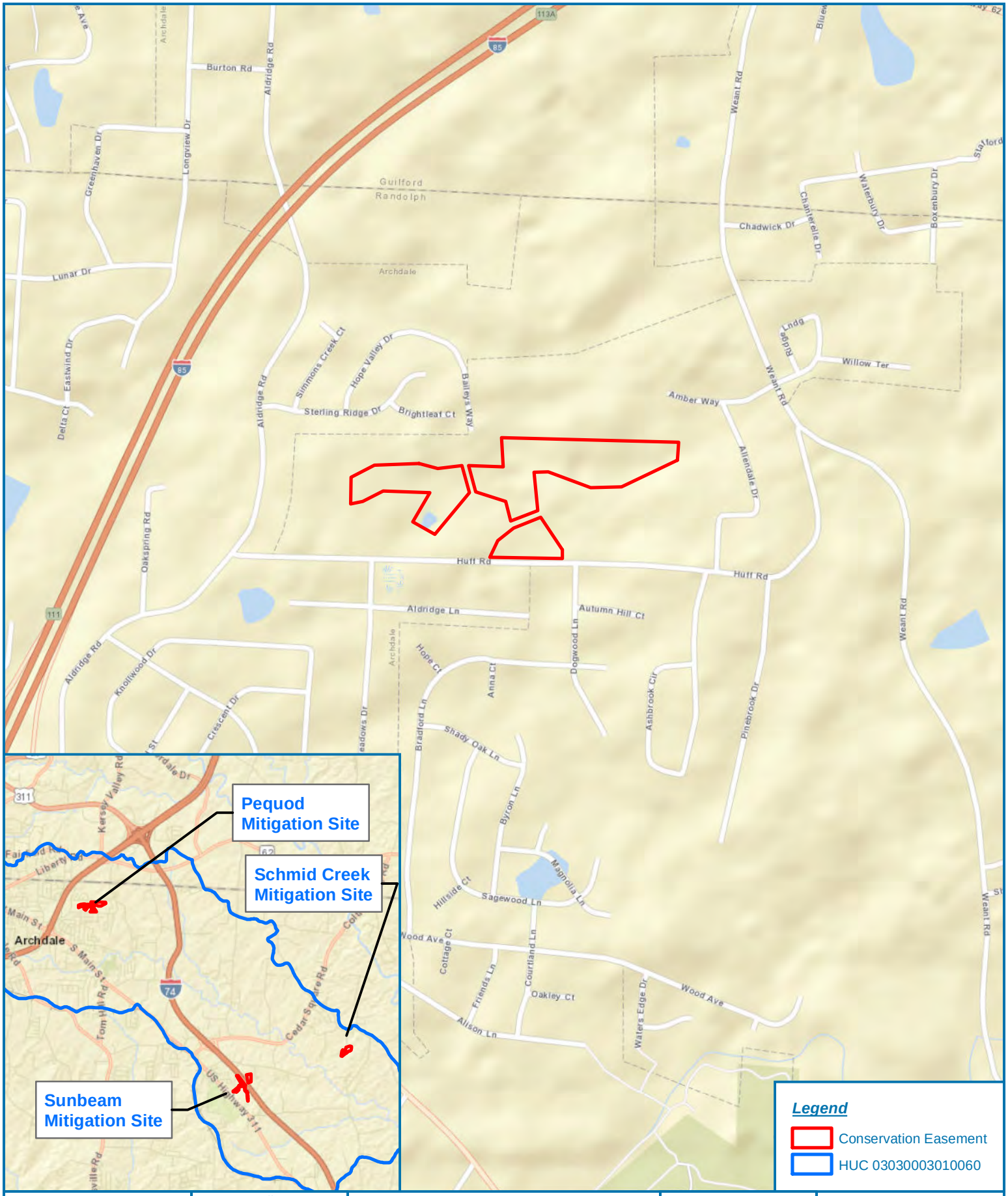


Figure 1a - Site Location Map

RES Randleman Group A - Pequod Mitigation Site

Randolph County, North Carolina

Date:	5/3/2019
Drawn by:	RTM
Checked by:	BPB
	1 inch = 1,000 feet

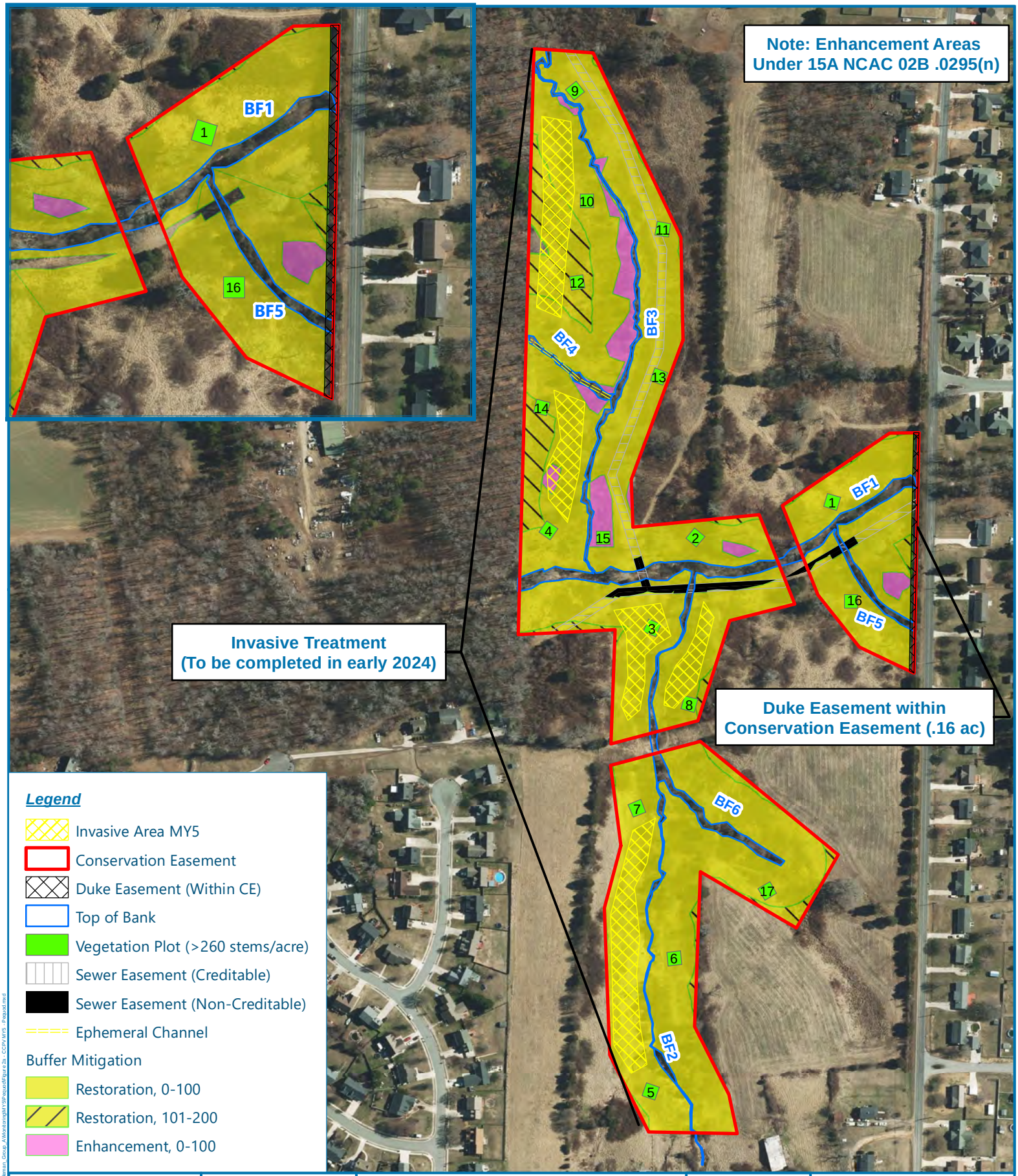


Figure 2a. Current Conditions Plan View

RES Randleman Group A - Pequod Mitigation Site (MY5 2023)

Randolph County, North Carolina

Date: 1/4/2024

Drawn by: HKH

Checked by: BPB

1 inch = 300 feet

res

Table 1b. Schmid Creek Mitigation Site Buffer Project Areas and Assets

RIPARIAN BUFFER (15A NCAC 02B.0295)

Location	Jurisdictional Streams	Restoration Type	Reach ID/Component	Buffer Width (ft)	Creditable Area (acres)*	Creditable Area (sf)*	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Riparian Buffer Credits (BMU)	Riparian Buffer Credits (acres)	Convertible to Nutrient Offset (Yes or No)	If Converted to Nutrient Offset: Nutrient Offset: N (lbs)	If Converted to Nutrient Offset: Nutrient Offset: P (lbs)
Rural	Subject	Restoration	SC1	20-29	0.00	0	1	75%	1.33333	0.000	0.00	No	0.000	0.000
				30-100	4.80	209,182		100%	1.00000	209,182.414	4.80	No	0.000	0.000
				101-200	4.49	195,622		33%	3.00000	64,555.131	1.48	No	0.000	0.000
		Enhancement		20-29	0.00	0	2	75%	2.66667	0.000	0.00	No	0.000	0.000
				30-100	0.00	0		100%	2.00000	0.000	0.00	No	0.000	0.000
				101-200	0.00	0		33%	6.00000	0.000	0.00	No	0.000	0.000
			SUBTOTALS		**9.29**	**404,804**				**273,737.545**	**6.28**		**0.000**	**0.000**

			ELIGIBLE PRESERVATION AREA			**134,935**					
Location	**Jurisdictional Streams**	**Restoration Type**	**Reach ID/Component**	**Buffer Width (ft)**		**Creditable Area (sf)***	**Initial Credit Ratio (x:1)**	**% Full Credit**	**Final Credit Ratio (x:1)**	**Riparian Buffer Credits (BMU)**	**Riparian Buffer Credits (acres)**
Rural	Subject	Preservation		20-29		0	10	75%	13.33333	0.000	0.00
				30-100		0		100%	10.00000	0.000	0.00
				101-200		0		33%	30.00000	0.000	0.00
	Nonsubject			20-29		0	5	75%	6.66667	0.000	0.00
				30-100		0		100%	5.00000	0.000	0.00
				101-200		0		33%	15.00000	0.000	0.00
Urban	Subject or Nonsubject			20-29		0	3	75%	4.00000	0.000	0.00
				30-100		0		100%	3.00000	0.000	0.00
				101-200		0		33%	9.00000	0.000	0.00
			SUBTOTALS			**0**				**0.000**	**0.00**
			TOTALS		**9.29**	**404,804**				**273,737.545**	**6.28**

**Area eligible for preservation may be no more than 25% of total area, where total area is back-calculated with the equation R+E/0.75.*

**All buffers eligible for credit must be at minimum 20' wide*

**When preservation areas exceed the total eligible preservation area, select the areas with the best credit ratios as the creditable areas.*

FILLIBLE CELLS, leave blank if N/A

Regulatory direction for Riparian Buffer in this table follows NCAC rule 15A NCAC 02B .0295, effective November 1, 2015.
Regulatory direction for Nutrient Offset in this table follows Nutrient Offsets Payments Rule 15A NCAC 02B. 0240, amended effective September 1, 2010 and
DWR – 1998. Methodology and Calculations for determining Nutrient Reductions associated with Riparian Buffer Establishment.
N.O. calculation based on effectiveness in 30 years, with 146.40 lb/ac P; and 2,273.02 lb/ac N. The N credit ratio used is 19.16325 sf per pound. The P credit ratio used is 297.54098 sf per pound.

Table 2b. Project Activity and Reporting History
Schmid Creek Site

Elapsed Time Since grading complete: **NA**
Elapsed Time Since planting complete: **4 year 8 months**
Number of reporting Years[1]: **5**

Activity or Deliverable	Data Collection Complete	Completion or Delivery
Restoration Plan	NA	Mar-19
Final Design – Construction Plans	NA	NA
Stream Construction	NA	NA
Site Planting	NA	Apr-19
As-built (Year 0 Monitoring – baseline)	Apr-19	May-19
Year 1 Monitoring	Oct-19	Jan-20
Livestake Planting	NA	Mar-20
Year 2 Monitoring	Oct-20	Oct-20
Invasive Species Treatment	NA	Oct-21
Year 3 Monitoring	Oct-21	Oct-21
Year 4 Monitoring	Sep-22	Oct-22
Year 5 Monitoring	23-Sep	Dec-23

1 = The number of reports or data points produced excluding the baseline

Table 3b. Project Contacts Table Schmid Creek Mitigation Site	
Planting Contractor	H&J Forestry
Planting contractor POC	Matt Hitch
Nursery Stock Suppliers	Arborgen / 2011 Broadbank Court, Ridgeville, SC 29472
Monitoring Performers	RES / 3600 Glenwood Ave, Suite 100, Raleigh, NC 27612
Vegetation Monitoring POC	Ryan Medric (919) 741-6268

Table 4b. Project Background Information			
Project Name	Schmid Creek		
County	Randolph		
Project Area (acres)	9.99		
Project Coordinates (latitude and longitude)	Latitude: 35.8726 N Longitude: -79.8726 W		
Planted Acreage (Acres of Woody Stems Planted)	9.3		
Project Watershed Summary Information			
Physiographic Province	Southern Outer Piedmont		
River Basin	Cape Fear		
USGS Hydrologic Unit 8-digit	03030003	USGS Hydrologic Unit 14-digit	03030003010060
DWR Sub-basin	03-06-08		
Project Drainage Area (Acres)	57		
CGIA Land Use Classification	Forest; Agricultural; Residential		

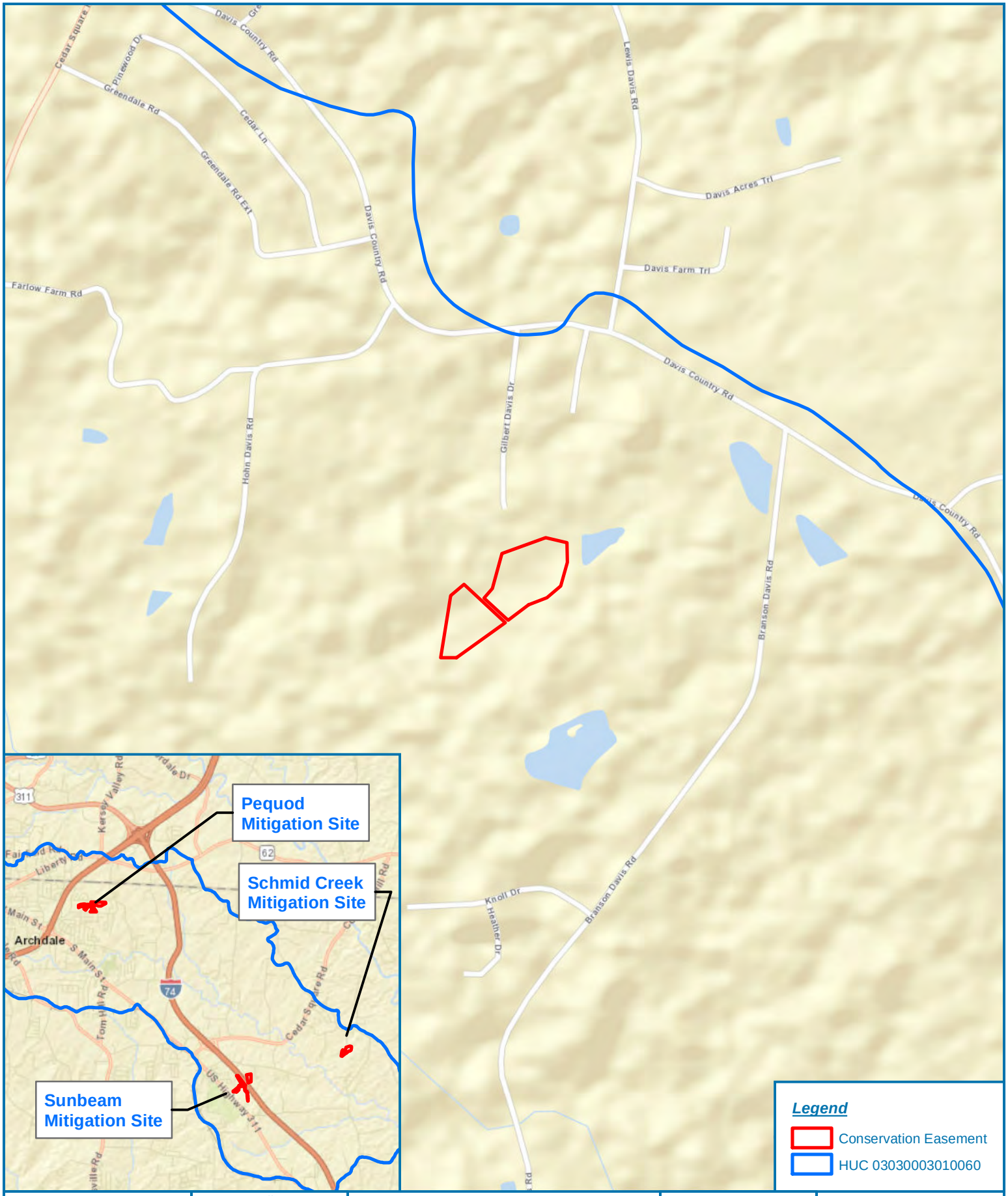
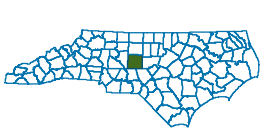


Figure 1b - Site Location Map

RES Randleman Group A - Schmid Creek Mitigation Site

Randolph County, North Carolina

Date:	5/3/2019
Drawn by:	RTM
Checked by:	BPB
	1 inch = 1,000 feet



N
W E
S
0 100 200
Feet

Figure 2b - Current Conditions Plan View

RES Randleman Group A - Schmid Creek Mitigation Site (MY5 2023)

Randolph County, North Carolina

Date: 12/13/2023

Drawn by: HKH

Checked by: RTM

1 inch = 200 feet

res

Document Path: R:\Resp\Projects\NC\100913_Randleman_Group_A\Monitoring\MY5\Schmid\Figure 2b - CCPV_MY5 - Schmid.mxd

Table 1c. Sunbeam Mitigation Site Buffer Project Areas and Assets

RIPARIAN BUFFER (15A NCAC 02B.0295)

Location	Jurisdictional Streams	Restoration Type	Reach ID / Component	Buffer Width (ft)	Creditable Area (acreage)	Creditable Area (sf)*	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Riparian Buffer Credits (BMU)	Riparian Buffer Credits (acreage)	Convertible to Nutrient Offset (Yes or No)	If Converted to Nutrient Offset: Nutrient Offset: N (lbs)	If Converted to Nutrient Offset: Nutrient Offset: P (lbs)
Rural	Subject	Restoration	ZF1	20-29	0.06	2,527	1	75%	1.33333	1,894.930	0.04	No	0.000	0.000
				30-100	4.16	181,155		100%	1.00000	181,155.058	4.16	No	0.000	0.000
				101-200	0.24	10,467		33%	3.00000	3,453.974	0.08	No	0.000	0.000
		Enhancement		20-29	0.00	0	2	75%	2.66667	0.000	0.00	No	0.000	0.000
				30-100	0.15	6,624		100%	2.00000	3,311.971	0.08	No	0.000	0.000
				101-200	0.00	0		33%	6.00000	0.000	0.00	No	0.000	0.000
		Restoration	ZF2	20-29	0.00	0	1	75%	1.33333	0.000	0.00	No	0.000	0.000
				30-100	2.20	95,766		100%	1.00000	95,766.014	2.20	No	0.000	0.000
				101-200	0.00	0		33%	3.00000	0.000	0.00	No	0.000	0.000
			ZF3	20-29	0.00	0		75%	1.33333	0.000	0.00	No	0.000	0.000
				30-100	4.14	180,250		100%	1.00000	180,250.307	4.14	No	0.000	0.000
				101-200	0.20	8,554		33%	3.00000	2,822.951	0.06	No	0.000	0.000
			ZF4	20-29	0.00	0		75%	1.33333	0.000	0.00	No	0.000	0.000
				30-100	1.93	83,983		100%	1.00000	83,983.325	1.93	No	0.000	0.000
				101-200	1.86	81,121		33%	3.00000	26,769.823	0.61	No	0.000	0.000
				SUBTOTALS	**14.93**	**650,447**				**579,408.353**	**13.30**		**0.000**	**0.000**
				ELIGIBLE PRESERVATION AREA	**4.98**	**216,816**								
Rural	Subject	Preservation	ZF4	20-29	0.00	0	10	75%	13.33333	0.000	0.00			
				30-100	1.01	44,063		100%	10.00000	4406.342	0.10			
				101-200	0.83	35,948		33%	30.00000	1186.293	0.03			
				SUBTOTALS	**1.84**	**80,012**				**5,592.634**	**0.13**			
				TOTALS	**16.77**	**730,459**				**585,000.988**	**13.43**			

MY5 riparian buffer credit deductions on Reach ZF3: Restoration 30-100 (981.539 BMU), Restoration 101-200 (20.512 BMU)

**Area eligible for preservation may be no more than 25% of total area, where total area is back-calculated with the equation R+E/0.75.*
**All buffers eligible for credit must be at minimum 20' wide*
**When preservation areas exceed the total eligible preservation area, select the areas with the best credit ratios as the creditable areas.*

Regulatory direction for Riparian Buffer in this table follows NCAC rule 15A NCAC 02B .0295, effective November 1, 2015.
Regulatory direction for Nutrient Offset in this table follows Nutrient Offsets Payments Rule 15A NCAC 02B. 0240, amended effective September 1, 2010 and
DWR – 1998. Methodology and Calculations for determining Nutrient Reductions associated with Riparian Buffer Establishment.
N.O. calculation based on effectiveness in 30 years, with 146.40 lb/ac P; and 2,273.02 lb/ac N. The N credit ratio used is 19.16325 sf per pound. The P credit ratio used is 297.54098 sf per pound.

Table 2c. Project Activity and Reporting History
Sunbeam Site

Elapsed Time Since grading complete: NA
Elapsed Time Since planting complete: 4 years 8 months
Number of reporting Years[1]: 5

Activity or Deliverable	Data Collection Complete	Completion or Delivery
Restoration Plan	NA	Mar-19
Final Design – Construction Plans	NA	NA
Stream Construction	NA	NA
Site Planting	NA	Apr-19
As-built (Year 0 Monitoring – baseline)	Apr-19	May-19
Year 1 Monitoring	Oct-19	Jan-20
Invasive Species Treatment	NA	Aug-20
Year 2 Monitoring	Oct-20	Nov-20
Livestake Planting	NA	Mar-21
Year 3 Monitoring	Oct-21	Oct-21
Year 4 Monitoring	Sep-22	Oct-22
Invasive Species Treatment	NA	Jul-23
Year 5 Monitoring	Oct-23	Dec-23

1 = The number of reports or data points produced excluding the baseline

Table 3c. Project Contacts Table Sunbeam Site	
Planting Contractor	H&J Forestry
Planting contractor POC	Matt Hitch
Nursery Stock Suppliers	Arborgen / 2011 Broadbank Court, Ridgeville, SC 29472
Monitoring Performers	RES / 3600 Glenwood Ave, Suite 100, Raleigh, NC 27612
Vegetation Monitoring POC	Ryan Medric (919) 741-6268

Table 4c. Project Background Information			
Project Name	Sunbeam		
County	Randolph		
Project Area (acres)	18.46		
Project Coordinates (latitude and longitude)	Latitude: 35.8726 N Longitude: -79.8726 W		
Planted Acreage (Acres of Woody Stems Planted)	14.8		
Project Watershed Summary Information			
Physiographic Province	Southern Outer Piedmont		
River Basin	Cape Fear		
USGS Hydrologic Unit 8-digit	03030003	USGS Hydrologic Unit 14-digit	03030003010060
DWR Sub-basin	03-06-08		
Project Drainage Area (Acres)	540		
CGIA Land Use Classification	Forest; Agricultural; Residential		

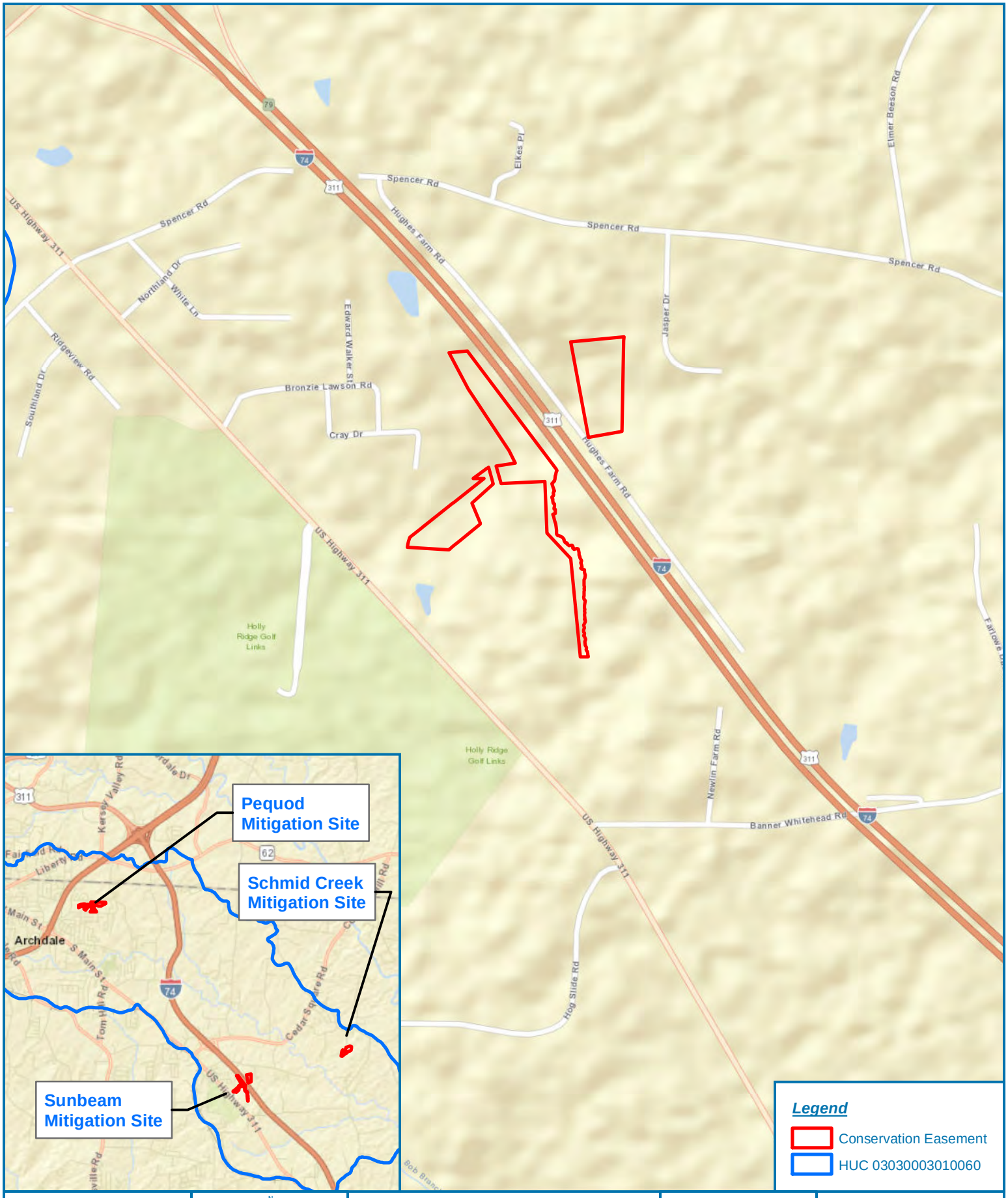
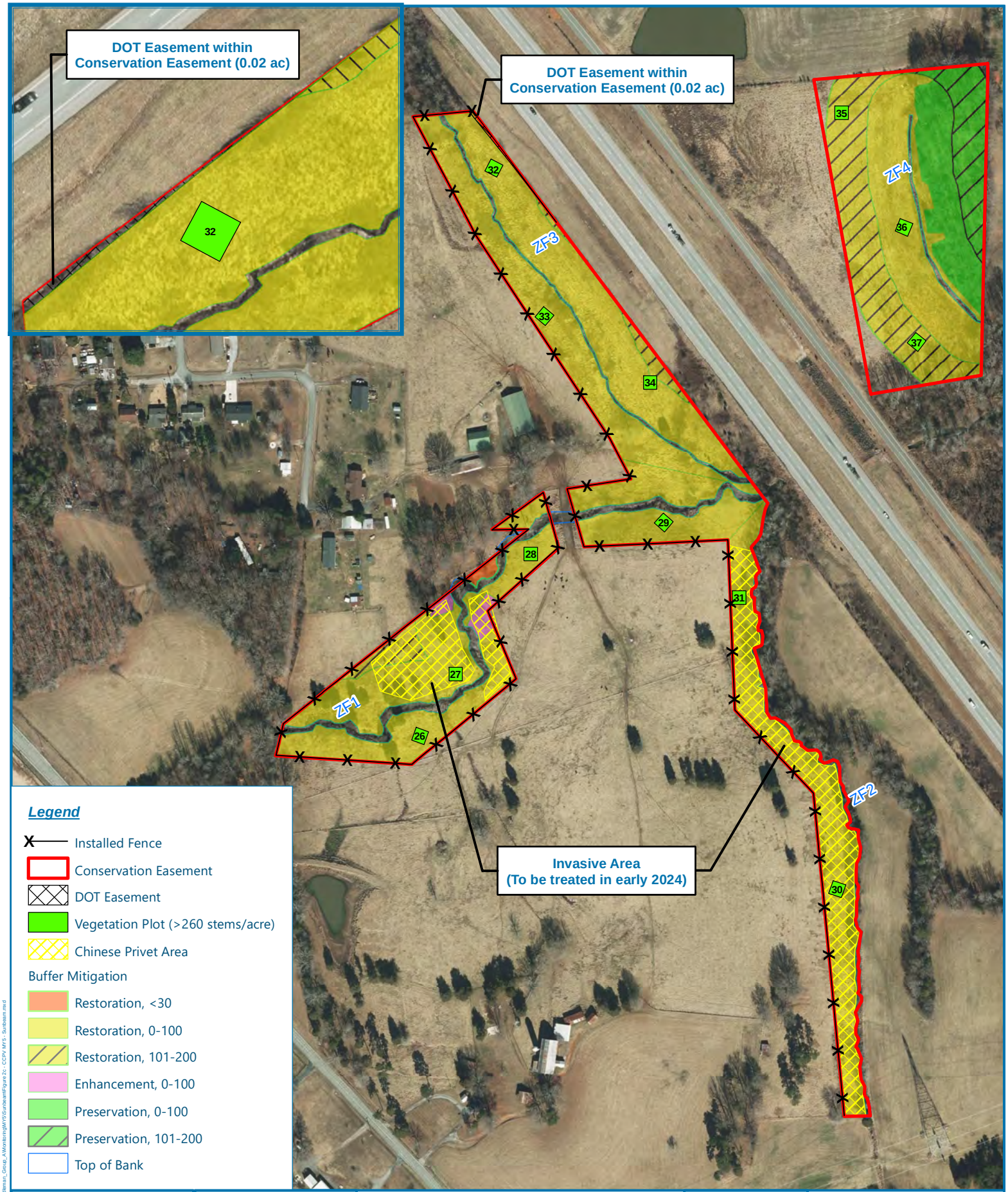


Figure 1c - Site Location Map

RES Randleman Group A - Sunbeam Mitigation Site

Randolph County, North Carolina

Date:	5/3/2019
Drawn by:	RTM
Checked by:	BPB
	1 inch = 1,000 feet



N
W
E
S
0
150
300
Feet

Figure 2c - Current Conditions Plan View

RES Randleman Group A - Sunbeam Mitigation Site (MY5 2023)

Randolph County, North Carolina

Date: 12/15/2023

Drawn by: HKH

Checked by: RTM

1 inch = 300 feet

res

Document Path: R:\Raleigh\Projects\NC\100913_Randleman_Group_A\Monitoring\MY5\Sunbeam\Figure 2c - CCPV MY5 - Sunbeam.mxd

Appendix B

Vegetation Assessment Data

Table 5a. Pequod Planted Species Summary

Common Name	Scientific Name	Total Stems Planted
Sycamore	*Platanus occidentalis*	3,800
Water Oak	*Quercus nigra*	3,800
Tuliptree	*Liriodendron tulipifera*	2,400
Willow Oak	*Quercus phellos*	2,000
White Oak	*Quercus alba*	1,800
Northern Red Oak	*Quercus rubra*	1,800
River Birch	*Betula nigra*	1,400
Green Ash	*Fraxinus pennsylvanica*	1,200
	Total	18,200

Table 6a. Pequod Vegetation Plot Mitigation Success Summary (MY5)

Plot #	Planted Stems/Acre	Volunteer Stems/Acre	Total Stems/Acre	Success Criteria Met?	Average Planted Stem Height (ft)
1	567	40	607	Yes	11.3
2	728	567	1295	Yes	8.7
3	567	647	1214	Yes	10.3
4	688	769	1457	Yes	10.9
5	526	0	526	Yes	6.8
6	971	0	971	Yes	10.5
7	647	405	1052	Yes	7.1
8	607	243	850	Yes	7.2
9	890	243	1133	Yes	7.3
10	526	121	647	Yes	5.5
11	364	283	647	Yes	8.1
12	526	850	1376	Yes	8.1
13	607	445	1052	Yes	5.7
14	809	0	809	Yes	6.7
15	567	647	1214	Yes	7.5
16	567	567	1133	Yes	6.3
17	769	40	809	Yes	5.5
Project Avg	**643**	**345**	**988**	**Yes**	**7.9**

Table 7a. Pequod Stem Count Total and Planted by Plot Species (MY5)

Pequod			Current Plot Data (MY5 2023)																																		
			100046-01-0001			100046-01-0002			100046-01-0003			100046-01-0004			100046-01-0005			100046-01-0006			100046-01-0007			100046-01-0008			100046-01-0009			100046-01-0010			100046-01-0011			100046-01-0012		
Scientific Name	Common Name	Species Type	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T
Acer negundo	boxelder	Tree																																			
Acer rubrum	red maple	Tree						4																													
Betula nigra	river birch	Tree							1	1	1	2	2	2													1	1	1						1			5
Carya	hickory	Tree																																			
Carya ovata	shagbark hickory	Tree																																			
Diospyros virginiana	common persimmon	Tree																								4					1						1
Fraxinus pennsylvanica	green ash	Tree				1	1	7							1	1	1	3	3	3	2	2	2	1	1	1	4	4	10	1	1	1	2	2	4	4	4	4
Juglans nigra	black walnut	Tree			1																																
Liquidambar styraciflua	sweetgum	Tree						4			16			19									10			2					2			4			15
Liriodendron tulipifera	tuliptree	Tree				2	2	2				4	4	4										1	1	1	1	1	1	1	1	1				3	3	3
Platanus occidentalis	American sycamore	Tree	11	11	11	1	1	1	10	10	10	2	2	2	3	3	3	8	8	8	4	4	4				5	5	5	2	2	2	2	2	2	3	3	3
Prunus serotina	black cherry	Tree																																			
Quercus	oak	Tree																																			
Quercus alba	white oak	Tree										1	1	1										4	4	4												
Quercus nigra	water oak	Tree	1	1	1	1	1	1				1	1	1	1	1	1	1	1	1	1	1	1				2	2	2	2	2	2				1	1	1
Quercus phellos	willow oak	Tree	2	2	2	8	8	8	3	3	3	5	5	5	4	4	4	12	12	12	7	7	7	6	6	6	6	6	6	2	2	2	2	2	2	1	1	1
Quercus rubra	northern red oak	Tree				5	5	5				2	2	2	4	4	4				2	2	2	3	3	3	3	3	3	5	5	5	3	3	3	1	1	1
Ulmus americana	American elm	Tree																																			
		Stem count	14	14	15	18	18	32	14	14	30	17	17	36	13	13	13	24	24	24	16	16	26	15	15	21	22	22	28	13	13	16	9	9	16	13	13	34
		size (ares)	1			1			1			1			1			1			1			1			1			1			1			1		
		size (ACRES)	0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.02		
		Species count	3	3	4	6	6	8	3	3	4	7	7	8	5	5	5	4	4	4	5	5	6	5	5	7	7	7	7	6	6	8	4	4	6	6	6	9
		Stems per ACRE	567	567	607	728	728	1295	567	567	1214	688	688	1457	526	526	526	971	971	971	647	647	1052	607	607	850	890	890	1133	526	526	647	364	364	647	526	526	1376

Pequod			Current Plot Data (MY5 2023)															Annual Means																				
			100046-01-0013			100046-01-0014			100046-01-0015			100046-01-0016			100046-01-0017			MY5 (2023)			MY4 (2022)			MY3 (2021)			MY2 (2020)			MY1 (2019)			MY0 (2019)					
Scientific Name	Common Name	Species Type	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T			
Acer negundo	boxelder	Tree																		2																		
Acer rubrum	red maple	Tree									1									5			30			9			15			7					
Betula nigra	river birch	Tree													1	1	1	5	5	11	5	5	5	5	5	5	6	6	6	3	3	3	3	3	3			
Carya	hickory	Tree																											2			7					
Carya ovata	shagbark hickory	Tree																		5																	
Diospyros virginiana	common persimmon	Tree												3						9			8			5											
Fraxinus pennsylvanica	green ash	Tree	2	2	2				4	4	13							25	25	48	18	18	61	19	19	74	19	19	90	22	22	86	24	24	100			
Juglans nigra	black walnut	Tree																		1			11			6			8								
Liquidambar styraciflua	sweetgum	Tree			7						6			11						96			376			234			330			558			76		
Liriodendron tulipifera	tuliptree	Tree	1	1	1							1	1	1				14	14	14	13	13	13	14	14	16	16	16	16	25	25	30	34	34	34			
Platanus occidentalis	American sycamore	Tree	4	4	4	3	3	3	7	7	7							65	65	65	65	65	65	66	66	66	64	64	64	69	69	69	79	79	79			
Prunus serotina	black cherry	Tree			4															4			5			2						3					
Quercus	oak	Tree																									3	3	3	10	10	10	124	124	124			
Quercus alba	white oak	Tree	3	3	3							5	5	5	7	7	7	20	20	20	18	18	20	20	20	20	18	18	18	23	23	23	1	1	1			
Quercus lyrata	overcup oak	Tree															1			1																	
Quercus nigra	water oak	Tree	1	1	1	1	1	1										13	13	13	14	14	14	12	12	12	11	11	11	17	17	17	28	28	28			
Quercus phellos	willow oak	Tree	3	3	3	11	11	11	3	3	3	6	6	6	3	3	3	84	84	84	85	85	85	91	91	91	90	90	90	100	100	102	89	89	89			
Quercus rubra	northern red oak	Tree	1	1	1	5	5	5				2	2	2	8	8	8	44	44	44	46	46	48	46	46	46	43	43	43	50	50	52	19	19	19			
Ulmus americana	American elm	Tree																		9												2					
		Stem count	15	15	26	20	20	20	14	14	30	14	14	28	19	19	20	270	270	415	264	264	757	273	273	586	270	270	696	319	319	969	401	401	553			
		size (ares)	1			1			1			1			1			17			17			17			17			17			17					
		size (ACRES)	0.02			0.02			0.02			0.02			0.02			0.42			0.42			0.42			0.42			0.42			0.42					
		Species count	7	7	9	4	4	4	3	3	5	4	4	6	4	4	5	8	8	14	8	8	16	8	8	13	9	9	13	9	9	14	9	9	10			
		Stems per ACRE	607	607	1052	809	809	809	567	567	1214	567	567	1133	768.9	769	809	642.7	643	988	628	628	1802	650	650	1395	643	643	1657	759	759	2307	955	955	1316			

Table 5b. Schmid Creek Planted Species Summary

Common Name	Scientific Name	Total Stems Planted
Water Oak	*Quercus nigra*	2,700
Sycamore	*Platanus occidentalis*	2,800
Tuliptree	*Liriodendron tulipifera*	1,600
Willow Oak	*Quercus phellos*	1,500
White Oak	*Quercus alba*	1,500
Northern Red Oak	*Quercus rubra*	1,200
River Birch	*Betula nigra*	1,000
Green Ash	*Fraxinus pennsylvanica*	800
	Total	13,100

Table 6b. Schmid Creek Vegetation Plot Mitigation Success Summary (MY5)

Plot #	Planted Stems/Acre	Volunteer Stems/Acre	Total Stems/Acre	Success Criteria Met?	Average Planted Stem Height (ft)
18	648	0	648	Yes	3.9
19	809	0	809	Yes	6.4
20	728	203	931	Yes	5.4
21	809	0	809	Yes	5.8
22	405	323	728	Yes	5.5
23	1012	202	1214	Yes	4.6
24	850	121	890	Yes	5.6
25	850	2064	2914	Yes	4.3
Project Avg	764	**364**	**1118**	Yes	**5.2**

Table 7b. Schmid Creek Stem Count Total and Planted by Plot Species (MY5)

Schmid			Current Plot Data (MY5 2023)																								Annual Means														
			100046-01-0018			100046-01-0019			100046-01-0020			100046-01-0021			100046-01-0022			100046-01-0023			100046-01-0024			100046-01-0025			MY5 (2023)			MY4 (2022)			MY3 (2021)			MY2 (2020)			MY1 (2019)			MY0 (2019)		
Scientific Name	Common Name	Species Type	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T
Betula nigra	River Birch, Red Birch	Tree				1	1	1	4	4	4	6	6	6				2	2	2							13	13	13	13	13	13	15	15	15	15	15	15	16	16	16	29	29	29
Cephalanthus occidentali	Buttonbush	Shrub Tree															5												5														
Diospyros virginiana	American Persimmor	Tree									1																		1														
Fraxinus pennsylvanica	Green Ash, Red Ash	Tree				4	4	4			4	2	2	2	1	1	2	2	2	7	3	3	3	2	2	52	14	14	74	14	14	71	14	14	81	13	13	44	14	14	24	14	14	14
Liquidambar styraciflua	Sweet Gum, Red Gum	Tree															2												2														
Liriodendron tulipifera		Tree	2	2	2	1	1	1																1	1	1	4	4	4	7	7	7	8	8	8	9	9	9	24	24	24	36	36	36
Platanus occidentalis	Sycamore, Plane-tree	Tree	4	4	4	3	3	3	7	7	7	1	1	1	2	2	2	6	6	6	4	4	4	1	1	1	28	28	28	27	27	27	28	28	28	30	30	30	30	30	30	45	45	45
Quercus	Oak	Shrub Tree																																								38	38	38
Quercus alba	White Oak	Tree	5	5	5	4	4	4				5	5	5				3	3	3				3	3	3	20	20	20	20	20	21	20	20	20	20	20	20	23	23	23	2	2	2
Quercus nigra	Water Oak, Paddle Oa	Tree				1	1	1	1	1	1				2	2	2										4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	8	8	8
Quercus phellos	Willow Oak	Tree	2	2	2	2	2	2	4	4	4	4	4	4	5	5	5	11	11	11	9	9	9	4	4	4	41	41	41	41	41	41	41	41	41	41	41	41	44	44	44	29	29	29
Quercus rubra		Tree	3	3	3	4	4	4	2	2	2	2	2	2				1	1	1	5	5	5	10	10	11	27	27	28	27	27	27	25	25	25	26	26	26	26	26	26	12	12	12
Ulmus alata	Winged Elm	Tree																					1						1														
		Stem count	16	16	16	20	20	20	18	18	23	20	20	20	10	10	18	25	25	30	21	21	22	21	21	72	151	151	221	153	153	211	155	155	222	158	158	189	181	181	191	213	213	213
		size (ares)	1			1			1			1			1			1			1			1			8			8			8			8			8			8		
		size (ACRES)	0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.20			0.20			0.20			0.20			0.20			0.20		
		Species count	5	5	5	8	8	8	5	5	7	6	6	6	4	4	6	6	6	6	4	4	5	6	6	6	8	8	12	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9
		Stems per ACRE	648	648	648	809	809	809	728	728	931	809	809	809	405	405	728	1012	1012	1214	850	850	890	850	850	2914	764	764	1118	774	774	1067	784	784	1123	799	799	956	916	916	966	1077	1077	1077

Table 5c. Sunbeam Planted Species Summary

Common Name	Scientific Name	Total Stems Planted
Water Oak	*Quercus nigra*	2,100
Sycamore	*Platanus occidentalis*	1,900
Tuliptree	*Liriodendron tulipifera*	1,000
Willow Oak	*Quercus phellos*	1,000
White Oak	*Quercus alba*	800
Northern Red Oak	*Quercus rubra*	800
River Birch	*Betula nigra*	600
Green Ash	*Fraxinus pennsylvanica*	600
	Total	8,800

Table 6c. Sunbeam Vegetation Plot Mitigation Success Summary (MY5)

Plot #	Planted Stems/Acre	Volunteer Stems/Acre	Total Stems/Acre	Success Criteria Met?	Average Planted Stem Height (ft)
26	607	283	890	Yes	12.4
27	445	40	486	Yes	17.4
28	809	81	890	Yes	16.0
29	567	324	890	Yes	10.7
30	809	243	1052	Yes	14.6
31	688	243	931	Yes	11.4
32	526	445	971	Yes	13.7
33	850	162	1012	Yes	9.8
34	688	162	850	Yes	10.1
35	405	0	405	Yes	3.3
36	567	1012	1578	Yes	7.2
37	809	0	809	Yes	2.6
Project Avg	**647**	**250**	**897**	**Yes**	**10.8**

Table 7c. Sunbeam Stem Count Total and Planted by Plot Species (MY5)

Sunbeam			Current Plot Data (MY5 2023)																														
			100046-01-0026			100046-01-0027			100046-01-0028			100046-01-0029			100046-01-0030			100046-01-0031			100046-01-0032			100046-01-0033			100046-01-0034			100046-01-0035		
Scientific Name	Common Name	Species Type	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T
Acer negundo	boxelder	Tree																															
Acer rubrum	red maple	Tree																					1			4							
Betula nigra	river birch	Tree							4	4	4	4	4	4	1	1	1							2	2	2							
Celtis occidentalis	common hackberry	Tree																		1													
Diospyros virginiana	common persimmon	Tree																															
Fraxinus pennsylvanica	green ash	Tree	9	9	11	6	6	6	3	3	5	4	4	4				2	2	3				3	3	3				1	1	1
Hamamelis virginiana	American witchhazel	Tree																															
Juglans nigra	black walnut	Tree																		4			1										
Juniperus virginiana	eastern redcedar	Tree			1																												
Liquidambar styraciflua	sweetgum	Tree			3																		8						3				
Liriodendron tulipifera	tuliptree	Tree	1	1	1										3	3	3				1	1	1				1	1	1				
Platanus occidentalis	American sycamore	Tree	1	1	1	3	3	3	5	5	5	1	1	1	6	6	6	5	5	5	6	6	6	1	1	1	4	4	4	3	3	3
Quercus	oak	Tree																															
Quercus alba	white oak	Tree																						7	7	7							
Quercus michauxii	swamp chestnut oak	Tree							1	1	1																						
Quercus nigra	water oak	Tree							3	3	3	3	3	3	6	6	6	2	2	2	3	3	3	2	2	2	3	3	3	2	2	2
Quercus phellos	willow oak	Tree	4	4	4	2	2	2	3	3	3	2	2	2	1	1	1	8	8	8	3	3	3	2	2	2	4	4	4	2	2	2
Quercus rubra	northern red oak	Tree							1	1	1				3	3	3							4	4	4	5	5	5	2	2	2
Rhus	sumac	shrub																															
Ulmus alata	winged elm	Tree												3																			
Ulmus americana	American elm	Tree			1			1						5			6						1										
Stem count			15	15	22	11	11	12	20	20	22	14	14	22	20	20	26	17	17	23	13	13	24	21	21	25	17	17	21	10	10	10
size (ares)			1			1			1			1			1			1			1			1			1			1		
size (ACRES)			0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.02		
Species count			4	4	7	3	3	4	7	7	7	5	5	7	6	6	7	4	4	6	4	4	8	7	7	8	5	5	7	5	5	5
Stems per ACRE			607	607	890	445	445	486	809	809	890	567	567	890	809	809	1052	688	688	931	526	526	971	850	850	1012	688	688	850	405	405	405

Sunbeam			Current Plot Data (MY5 2023)						Annual Means																								
			100046-01-0036			100046-01-0037			MY5 (2023)			MY4 (2022)			MY3 (2021)			MY2 (2020)			MY1 (2019)			MY0 (2019)								
Scientific Name	Common Name	Species Type	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T							
Acer negundo	boxelder	Tree									1																						
Acer rubrum	red maple	Tree									5			2																			
Betula nigra	river birch	Tree							11	11	11	11	11	11	14	14	14	17	17	20	18	18	18	18	18	18							
Celtis occidentalis	common hackberry	Tree									1																						
Diospyros virginiana	common persimmon	Tree												11			8																
Fraxinus pennsylvanica	green ash	Tree	1	1	1	2	2	2	31	31	36	31	31	34	30	30	34	33	33	40	35	35	36	36	36	36							
Hamamelis virginiana	American witchhazel	Tree																					1										
Juglans nigra	black walnut	Tree									5			7						3													
Juniperus virginiana	eastern redcedar	Tree									1																						
Liquidambar styraciflua	sweetgum	Tree			25						39			51			26			3			5										
Liriodendron tulipifera	tuliptree	Tree							6	6	6	6	6	6	6	6	6	8	8	8	15	15	15	22	22	22							
Platanus occidentalis	American sycamore	Tree	5	5	5	1	1	1	41	41	41	41	41	41	45	45	45	45	45	45	45	45	45	51	51	51							
Quercus	oak	Tree																			2	2	2	52	52	52							
Quercus alba	white oak	Tree				6	6	6	13	13	13	13	13	13	13	13	13	18	18	18	19	19	19	19	19	19							
Quercus michauxii	swamp chestnut oak	Tree							1	1	1																						
Quercus nigra	water oak	Tree	5	5	5	1	1	1	30	30	30	30	30	30	27	27	27	37	37	37	42	42	42	30	30	30							
Quercus phellos	willow oak	Tree	3	3	3	8	8	8	42	42	42	42	42	43	45	45	45	46	46	46	43	43	43	26	26	26							
Quercus rubra	northern red oak	Tree				2	2	2	17	17	17	17	17	17	18	18	20	22	22	22	20	20	20	25	25	25							
Rhus	sumac	shrub															1																
Ulmus alata	winged elm	Tree									3			3																			
Ulmus americana	American elm	Tree									14			5						2													
Stem count			14	14	39	20	20	20	192	192	266	191	191	274	198	198	239	226	226	244	239	239	246	279	279	279							
size (ares)			1			1			12			12			12			12			12			12									
size (ACRES)			0.02			0.02			0.30			0.30			0.30			0.30			0.30			0.30									
Species count			4	4	5	6	6	6	9	9	17	8	8	14	8	8	11	8	8	11	9	9	11	9	9	9							
Stems per ACRE			567	567	1578	809	809	809	647	647	897	644	644	924	668	668	806	762	762	823	806	806	830	941	941	941							

Appendix C

Vegetation Monitoring Plot Photos

Pequod Vegetation Monitoring Plot Photos

Vegetation Plot 1 (10/4/23)


Vegetation Plot 2 (10/4/23)

Vegetation Plot 3 (10/4/23)

Vegetation Plot 4 (10/4/23)


Vegetation Plot 5 (10/4/23)

Vegetation Plot 6 (10/4/23)

Pequod Vegetation Monitoring Plot Photos

Vegetation Plot 7 (10/4/23)

Vegetation Plot 8 (10/4/23)

Vegetation Plot 9 (10/4/23)

Vegetation Plot 10 (10/4/23)

Vegetation Plot 11 (10/4/23)

Vegetation Plot 12 (10/4/23)

Pequod Vegetation Monitoring Plot Photos

Vegetation Plot 13 (10/4/23)

Vegetation Plot 14 (10/4/23)

Vegetation Plot 15 (10/4/23)

Vegetation Plot 16 (10/4/23)

Vegetation Plot 17 (10/4/23)

Schmid Creek Vegetation Monitoring Plot Photos MY5 (09/21/2023)

Vegetation Plot 18

Vegetation Plot 19

Vegetation Plot 20

Vegetation Plot 21

Vegetation Plot 22

Vegetation Plot 23

Schmid Creek Vegetation Monitoring Plot Photos

Vegetation Plot 24

Vegetation Plot 25

Sunbeam Vegetation Monitoring Plot Photos MY5 10/31/2023

Vegetation Plot 26

Vegetation Plot 27

Vegetation Plot 28

Vegetation Plot 29

Vegetation Plot 30

Vegetation Plot 31

Sunbeam Vegetation Monitoring Plot Photos MY5 10/31/2023

Vegetation Plot 32

Vegetation Plot 33

Vegetation Plot 34

Vegetation Plot 35

Vegetation Plot 36

Vegetation Plot 37

Appendix D

Vegetation Monitoring Plot Data Sheets

Period 2023

Plot (continued): 100046-01-0001					Oct 2022 Data				THIS YEAR'S DATA						
ID	Species	map char	source	X (m)	Y (m)	ddh (mm)	Height (cm)	DBH (cm)	NOTES*	ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0001

VMD Year (1-5): 5 Date: 10 / 4 /23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.909176 Datum: NAD27

Longitude or UTM-E: -79.939049 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 316

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: JD JS Role:

Date last planted:

New planting date m/yy?

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Oct 2022 Data Height 1cm*	DBH 1 cm	NOTES*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
3	Platanus occidentalis	c	R	3.1	0.3	135.0	DBH?	☐	330	2.0	☐	3		
4	Platanus occidentalis	g	R	4.8	0.3	410.0	2.8	☐	480	5.0	☐			
5	Platanus occidentalis	j	R	6.5	0.3	300.0	1.9	☐	400	3.0	☐			
6	Platanus occidentalis	m	R	7.8	0.3	210.0	1.6	☐	360	2.5	☐			
7	Platanus occidentalis	n	R	9.2	0.3	130.0	DBH?	☐	320	2.0	☐			
9	Platanus occidentalis	l	R	7.2	3.2	400.0	3.3	☐	410	5.0	☐			
10	Platanus occidentalis	h	R	5.7	3.2	80.0		☐	220	0.3	☐			
11	Quercus phellos	e	R	3.9	3.2	132.0	DBH?	☐	210	0.2	☐			
12	Quercus nigra	b	R	2.4	3.5	210.0	0.3	☐	280	0.7	☐			
13	Platanus occidentalis	a	R	0.6	3.5	205.0	1.0	☐	300	1.1	☐			
16	Platanus occidentalis	d	R	3.1	6.1	100.0		☐	190	0.2	☐			
17	Platanus occidentalis	f	R	4.5	6.0	450.0	3.1	☐	600	7.0	☐			
18	Platanus occidentalis	i	R	6.1	6.0	440.0	2.8	☐	600	9.0	☐			
23	Quercus phellos	k	R	7.0	9.2	80.0		☐	170	6.3	☐			

 # stems: 14

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0001

ID	Species	map char	source	X (m)	Y (m)	Oct 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTES*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
BLACK WAL		—				—		1			
		—				—					
		—				—					
		—				—					
		—				—					
		—				—					
		—				—					

**Required if cut-off >10cm or subsample ? 100%.

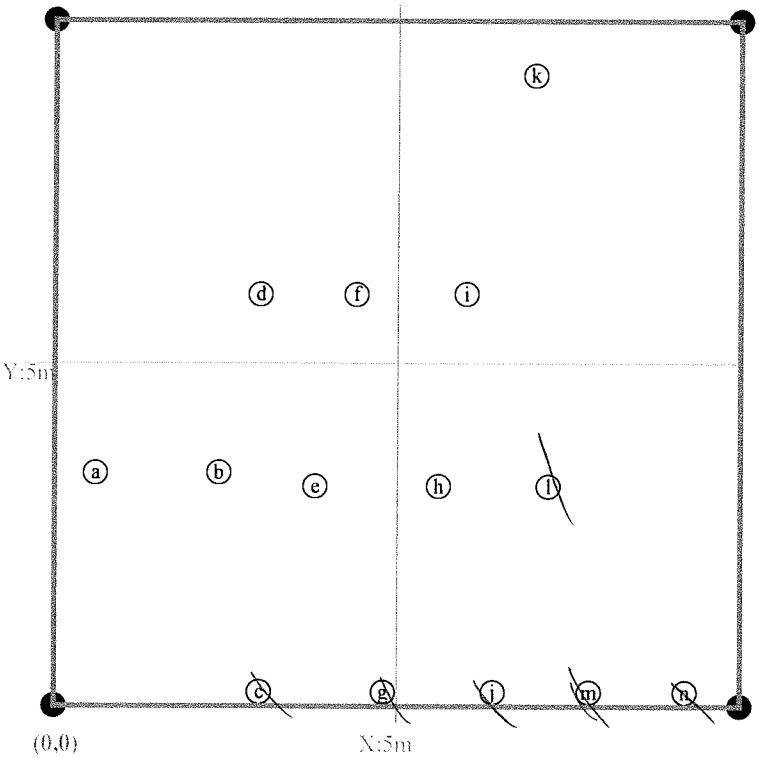
●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10 Form WS2, ver 9.1

Map of stems on plot 100046-01-0001

→ X-axis: 316°

 # stems: 14
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0002

VMD Year (1-5): 5 Date: 10/4/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.91008 Datum: NAD27

Longitude or UTM-E: -79.93935 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 307

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: JD Role:

Date last planted:

New planting date m/yy?

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Oct 2022 Data Height 1cm*	Oct 2022 Data DBH 1 cm	NO-GO*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
29	Quercus phellos	ⓑ	R	0.5	0.7	175.0	0.2	☐	180	—	☐	3		
30	Quercus phellos	ⓐ	R	0.2	4.7	230.0	0.9	☐	300	2.7	☐			
31	Quercus rubra	ⓓ	R	1.1	3.6	160.0	0.2	☐	220	0.4	☐			
33	Fraxinus pennsylvanica	ⓖ	R	2.8	2.2	120.0	*DBH?*	☐	140	0.2	☐			
34	Platanus occidentalis	ⓚ	R	4.3	0.9	500.0	2.8	☐	600	6.0	☐			
36	Quercus phellos	ⓠ	R	8.6	1.1	85.0		☐	200	0.3	☐			
37	Quercus rubra	ⓞ	R	7.3	1.8	90.0		☐	300	0.8	☐			
38	Quercus rubra	ⓝ	R	5.9	3.1	275.0	1.5	☐	250	0.9	☐			
39	Quercus phellos	ⓛ	R	4.7	4.1	230.0	1.2	☐	240	0.5	☐			
40	Quercus rubra	ⓘ	R	3.4	5.3	200.0	0.6	☐	220	0.8	☐			
41	Quercus phellos	ⓕ	R	2.3	6.5	175.0	0.2	☐	200	0.6	☐			
42	Quercus rubra	ⓔ	R	1.3	7.8	205.0	0.6	☐	220	0.8	☐			
43	Quercus phellos	ⓒ	R	0.4	9.0	52.0		☐	80	—	☐			
45	Quercus phellos	ⓙ	R	4.0	9.2	60.0		☐	210	0.3	☐			
46	Quercus phellos	ⓜ	R	5.0	8.3	160.0	0.1	☐	190	0.3	☐			
48	Liriodendron tulipifera	ⓟ	R	7.4	6.3	210.0	0.5	☐	300	4.0	☐			
51	~~Quercus nigra~~ LITU	ⓡ	R	9.3	8.8	50.0		☐	300	3.0	☐			
1275	Liriodendron tulipifera	ⓗ	R	3.4	1.8	550.0	4.1	☐	600	8.0	☐			

 # stems: *18*

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0002

ID	Species	map char	source	X (m)	Y (m)	Oct 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTES	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
FRPE		—		11	11	—	1				
LIST		—			11	—		1			
ACRU		—		1		—	1 1				
		—				—					
		—				—					
		—				—					
		—				—					

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

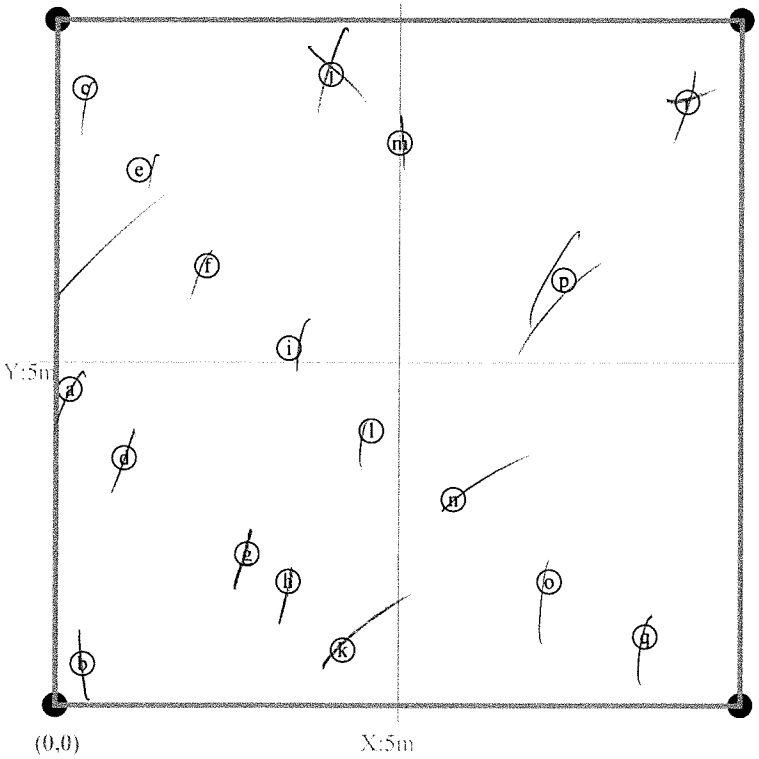
Form WS2, ver 9.1

Map of stems on plot 100046-01-0002

→ X-axis: 307 °

 # stems: 18
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0003

VMD Year (1-5): 5 Date: 10/4/2023 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.910363 Datum: NAD27

Longitude or UTM-E: -79.940092 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 230

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
KF	
SB	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	Sep 2022 Data NO-GO*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
54	Platanus occidentalis	a	R	0.1	2.1	300.0	2.8	☐	320	1.8	☐	3		
55	Platanus occidentalis	b	R	0.4	0.6	260.0	1.9	☐	250	1.5	☐	3		
56	Quercus phellos	h	R	3.5	0.4	100.0		☐	50		☐	2		RESPROUT
58	Quercus phellos	g	R	3.0	4.1	260.0	1.2	☐	270	1.1	☐	3		
59	Platanus occidentalis	f	R	2.8	6.0	360.0	2.0	☐	410	2.2	☐			
60	Platanus occidentalis	e	R	2.6	7.3	170.0	0.2	☐	260	0.6	☐			
61	Platanus occidentalis	d	R	2.5	8.6	250.0	1.3	☐	300	1.0	☐			
62	Platanus occidentalis	c	R	2.3	9.9	165.0	0.4	☐	260	0.6	☐			
63	Platanus occidentalis	i	R	5.7	9.3	310.0	2.0	☐	410	2.8	☐			
64	Betula nigra	j	R	6.0	7.1	165.0	0.2	☐	240	0.6	☐			
65	Platanus occidentalis	l	R	6.3	5.2	270.0	1.4	☐	440	3.0	☐			
66	Platanus occidentalis	k	R	6.3	2.9	240.0	1.2	☐	400	1.5	☐			
68	Quercus phellos	m	R	6.6	1.0	192.0	0.4	☐	240	0.5	☐			
69	Platanus occidentalis	n	R	9.4	1.6	310.0	0.7	☐	460	3.0	☐			

 # stems: 14

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0003

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTE*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
SWEET GUM		—			☒	—			1		
		—				—					
		—				—					
		—				—					
		—				—					
		—				—					
		—				—					

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

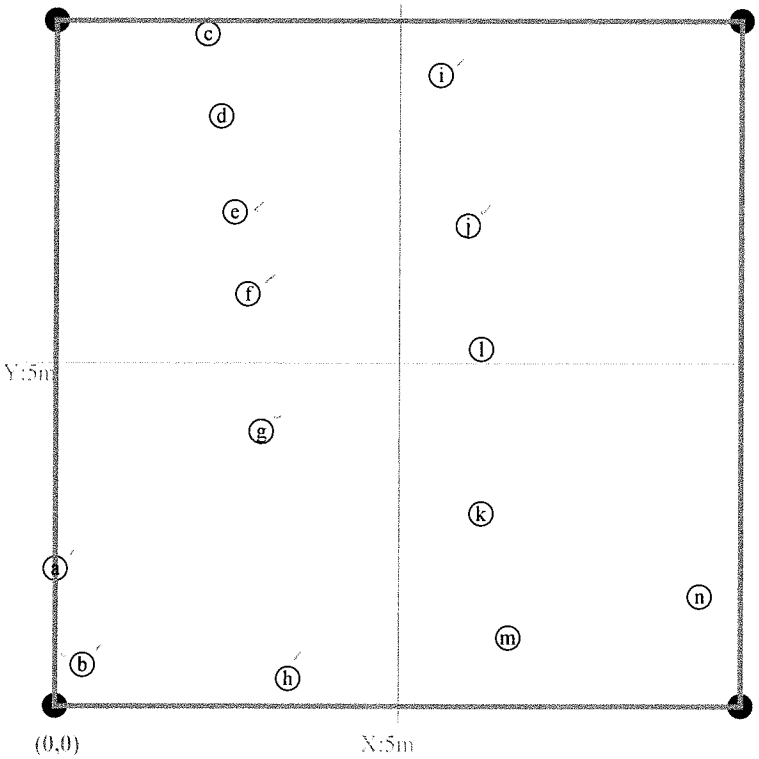
Form WS2, ver 9.1

Map of stems on plot 100046-01-0003

X-axis: 230 °

 # stems: 14
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0004

VMD Year (1-5): 5 Date: 10/4/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.911056 Datum: NAD27

Longitude or UTM-E: -79.939303 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 5

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
SF	
CB	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Oct 2022 Data Height 1cm*	Oct 2022 Data DBH 1 cm	NOT*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
75	Liriodendron tulipifera	a	R	0.3	0.3	390.0	1.3	☐	415	1.8	☐	3		
76	Betula nigra	g	R	0.4	2.6	300.0	0.7	☐	365	1.3	☐	1		
77	Betula nigra	b	R	0.3	4.1	400.0	2.1	☐	500	3.1	☐	1		
78	Quercus phellos	c	R	0.3	5.8	193.0	0.4	☐	320	1.0	☐	1		
79	Quercus nigra	d	R	0.3	7.4	136.0	*DBH?*	☐	205	0.5	☐	1		
80	Platanus occidentalis	e	R	0.2	9.1	450.0	3.1	☐	700	5.2	☐	↓		
83	Quercus nigra	i	R	3.1	7.1	128.0	*DBH?*	☐	X		☐	0		
84	Quercus phellos	h	R	3.1	5.7	50.0		☐	50		☐	2		
86	Quercus phellos	j	R	3.2	2.7	200.0	0.6	☐	280	1.0	☐	3		
88	Quercus phellos	k	R	6.5	0.2	121.0	*DBH?*	☐	118		☐	2	munched	
89	Quercus rubra	l	R	6.5	1.8	81.0		☐	95		☐	3		
90	Liriodendron tulipifera	m	R	6.4	3.4	400.0	2.2	☐	450	2.5	☐	3		
91	Liriodendron tulipifera	p	R	6.6	4.9	475.0	3.9	☐	600	4.4	☐	3		
92	Liriodendron tulipifera	n	R	6.5	6.7	*Missing*		☐	X		☐	0		
93	Quercus rubra	o	R	6.5	8.1	92.0		☐	X		☐	0		
94	Quercus rubra	s	R	9.7	8.7	90.0		☐	90		☐	2		
95	Platanus occidentalis	r	R	9.5	6.8	550.0	3.3	☐	800	5.0	☐	3		
96	Quercus alba	q	R	9.4	5.0	100.0		☐	105		☐	3		
1278	Quercus phellos	f	R	0.5	2.0	182.0	0.3	☐	205	0.5	☐	3		

 # stems: 19

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
LITU	1			370	2	3		

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0004

ID	Species	map char	source	X (m)	Y (m)	Oct 2022 Data ddh (mm)	Height (cm)	DBH (cm)	Notes*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
Sweet gum		—		10		—	2	2	2	3	
		—				—					
		—				—					
		—				—					
		—				—					
		—				—					
		—				—					

**Required if cut-off >10cm or subsample ? 100%.

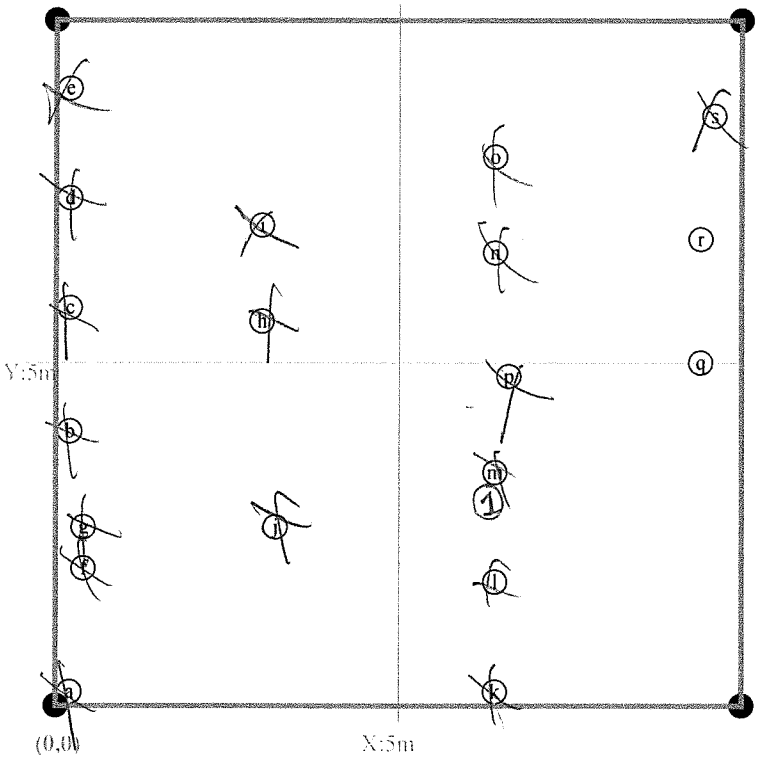
●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10 Form WS2, ver 9.1

Map of stems on plot 100046-01-0004

X-axis: 5°

 # stems: 19
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0005

VMD Year (1-5): 5 Date: / / - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.910343 Datum: NAD27

Longitude or UTM-E: -79.943873 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg):

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	NOCW**	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
100	Fraxinus pennsylvanica	ⓛ	R	9.1	1.0	100.0		☐	190	0.5	☐	3		
102	Quercus rubra	ⓙ	R	8.1	3.3	90.0		☐	160	0.3	☐	1		
104	Quercus nigra	ⓖ	R	5.8	1.1	165.0	0.2	☐	200	0.3	☐	1		
105	Quercus phellos	ⓐ	R	0.3	0.5	83.0		☐	135		☐	1		
106	Quercus rubra	ⓒ	R	1.4	1.3	74.0		☐	45		☐	2		RESPROUT
109	Quercus rubra	ⓕ	R	5.1	4.3	70.0		☐	100		☐	3		
111	Quercus phellos	ⓘ	R	7.4	6.3	135.0	*DBH?*	☐	220	1.1	☐	1		
113	Quercus phellos	ⓜ	R	9.9	8.6	90.0		☐	156	0.2	☐	1		
116	Quercus rubra	ⓗ	R	6.0	8.4	82.0		☐	125		☐	1		
121	Platanus occidentalis	ⓑ	R	0.4	6.2	300.0	3.1	☐	400	3.1	☐	1		
124	Platanus occidentalis	ⓓ	R	3.5	8.9	310.0	3.3	☐	489	4.3	☐	1		
125	Platanus occidentalis	ⓔ	R	4.4	9.7	250.0	2.0	☐	400	2.5	☐	1		
1937	Quercus phellos	ⓚ	R	8.1	3.4	100.0		☐	190	0.2	☐	1		

 # stems: *13* New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
Ave Resprouts				75				

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0005					Sep 2022 Data				THIS YEAR'S DATA						
ID	Species	map char	source	X (m)	Y (m)	ddh (mm)	Height (cm)	DBH (cm)	ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	Seedlings — Height Classes				Saplings — DBH			Trees — DBH		
		Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	Sub-Sapl	0-1 cm	1-2.5	2.5-	5-	=10 (write DBH)

**Required if cut-off >10cm or subsample ? 100%.

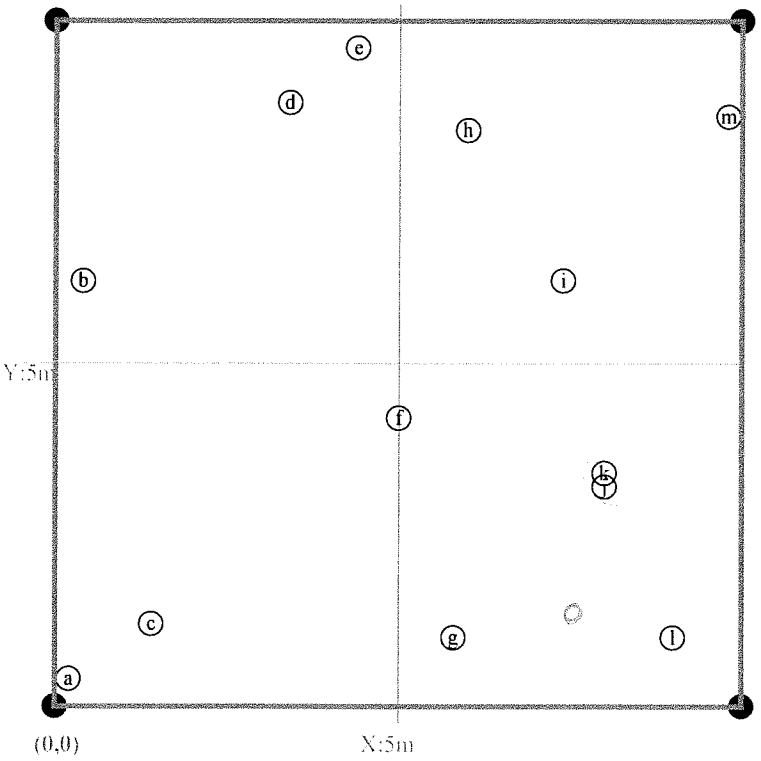
●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

Form WS2, ver 9.1

Map of stems on plot 100046-01-0005

Please measure bearing of X-axis and record at top of plot.

 # stems: 13
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0006

VMD Year (1-5): 5 Date: 10 / 4 / 2022 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.910194 Datum: NAD27

Longitude or UTM-E: -79.942787 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg):

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
a	
b	
b	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	Dead*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
128	Platanus occidentalis	c	R	0.4	0.6	320.0	2.1	☐	370	2.7	☐	3		
130	Quercus phellos	a	R	0.3	4.2	300.0	1.3	☐	340	2.5	☐			
131	Quercus phellos	b	R	0.3	6.0	210.0	0.7	☐	260	1.2	☐			
132	Quercus phellos	d	R	0.4	8.0	380.0	2.6	☐	390	2.7	☐			
133	Platanus occidentalis	i	R	2.3	9.4	260.0	1.1	☐	280	2.0	☐			
134	Quercus phellos	h	R	2.3	7.7	230.0	1.2	☐	230	1.0	☐			
135	Platanus occidentalis	g	R	2.3	6.0	360.0	2.2	☐	400	2.2	☐			
136	Platanus occidentalis	f	R	2.2	4.5	260.0	1.0	☐	0	1.7	☐			
137	Quercus phellos	e	R	2.3	2.5	165.0	0.3	☐	270	2.0	☐			
138	Fraxinus pennsylvanica	l	R	4.4	1.2	84.0		☐	120		☐			
139	Quercus phellos	m	R	4.4	2.9	200.0	0.6	☐	305	1.0	☐			
140	Quercus phellos	n	R	4.4	5.2	350.0	2.9	☐	450	4.5	☐			
141	Quercus phellos	k	R	4.3	7.2	300.0	2.6	☐	390	5.0	☐			
142	Quercus phellos	j	R	4.1	9.1	320.0	2.8	☐	390	5.0	☐			
143	Platanus occidentalis	r	R	6.7	8.3	400.0	3.2	☐	500	3.5	☐			
144	Platanus occidentalis	q	R	6.6	6.2	330.0	3.0	☐	400	3.1	☐			
146	Platanus occidentalis	o	R	6.5	2.5	260.0	2.3	☐	380	2.5	☐			
147	Platanus occidentalis	p	R	6.6	0.7	230.0	1.8	☐	370	3.0	☐			
148	Fraxinus pennsylvanica	t	R	8.8	0.5	133.0	*DBH?*	☐	170	0.3	☐			
149	Quercus phellos	s	R	8.7	2.0	154.0	0.2	☐	230	0.2	☐			
150	Quercus phellos - nigra	u	R	8.9	3.9	200.0	0.8	☐	300	0.5	☐			
151	Quercus phellos - nigra	v	R	9.0	5.3	92.0		☐	150	0.2	☐			
152	Quercus nigra	w	R	9.1	7.0	130.0	*DBH?*	☐	170	0.3	☐			
153	Fraxinus pennsylvanica	x	R	9.1	8.7	80.0		☐	130	0.2	☐			

 # stems: 24

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0006					Sep 2022 Data			NOTE*	THIS YEAR'S DATA						
ID	Species	map char	source	X (m)	Y (m)	ddh (mm)	Height (cm)	DBH (cm)		ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES				SAPLINGS — DBH			TREES — DBH		
		Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	Sub-Sapl	0-1 cm	1-2.5	2.5-	5-	=10 (write DBH)

**Required if cut-off >10cm or subsample ? 100%.

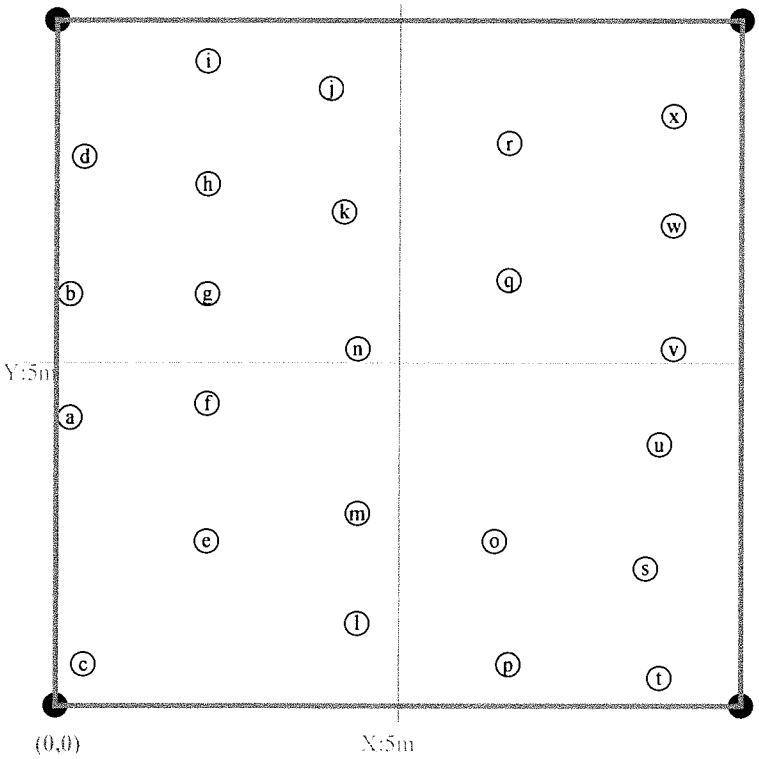
●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

Form WS2, ver 9.1

Map of stems on plot 100046-01-0006

Please measure bearing of X-axis and record at top of plot.

 # stems: 24
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0007

VMD Year (1-5): 5 Date: 10 / 12 /2022 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.910451 Datum: NAD27

Longitude or UTM-E: -79.941565 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 270

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
SCF	
SB	
JS	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	DOY*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
155	Quercus rubra	a	R	0.3	0.6	190.0	0.4	☐	260	1.8	☐	3		
156	Quercus phellos	b	R	1.0	3.0	42.0		☐	40		☐			
157	Fraxinus pennsylvanica	e	R	2.6	1.9	72.0		☐	122		☐			
158	Fraxinus pennsylvanica	h	R	4.2	0.5	65.0		☐	78		☐			
160	Quercus phellos	m	R	6.7	1.5	130.0	*DBH?*	☐	203	0.5	☐			
162	Quercus phellos	f	R	3.7	3.5	147.0	0.4	☐	220	2.0	☐			
165	Quercus phellos	c	R	1.2	8.8	118.0	*DBH?*	☐	155	0.3	☐			
166	Quercus phellos	d	R	2.4	7.8	106.0	*DBH?*	☐	130		☐			
167	Quercus phellos	g	R	3.7	7.0	136.0	*DBH?*	☐	172	0.5	☐			
168	Quercus phellos	j	R	5.0	5.9	100.0		☐	155	0.1	☐			
169	Quercus rubra	l	R	6.4	5.0	67.0		☐	120		☐			
172	Platanus occidentalis	o	R	8.2	5.9	350.0	1.7	☐	420	5.0	☐			
173	Platanus occidentalis	n	R	7.0	7.1	340.0	1.7	☐	450	4.5	☐			
174	Platanus occidentalis	k	R	5.7	8.4	270.0	1.1	☐	390	3.5	☐			
175	Platanus occidentalis	i	R	4.4	9.4	190.0	0.5	☐	290	2.0	☐			
176	Quercus nigra	p	R	9.1	9.3	240.0	0.9	☐	270	2.5	☐			

 # stems: 16

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
BENI				40				

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0007

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data: ddh (mm)	Height (cm)	DBH (cm)	NO-GO*	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

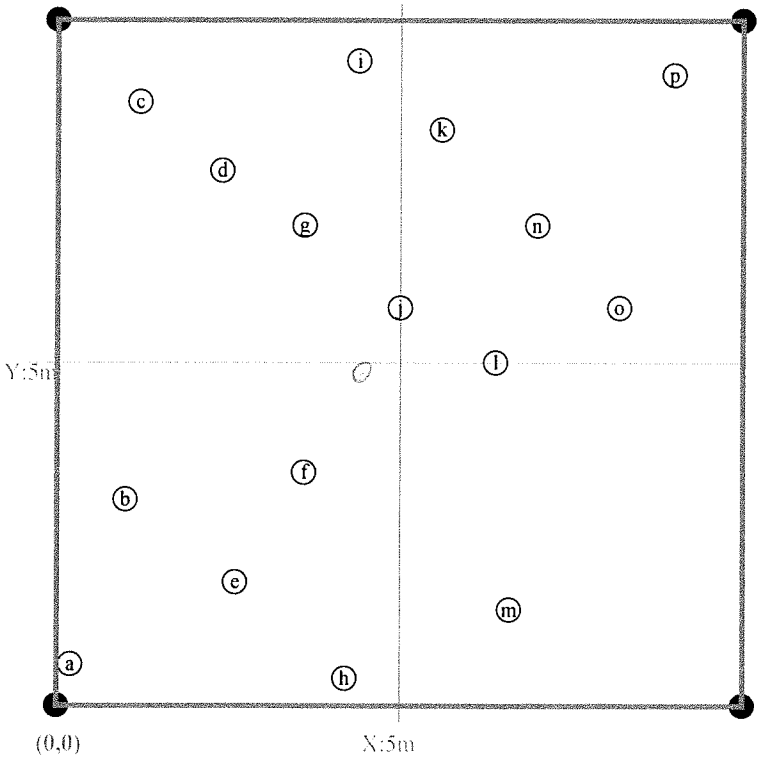
Form WS2, ver 9.1

Map of stems on plot 100046-01-0007

→ X-axis: 270°

 # stems: 16
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0008

VMD Year (1-5):	5	Date:	10/11/2023 - / /
Taxonomic Standard:			
Taxonomic Standard DATE:			
Latitude or UTM-N: (dec.deg. or m)	35.91011	Datum:	NAD27
Longitude or UTM-E:	-79.940711	UTM Zone:	17N
Coordinate Accuracy (m):	0.5	X-Axis bearing (deg):	105
Plot Dimensions: X:	10	Y:	10

☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
SCF	
SB	
JS	

Date last planted:
New planting date m/yy? /
☐ Check box if plot was not sampled, specify reason below
Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	Notes*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
179	Quercus rubra	ⓐ	R	0.5	0.2	52.0		☐	85		☐	3		
180	Quercus alba	ⓓ	R	1.8	0.6	*Missing*		☐	/		☐	3		
182	Quercus rubra	ⓗ	R	4.6	1.0	102.0	*DBH?*	☐	130		☐	1		
183	Quercus alba	ⓛ	R	5.9	1.1	162.0	0.3	☐	245	1.0	☐	3		
184	Quercus alba	ⓜ	R	7.5	1.2	150.0	0.2	☐	190	0.5	☐			
188	Quercus phellos	ⓙ	R	5.0	3.8	380.0	3.1	☐	405	6.0	☐			
190	Fraxinus pennsylvanica	ⓑ	R	0.6	3.1	*Missing*		☐	/		☐			
191	Quercus phellos	ⓒ	R	1.1	6.7	*Missing*		☐	/		☐			
192	Quercus phellos	ⓕ	R	2.6	7.0	116.0	*DBH?*	☐	145	0.1	☐			
193	Quercus phellos	ⓖ	R	4.0	7.4	200.0	1.3	☐	300	1.5	☐			
194	Quercus phellos	ⓚ	R	5.5	7.9	230.0	1.5	☐	270	1.5	☐			
195	Quercus alba	ⓝ	R	7.6	8.0	131.0	*DBH?*	☐	160	0.3	☐			
196	Quercus phellos	ⓞ	R	9.3	8.0	80.0		☐	140	0.1	☐			
197	Liriodendron tulipifera	ⓔ	R	1.8	9.8	115.0	*DBH?*	☐	206	0.4	☐			
1261	Quercus rubra	ⓘ	R	4.8	7.3	220.0	1.4	☐	350	2.0	☐			

 # stems: 15

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
Qu ph				450	4.5			

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0008

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTES*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
SWEET GUM											
DIVI											

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

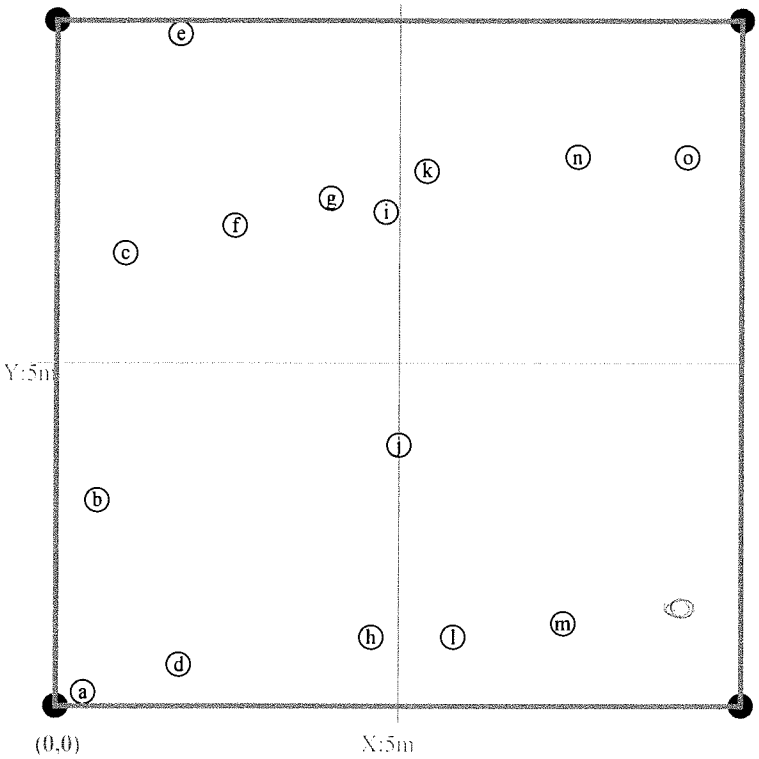
Form WS2, ver 9.1

Map of stems on plot 100046-01-0008

X-axis: 105 °

N

 # stems: 15
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0009

VMD Year (1-5): 5 Date: 10/4/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.910907 Datum: NAD27

Longitude or UTM-E: -79.935713 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 330

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
JS	
TO	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Oct 2022 Data Height 1cm*	Oct 2022 Data DBH 1 cm	NOTE*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
200	Quercus phellos	d	R	0.4	0.2	280.0	1.4	☐	320	3.2	☐	3		
201	Quercus rubra	a	R	0.3	1.8	50.0		☐	135		☐			
202	Quercus phellos	b	R	0.3	3.3	132.0	*DBH?*	☐	165	0.2	☐			
203	Quercus phellos	c	R	0.2	5.0	100.0		☐	130	—	☐			
205	Platanus occidentalis	e	R	1.3	8.9	164.0	0.4	☐	220	0.4	☐			
206	Quercus rubra	f	R	1.8	7.3	95.0		☐	105	—	☐			
207	Platanus occidentalis	g	R	2.1	5.7	250.0	0.9	☐	370	2.2	☐			
208	Platanus occidentalis	h	R	2.4	4.0	130.0	*DBH?*	☐	190	0.2	☐			
210	Platanus occidentalis	i	R	2.7	0.7	225.0	1.1	☐	320	0.7	☐			
213	Fraxinus pennsylvanica	j	R	4.7	3.1	180.0	0.6	☐	240	0.3	☐			
214	Platanus occidentalis	k	R	4.7	4.8	230.0	0.7	☐	320	1.6	☐			
216	Betula nigra	l	R	4.7	8.1	300.0	1.8	☐	300	2.0	☐			
217	Liriodendron tulipifera	m	R	4.6	9.9	80.0		☐	70	—	X	2		
218	Quercus phellos	o	R	7.6	9.8	195.0	0.7	☐	220	0.2	☐	3		
219	Quercus phellos	n	R	7.7	7.7	186.0	0.4	☐	220	0.7	☐			
220	Quercus phellos	r	R	8.0	6.0	112.0	*DBH?*	☐	180	1.5	☐			
222	Quercus nigra	q	R	8.0	2.0	200.0	0.8	☐	230	2.0	☐			
223	Quercus nigra	p	R	8.1	0.4	142.0	0.2	☐	220	1.0	☐			
224	Quercus rubra	s	R	9.8	8.5	128.0	*DBH?*	☐	170	0.2	☐			

 # stems: 19

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
FRPE		A		240				
FRPE		B		200				
FRPE		C		200				

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0009

ID	Species	map char	source	X (m)	Y (m)	Oct 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTES*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
FRPE		___		VIII		___		II			
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					

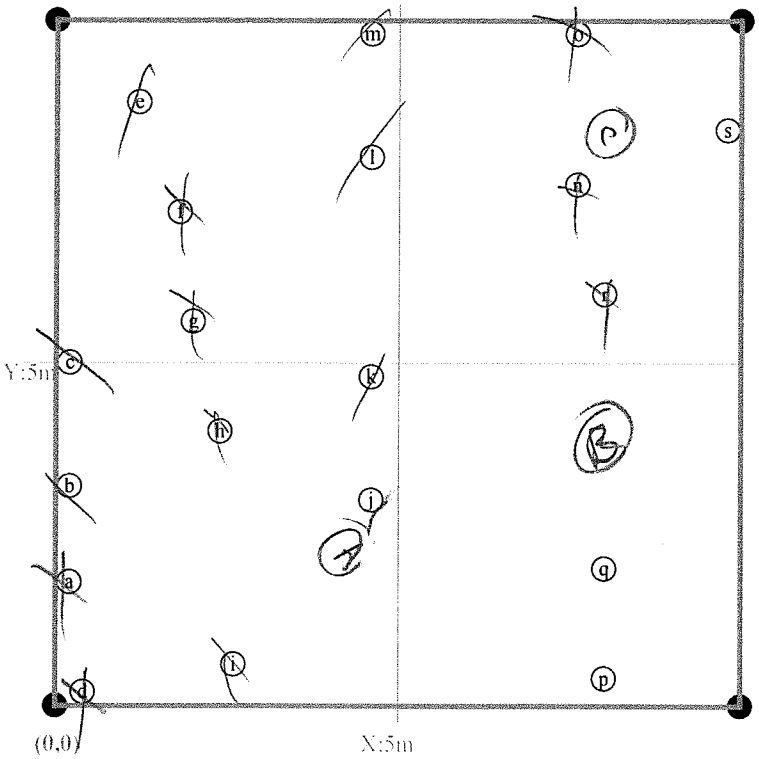
**Required if cut-off >10cm or subsample ? 100%. ●1 ●2 ●3 ●●4 ●●5 ●●6 ●●7 ●●8 ●9 ●10 Form WS2, ver 9.1

Map of stems on plot 100046-01-0009

→ X-axis: 330 °

 # stems: 19
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0010

VMD Year (1-5): 5 Date: 10/14/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.910821 Datum: NAD27

Longitude or UTM-E: -79.936612 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 220

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
SF	
SB	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Oct 2022 Data Height 1cm*	Oct 2022 Data DBH 1 cm	NOTE*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
226	Fraxinus pennsylvanica	ⓑ	R	0.4	0.4	103.0	*DBH?*	☐	105		☐	3		
227	Quercus rubra	ⓖ	R	3.3	0.1	58.0		☐	67		☐	3		
228	Quercus phellos	ⓕ	R	3.0	1.5	155.0	0.2	☐	178	.6	☐	3		
229	Quercus rubra	ⓓ	R	2.1	3.0	48.0		☐	105		☐	4		
230	Quercus rubra	ⓒ	R	1.6	4.6	96.0		☐	97		☐	3		
233	Quercus nigra	ⓐ	R	0.2	9.4	70.0		☐	111		☐	3		
235	Platanus occidentalis	ⓔ	R	2.7	7.5	260.0	1.6	☐	320	dw/f	☐	3		
239	Platanus occidentalis	ⓘ	R	6.4	1.1	410.0	2.2	☐	440	4.2	☐	3		
240	Quercus alba	ⓛ	R	8.6	0.8	*Missing*		☐	X		☐	3		
242	Quercus rubra	ⓙ	R	7.1	3.6	125.0	*DBH?*	☐	200	0.5	☐	3		
246	Quercus rubra	ⓗ	R	3.6	9.8	142.0	0.3	☐	196	0.8	☐	3		
247	Liriodendron tulipifera	ⓚ	R	7.4	9.9	109.0	*DBH?*	☐	185	0.6	☐	3		
249	Quercus nigra	ⓜ	R	9.0	6.9	73.0		☐	90		☐	3		
250	Quercus phellos	ⓝ	R	9.6	5.1	60.0		☐	105		☐	3		

 # stems: *14*

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0010

ID	Species	map char	source	X (m)	Y (m)	Oct 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NO-GO*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
SWT GUM									0	0	
DIVI										0	

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

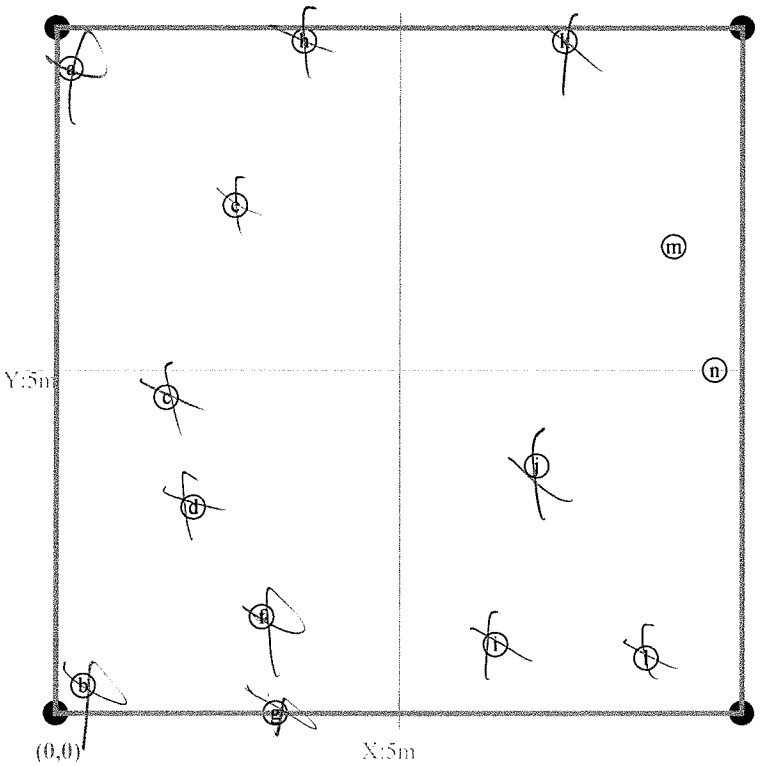
Form WS2, ver 9.1

Map of stems on plot 100046-01-0010

→ X-axis: 220 °

 # stems: 14
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0011

VMD Year (1-5): 5 Date: 10 / 4 /23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.910316 Datum: NAD27

Longitude or UTM-E: -79.936838 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 69

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
JD	
JS	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Oct 2022 Data Height 1cm*	Oct 2022 Data DBH 1 cm	NOTE**	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
256	Quercus rubra	(f)	R	7.5	0.6	20.0		☐	250		☐			
266	Quercus rubra	(c)	R	3.7	5.1	30.0		☐	60		☐			
267	Quercus rubra	(e)	R	5.3	5.3	60.0		☐	60	—	☐			
268	Quercus phellos	(g)	R	7.5	5.3	50.0		☐	65	—	☐			
269	Quercus phellos	(i)	R	9.0	5.3	74.0		☐	80	—	☐			
270	Fraxinus pennsylvanica	(h)	R	8.3	7.6	320.0	2.8	☐	400	3.0	☐			
272	Platanus occidentalis	(d)	R	4.3	7.0	320.0	2.1	☐	400	4.5	☐			
273	Platanus occidentalis	(b)	R	1.9	7.5	500.0	2.0	☐	550	3.5	☐			
274	Fraxinus pennsylvanica	(a)	R	0.2	7.7	300.0	1.6	☐	350	1.5	☐			

 # stems: 9

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH Sub-Sapl	0-1 cm	1-2.5	TREES — DBH 2.5-	5-	=10 (write DBH)
BENI		___				___	1				
LIST		___		11		___		1			
FRPE		___				___	11				
		___				___					
		___				___					
		___				___					
		___				___					

**Required if cut-off >10cm or subsample ? 100%. ●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ⊠10 Form WS2, ver 9.1

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

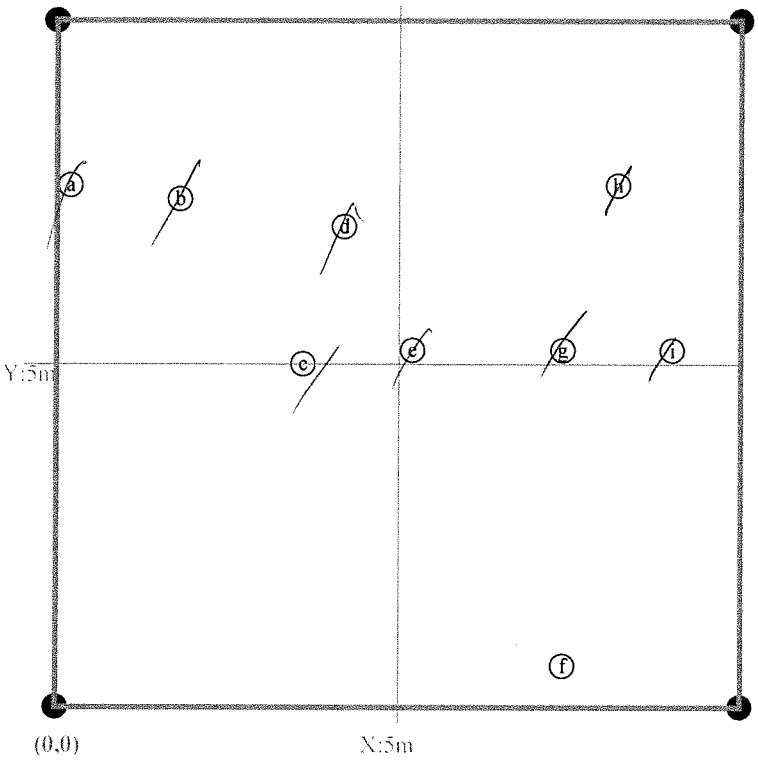
*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Map of stems on plot 100046-01-0011

X-axis: 69 °

N

 # stems: 9
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0012

VMD Year (1-5): 5 Date: 10/4/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.91088 Datum: NAD27

Longitude or UTM-E: -79.937278 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 24

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
SF	
SB	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Oct 2022 Data Height 1cm*	Oct 2022 Data DBH 1 cm	NOCO*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
277	Quercus rubra	ⓑ	R	1.8	0.1	168.0	0.3	☐	230	.4	☐	3		
278	Quercus phellos	ⓖ	R	5.7	0.1	116.0	*DBH?*	☐	200	.3	☐	3		
284	Platanus occidentalis	ⓒ	R	2.4	5.6	*Missing*		☐	X		☐	0		
285	Platanus occidentalis	ⓓ	R	3.8	4.5	340.0	1.9	☐	430	3.0	☐	3		
286	Platanus occidentalis	ⓔ	R	5.4	3.2	340.0	2.2	☐	410	3.0	☐	3		
287	Platanus occidentalis	ⓙ	R	6.8	2.2	300.0	1.0	☐	390	2.5	☐	3		
288	Liriodendron tulipifera	ⓛ	R	8.3	1.4	170.0	0.3	☐	320	1.3	☐	3		
290	Quercus nigra	ⓜ	R	8.8	4.2	200.0	0.6	☐	300	2.2	☐	3		
292	Liriodendron tulipifera	ⓗ	R	5.8	6.1	215.0	1.0	☐	320	2.0	☐	3		
296	Liriodendron tulipifera	ⓐ	R	0.2	9.9	85.0		☐	110		☐	3		
297	Fraxinus pennsylvanica	ⓕ	R	5.4	9.6	110.0	*DBH?*	☐	130		☐	2		
298	Fraxinus pennsylvanica	ⓘ	R	6.7	8.8	60.0		☐	90		☐	3		
299	Fraxinus pennsylvanica	ⓚ	R	8.0	8.1	50.0		☐	50		☐	2		
300	Fraxinus pennsylvanica	ⓝ	R	9.5	7.4	100.0		☐	210	.8	☐	3		

 # stems: *14*

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0012

ID	Species	map char	source	X (m)	Y (m)	Oct 2022 Data: ddh (mm)	Height (cm)	DBH (cm)	NOTES*	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
DIVI							1				
LIST			5				4	2		2	
BENI			5								

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

Fonn WS2, ver 9.1

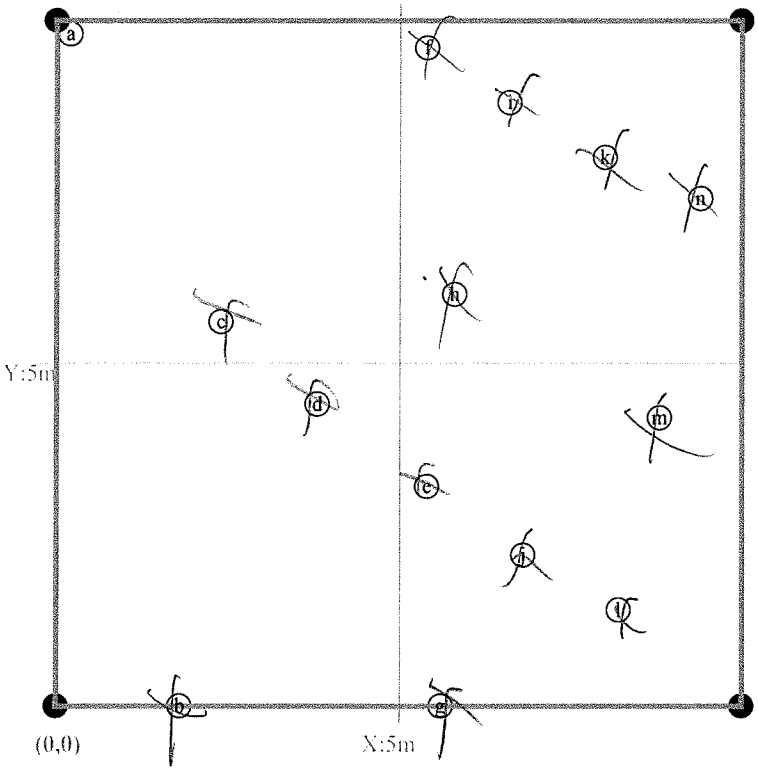
Map of stems on plot 100046-01-0012

X-axis: 24 °

N

 # stems: 14

map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0013

VMD Year (1-5): 5 Date: 10/4/22 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.910333 Datum: NAD27

Longitude or UTM-E: -79.93804 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 12

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Oct 2022 Data Height 1cm*	Oct 2022 Data DBH 1 cm	NOTES*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
302	Quercus rubra	a	R	0.3	0.5	210.0	0.6	☐	190	0.4	☐	3		
303	Quercus phellos	b	R	0.4	2.1	100.0		☐	105		☐			
307	Fraxinus pennsylvanica	c	R	0.9	8.0	150.0	0.3	☐	105		X			
308	Fraxinus pennsylvanica	d	R	1.1	9.6	102.0	*DBH?*	☐	105		☐			
310	Quercus alba	f	R	3.7	7.4	60.0		☐	80	—	☐			
313	Quercus phellos	e	R	3.7	2.3	63.0		☐	70	—	☐			
314	Quercus alba	g	R	3.8	0.7	65.0		☐	100	—	☐			
316	Quercus nigra	i	R	6.8	2.0	130.0	*DBH?*	☐	180	0.4	☐			
319	Quercus phellos	h	R	6.7	7.4	300.0	1.5	☐	320	1.2	☐			
321	Liriodendron tulipifera	j	R	6.9	9.9	340.0	1.9	☐	400	2.5	☐			
322	Quercus alba	o	R	9.9	7.8	270.0	1.4	☐	240	0.8	X			
323	Platanus occidentalis	n	R	9.7	6.3	160.0	0.2	☐	160	6.3	☐			
324	Platanus occidentalis	m	R	9.5	4.4	110.0	*DBH?*	☐	100	—	X			
325	Platanus occidentalis	l	R	9.5	2.6	170.0	0.4	☐	210	0.9	☐			
326	Platanus occidentalis	k	R	9.4	0.7	190.0	0.4	☐	220	0.9	☐			

 # stems: *15*

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0013

ID	Species	map char	source	X (m)	Y (m)	Oct 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTES*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
0 LIST		___		III	I	___	III				
BLACKCHERRY		___		I	I	___	I	I			
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					

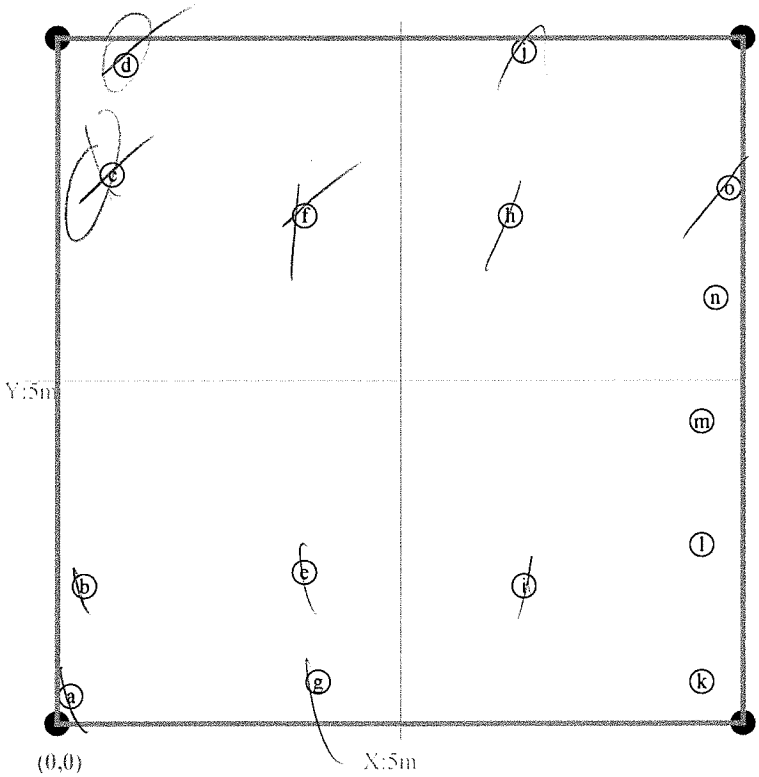
**Required if cut-off >10cm or subsample ? 100%. ●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10 Form WS2, ver 9.1

Map of stems on plot 100046-01-0013

→ X-axis: 12 °

 # stems: 15
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0014

VMD Year (1-5): 5 Date: 10 / 4 /2023 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.911109 Datum: NAD27

Longitude or UTM-E: -79.938301 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 278

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
SCF	
SB	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes: PLOT BEING TAKEN OVER BY [illegible]

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Oct 2022 Data Height 1cm*	Oct 2022 Data DBH 1 cm	NOCE*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
329	Quercus phellos	a	R	0.3	0.6	70.0		☐	80		☐	3		
330	Quercus rubra	d	R	1.7	0.6	62.0		☐	86		☐			
331	Quercus rubra	h	R	3.3	0.6	115.0	*DBH?*	☐	160	0.3	☐			
333	Quercus phellos	o	R	6.2	0.6	151.0	0.2	☐	200	0.7	☐			VINE
334	Quercus phellos	s	R	7.8	0.6	72.0		☐	90		☐			
337	Platanus occidentalis	t	R	7.8	3.0	112.0	*DBH?*	☐	113		☐			
338	Quercus phellos	p	R	6.2	3.0	93.0		☐	105		☐			
339	Quercus phellos	k	R	4.7	3.0	160.0	0.4	☐	210		☐			
340	Quercus phellos	i	R	3.2	3.0	310.0	2.6	☐	400	3.0	☐			
341	Quercus phellos	e	R	1.6	3.0	142.0	0.2	☐	20		☐	2		RESPROUT
342	Quercus phellos	c	R	0.8	5.8	215.0	1.2	☐	310	1.8	☐	3		
343	Quercus phellos	g	R	2.2	5.8	193.0	0.7	☐	260	1.3	☐			
345	Quercus phellos	n	R	5.7	5.8	195.0	1.6	☐	250	1.0	☐			
346	Quercus nigra	r	R	7.5	5.8	96.0		☐	250	1.0	☐			
351	Platanus occidentalis	j	R	3.5	8.0	185.0	0.4	☐	220	0.4	☐			
352	Quercus phellos	f	R	1.8	8.2	240.0	1.7	☐	310	1.8	☐			
353	Platanus occidentalis	b	R	0.4	8.3	265.0	1.3	☐	340	1.8	☐			
834	Quercus rubra	q	R	7.0	4.0	190.0	0.9	☐	210	1.0	☐			VINE
835	Quercus rubra	m	R	5.7	4.0	190.0	0.8	☐	265	1.5	☐			
836	Quercus rubra	l	R	4.8	3.5	215.0	1.3	☐	260	1.5	☐			

 # stems: 20 New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
Qu ru				210	1.3			

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0014

ID	Species	map char	source	X (m)	Y (m)	Oct 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTES*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)

**Required if cut-off >10cm or subsample ? 100%.

1 2 3 4 5 6 7 8 9 10

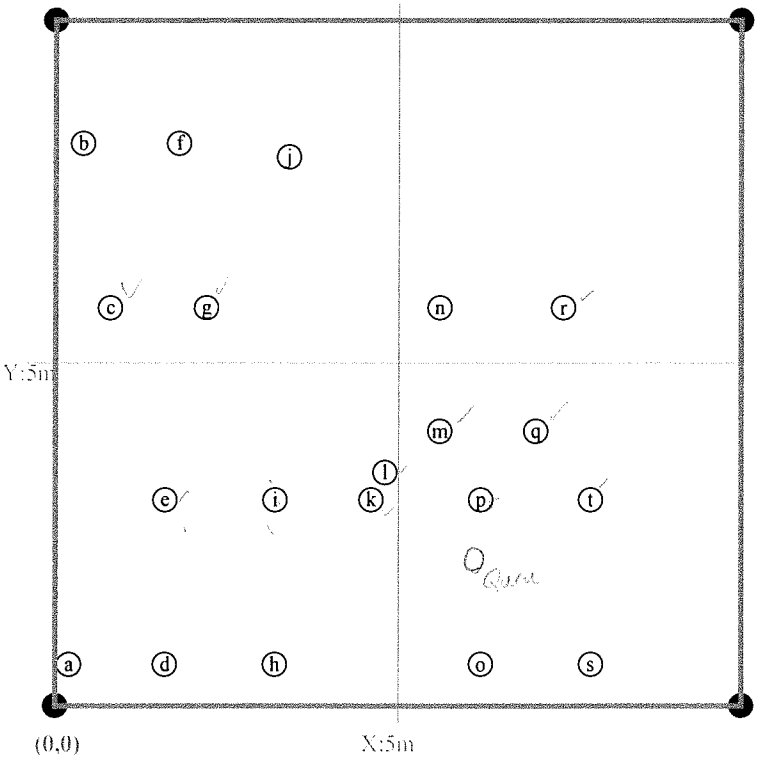
Form WS2, ver 9.1

Map of stems on plot 100046-01-0014

X-axis: 278 °

 # stems: 20
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0015

VMD Year (1-5): 5 Date: 10/4/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.910693 Datum: NAD27

Longitude or UTM-E: -79.93936 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 73

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
JD	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Oct 2022 Data Height 1cm*	Oct 2022 Data DBH 1 cm	NO-GO	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
356	Quercus phellos	c	R	2.4	1.0	41.0		☐	42	—	☐	3		
357	Quercus phellos	e	R	4.0	1.0	36.0		☐	50	—	☐			
358	Quercus phellos	i	R	6.0	1.0	45.0		☐	X	X	☐	X		
361	Fraxinus pennsylvanica	m	R	9.8	5.6	90.0		☐	160	0.2	☐			
363	Quercus rubra	j	R	6.0	5.6	70.0		☐	X	X	☐	X		
364	Quercus rubra	f	R	4.0	5.8	50.0		☐	X	X	☐	X		
367	~~Platanus occidentalis~~ FRPE	a	R	0.2	9.8	130.0	*DBH?*	☐	120	0.2	☐			
368	Platanus occidentalis	b	R	1.3	9.8	600.0	4.2	☐	700	5.0	☐			
369	Platanus occidentalis	d	R	2.7	9.8	325.0	2.9	☐	350	0.5	☐			
370	Platanus occidentalis	g	R	4.2	9.8	450.0	3.2	☐	500	1.8	☐			
371	Platanus occidentalis	h	R	5.5	9.8	200.0	1.1	☐	210	0.2	☐			
372	Platanus occidentalis	k	R	7.1	9.8	220.0	1.4	☐	230	0.3	☐			
373	Platanus occidentalis	l	R	8.5	9.8	280.0	1.3	☐	300	0.5	☐			
374	Quercus phellos	n	R	9.9	9.8	80.0		☐	85	—	☐			

 # stems: 14

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
FRPE	1			120				
FRPE	2			160				
FRPE	3			210				

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0015

ID	Species	map char	source	X (m)	Y (m)	Oct 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTES*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
FRPE		—	II	III	I	—	III				
LIST		—			IIII	—	II				
AURU		—		I		—					
		—				—					
		—				—					
		—				—					
		—				—					

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

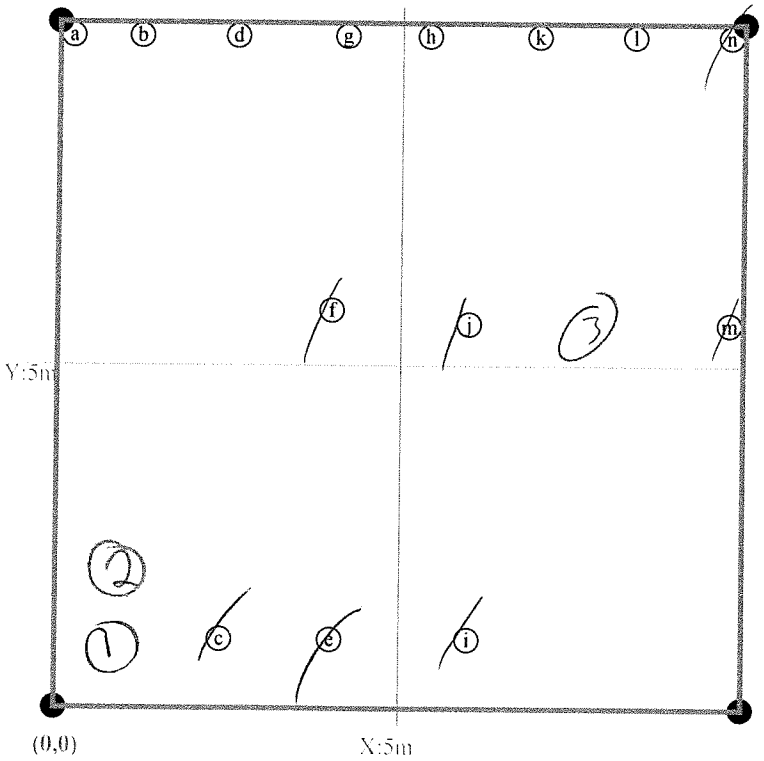
Form WS2, ver 9.1

Map of stems on plot 100046-01-0015

X-axis: 73 °

N

 # stems: 14
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0016

VMD Year (1-5): 5 Date: 10/4/2022 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.909043 Datum: NAD27

Longitude or UTM-E: -79.93986 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 180

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
JD	
SF	
SB	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	NOTES	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
377	Quercus phellos	a	R	0.6	0.5	170.0	0.3	☐	200	0.3	☐	3		
379	Quercus rubra	b	R	1.0	8.8	40.0		☐	45	—	☐	1		
380	Quercus rubra	c	R	1.2	7.2	*Missing*		☐	X	X	☐	X		
382	Quercus rubra	d	R	2.2	3.7	*Missing*		☐	X	X	☐	X		
383	Quercus rubra	f	R	3.2	0.6	60.0		☐	65	—	☐			
385	Quercus alba	j	R	5.8	2.4	115.0	*DBH?*	☐	155	0.3	☐			
386	Quercus alba	i	R	5.1	4.1	215.0	0.8	☐	260	1.2	☐			
387	Liriodendron tulipifera	h	R	4.4	5.8	240.0	1.3	☐	330	2.0	☐			
388	Quercus alba	g	R	3.7	7.5	165.0	0.2	☐	240	1.1	☐			
389	Quercus alba	e	R	3.0	9.5	130.0	*DBH?*	☐	210	1.2	☐			
390	Quercus phellos	k	R	6.6	9.9	185.0	0.3	☐	230	1.2	☐			
391	Quercus phellos	l	R	6.9	8.3	142.0	0.1	☐	200	0.4	☐			
392	Quercus phellos	m	R	7.4	6.2	155.0	0.2	☐	195	0.3	☐			
393	Quercus alba	n	R	8.0	4.3	50.0		☐	205	0.5	☐			
394	Quercus phellos	o	R	8.7	2.3	80.0		☐	40	—	☒			
395	Quercus phellos	p	R	9.3	0.9	80.0		☐	X	X	☐	X		
396	Quercus phellos	q	R	9.4	9.4	260.0	1.1	☐	320	1.5	☐			

 # stems: 17

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0016

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data: ddh (mm)	Height (cm)	DBH (cm)	NOTES*	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
LIST											
DIVI				1				1			

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

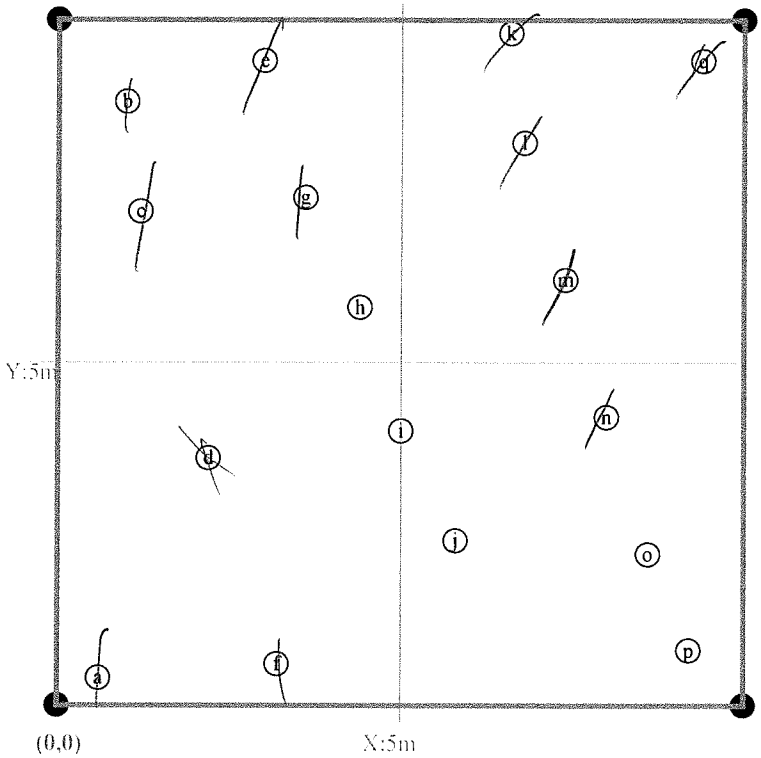
Form WS2, ver 9.1

Map of stems on plot 100046-01-0016

X-axis: 180 °

N

 # stems: 17
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0017

VMD Year (1-5): 5 Date: 10/4/2022 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.909581 Datum: NAD27

Longitude or UTM-E: -79.942229 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 0

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
AF	
JD	
SB	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	NOT*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
400	Quercus phellos	d	R	0.6	3.6	157.0	0.2	☐	220	0.9	☐	3		
401	Quercus rubra	e	R	0.6	6.5	40.0		☐	40		☐	3		
402	Quercus rubra	a	R	0.5	8.1	90.0		☐	90		☐	1		
403	Quercus phellos	b	R	0.5	9.9	108.0	*DBH?*	☐	120	0.5	☐	3		
404	Quercus alba	j	R	3.5	9.7	*Missing*		☐	150	0.2	☐	1		BROKEN AT
405	Quercus alba	k	R	3.6	7.9	75.0		☐	80	0.3	☐			
407	Quercus alba	h	R	3.5	4.4	60.0		☐	101		☐			
408	Quercus alba	g	R	3.3	2.5	140.0	0.1	☐	176	0.2	☐			
409	Quercus alba	f	R	3.2	0.7	116.0	*DBH?*	☐	210	1.0	☐			
410	Quercus alba	l	R	5.9	1.2	240.0	0.9	☐	340	2.5	☐			
413	Quercus rubra	o	R	5.8	9.9	*Missing*		☐	90		☐			RESPROUT
418	Quercus phellos	r	R	9.0	9.9	200.0	1.0	☐	320	1.1	☐			
419	Betula nigra	s	R	9.8	8.5	370.0	1.4	☐	400	3.7	☐			
420	Quercus rubra	p	R	8.2	0.7	78.0		☐	120		☐			
1644	Quercus alba	c	R	0.6	0.5	30.0		☐	50		☐			
1645	Quercus rubra	i	R	3.5	6.5	56.0		☐	99		☐			
1646	Quercus rubra	m	R	5.9	2.6	63.0		☐	95		☐			
1647	Quercus rubra	n	R	5.9	6.5	55.0		☐	145		☐			
1648	Quercus rubra alive	q	R	8.3	2.5	50.0		☐	76		☐			

 # stems: *19*

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
Quercus nigra				60				

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0017					Sep 2022 Data			NOTES	THIS YEAR'S DATA						
ID	Species	map char	source	X (m)	Y (m)	ddh (mm)	Height (cm)	DBH (cm)		ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES				SAPLINGS — DBH			TREES — DBH		
		Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	Sub-Sapl	0-1 cm	1-2.5	2.5-	5-	=10 (write DBH)
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●●4 ●●5 ●●6 ●●7 ●●8 ●●9 ●●10

Form WS2, ver 9.1

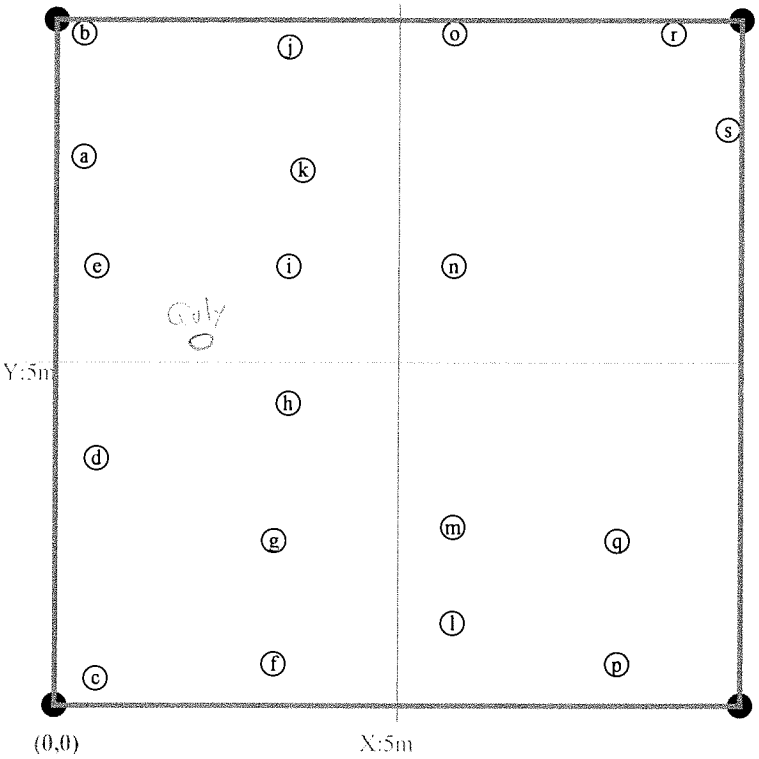
Map of stems on plot 100046-01-0017

X-axis: 0°

 # stems: 19

map size:

N *small*



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0018

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Sep 2022 Data Height (cm)	Sep 2022 Data DBH (cm)	THIS YEAR'S DATA ddh (mm)	THIS YEAR'S DATA Height (cm)	THIS YEAR'S DATA DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0018

VMD Year (1-5): 5 Date: 9/21/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.873122 Datum: NAD27

Longitude or UTM-E: -79.856008 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 282

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
JS	
SB	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
730	Platanus occidentalis	o	R	9.0	0.4	135.0	*DBH?*	107	.2	☐	3		
732	Quercus alba	l	R	7.2	2.2	67.0		66		☐	3		
733	Quercus alba	j	R	5.7	1.9	90.0		108		☐	3		
734	Quercus alba	f	R	4.3	1.7	60.0		91		☐	2		
735	Quercus alba	e	R	3.0	1.3	62.0		80		☐	2	browsed	
736	Quercus alba	c	R	1.8	1.0	60.0		83		☐	2		
738	Quercus rubra	a	R	0.1	3.6	119.0	*DBH?*	131		☐	3		
741	Liriodendron tulipifera	g	R	4.2	4.6	45.0		94		☐	3		
742	Quercus rubra	i	R	5.5	5.0	78.0		70		☐	2	Browsed	
743	Quercus phellos	k	R	6.7	5.2	153.0	0.1	215	.3	☐	3		
744	Liriodendron tulipifera	m	R	8.0	5.7	69.0		105		☐	3		
745	Platanus occidentalis	p	R	9.6	5.9	*Missing*		45		☐	2		
746	Platanus occidentalis	n	R	8.2	8.3	130.0	*DBH?*	185	.2	☐	3		
748	Quercus phellos	h	R	5.1	7.7	140.0	0.1	212	.4	☐	3		
750	Quercus rubra	d	R	2.1	7.0	75.0		95		☐	2	Browsed	
752	Platanus occidentalis	b	R	1.0	9.4	122.0	*DBH?*	176	.2	☐	3		

 # stems: *16*

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

Plot (continued): 100046-01-0018

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data: ddh (mm)	Height (cm)	DBH (cm)	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

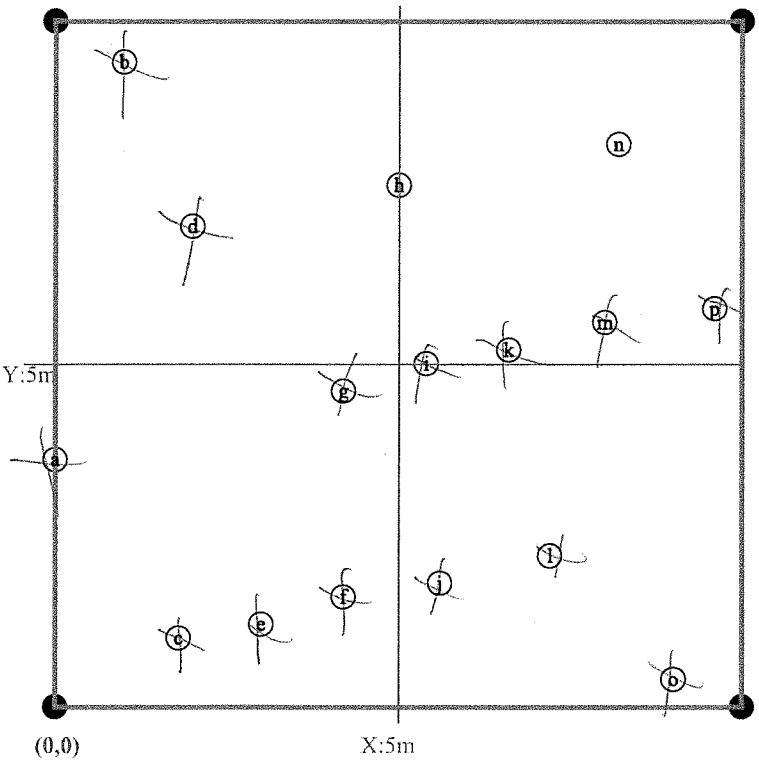
Form WS2, ver 9.1

Map of stems on plot 100046-01-0018

X-axis: 282 °

 # stems: 16
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0019

VMD Year (1-5): 5 Date: 9/21/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.872651 Datum: NAD27

Longitude or UTM-E: -79.856581 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 282

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: JS, SB Role:

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
756	Quercus alba	t	R	9.8	0.9	130.0	*DBH?*	203	.2	☐	3		
757	Quercus rubra	o	R	7.0	1.5	20.0		29		☐	2	BRO	Used
758	Quercus rubra	k	R	5.5	1.9	30.0		32		☐	3		
759	Quercus alba	g	R	3.7	2.3	123.0	*DBH?*	156	.1	☐	3		
761	Quercus alba	a	R	0.7	2.8	112.0	*DBH?*	192	.1	☐	3		
763	Quercus phellos	d	R	2.7	5.3	215.0	0.4	280	1.2	☐	3		
764	Quercus rubra	h	R	4.3	5.0	135.0	*DBH?*	215	1.5	☐	3		
778	Quercus phellos	l	R	5.7	4.6	240.0	0.9	360	3.0	☐	3		
765	Quercus nigra	p	R	7.1	4.2	175.0	0.3	290	1.5	☐	3		
766	Betula nigra	r	R	8.7	3.5	300.0	1.3	390	3.0	☐	3		
767	Platanus occidentalis	s	R	9.4	7.4	260.0	1.2	350	2.0	☐	3		
768	Quercus alba	q	R	7.5	8.0	120.0	*DBH?*	163	.8	☐	3		
769	Platanus occidentalis	m	R	5.8	8.0	195.0	0.7	255	1.0	☐	3		
770	Platanus occidentalis	j	R	4.4	8.0	310.0	1.6	400	3.0	☐	3		
771	Quercus rubra	e	R	2.6	7.8	40.0		84		☐	3		
772	Liriodendron tulipifera	b	R	1.1	7.8	87.0		97		☐	3		
773	Fraxinus pennsylvanica	c	R	1.2	8.7	100.0		120		☐	3		
774	Fraxinus pennsylvanica	f	R	2.6	8.7	129.0	*DBH?*	140	.1	☐	3		
775	Fraxinus pennsylvanica	i	R	4.2	8.7	76.0		90		☐	2		
776	Fraxinus pennsylvanica	n	R	6.3	8.7	83.0		85		☐	2	BRO	Used

 # stems: 20

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
QUAL	R			185				

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

Plot (continued): 100046-01-0019

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data: ddh (mm)	Height (cm)	DBH (cm)	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					

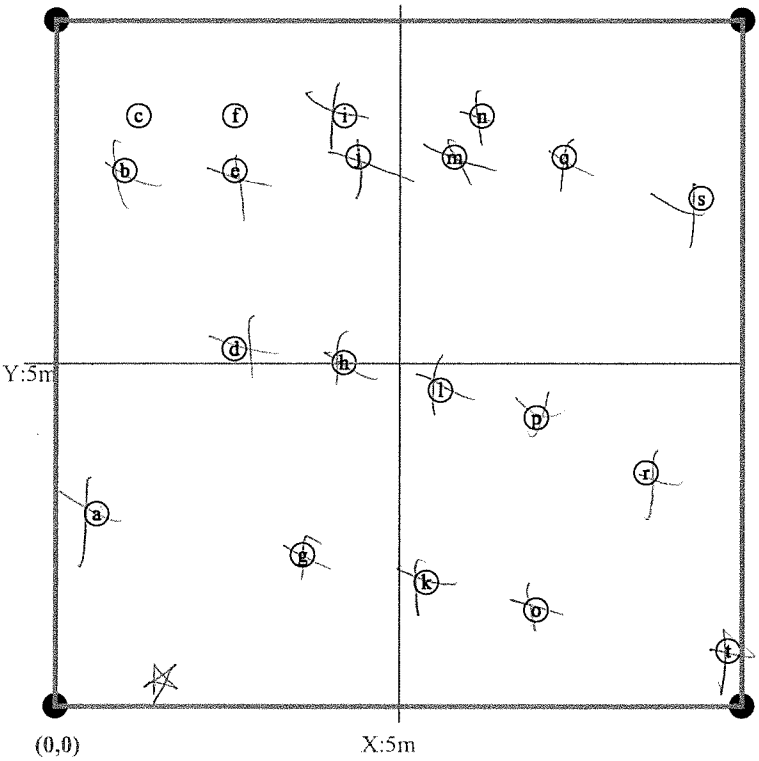
**Required if cut-off >10cm or subsample ? 100%. ●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10 Form WS2, ver 9.1

Map of stems on plot 100046-01-0019

X-axis: 282 °

 # stems: 20
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0020

VMD Year (1-5): 5 Date: 9/21/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.872895 Datum: NAD27

Longitude or UTM-E: -79.857167 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 177

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
JS	
SB	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
784	Quercus phellos	a	R	0.3	7.1	101.0	*DBH?*	161	.1	☐	3		
792	Platanus occidentalis	c	R	3.7	4.7	125.0	*DBH?*	194	.2	☐	3		
793	Platanus occidentalis	d	R	3.7	6.1	130.0	*DBH?*	196	.2	☐	3		
795	Quercus phellos	b	R	3.4	9.7	150.0	0.2	260	.8	☐	3		
796	Betula nigra	g	R	6.2	9.9	143.0	0.1	230	.1	☐	3		
797	Quercus rubra	f	R	6.3	8.7	40.0		38		☐	2	browsed	
798	Quercus nigra	e	R	6.3	6.4	80.0		93		☐	3		
799	Quercus phellos	h	R	6.7	2.6	160.0	0.3	230	.5	☐	3		
800	Quercus phellos	i	R	6.9	1.1	151.0	0.2	240	.5	☐	3		
801	Betula nigra	l	R	8.4	1.3	165.0	0.2	190	.3	☐	3		
802	Betula nigra	k	R	7.8	5.1	150.0	0.2	203	.4	☐	3		
803	Quercus rubra	j	R	7.4	9.3	25.0		39		☐	2		
804	Platanus occidentalis	n	R	8.8	9.1	165.0	0.3	191	.8	☐	3		
805	Platanus occidentalis	m	R	8.8	7.0	230.0	1.0	310	2.5	☐	3		
807	Platanus occidentalis	o	R	9.4	2.4	112.0	*DBH?*	158	.8	☐	3		
808	Platanus occidentalis	q	R	9.8	0.7	60.0		75		☐	3		
809	Platanus occidentalis	r	R	9.9	5.0	165.0	0.4	240	.8	☐	3		
810	Betula nigra	p	R	9.7	8.4	170.0	0.3	230	.5	☐	3		

 # stems: 18

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
FRPE	1			95				
FRPE	2			69				
FRPE	3			90				

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0020

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data: ddh (mm)	Height (cm)	DBH (cm)	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
FRPE					2						
DIVI				1							

**Required if cut-off >10cm or subsample ? 100%.

1 2 3 4 5 6 7 8 9 10

Form WS2, ver 9.1

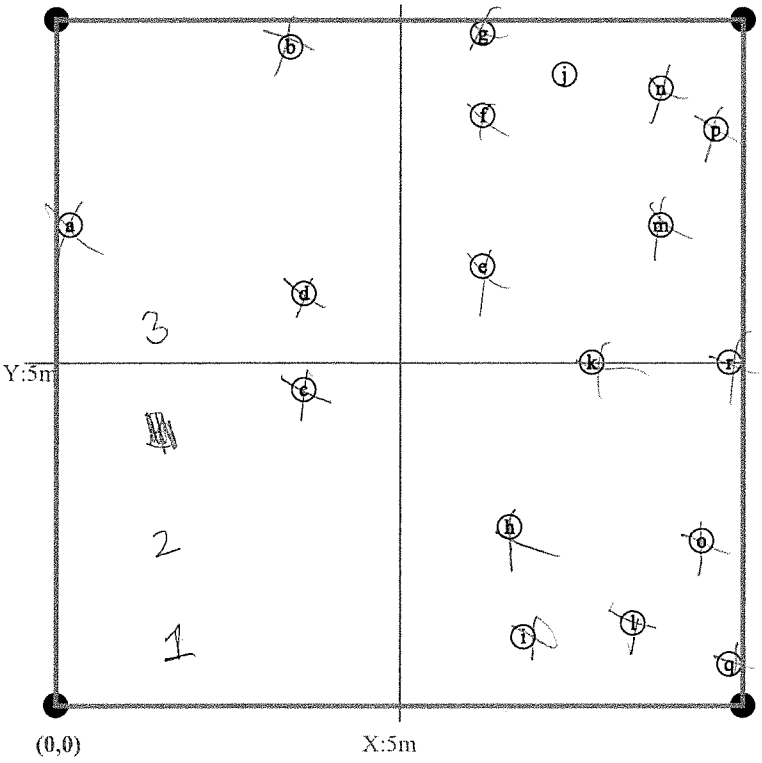
Map of stems on plot 100046-01-0020

X-axis: 177°

N

 # stems: 18

map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0021

VMD Year (1-5): 5 Date: 9/21/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.872564 Datum: NAD27

Longitude or UTM-E: -79.856257 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 296

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: JS, SB Role:

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
812	Platanus occidentalis	ⓛ	R	5.7	0.6	101.0	*DBH?*	144	.1	☐	3		
813	Quercus alba	ⓠ	R	7.0	1.2	117.0	*DBH?*	180	.2	☐	3		
814	Quercus alba	ⓡ	R	7.9	1.7	70.0		118		☐	3		
815	Quercus rubra	ⓣ	R	9.1	2.4	47.0		57		☐	2		
816	Betula nigra	ⓢ	R	8.9	5.0	380.0	3.0	446	4.5	☐	3		
818	Betula nigra	ⓝ	R	6.8	3.8	170.0	0.2	250	1.0	☐	3		
819	Fraxinus pennsylvanica	ⓜ	R	5.7	3.0	50.0		53		☐	3		
820	Fraxinus pennsylvanica	ⓘ	R	4.5	2.4	30.0		45		☐	3	Brwsed	
822	Betula nigra	ⓓ	R	2.0	1.7	230.0	0.5	340	2.5	☐	3		
824	Quercus phellos	ⓑ	R	1.0	3.7	250.0	1.0	290	3.0	☐	3		
825	~~Quercus phellos~~ Nyssa	ⓔ	R	2.2	4.2	70.0		70		☐	3	brwsed	
826	Quercus alba	ⓖ	R	3.3	4.8	67.0		74		☐	3	brwsed	
827	Quercus phellos	ⓙ	R	4.5	5.4	220.0	0.5	265	2.0	☐	3		
829	Quercus phellos	ⓞ	R	6.8	6.7	54.0		82		☐	3		
832	Betula nigra	ⓟ	R	6.9	9.6	320.0	1.8	460	4.0	☐	3		
833	Quercus alba	ⓚ	R	5.2	8.8	87.0		110		☐	3		
835	Quercus rubra	ⓐ	R	0.5	7.1	127.0	*DBH?*	205	1.0	☐	3		
836	Betula nigra	ⓒ	R	1.4	7.7	245.0	1.0	320	3.5	☐	3		
837	Betula nigra	ⓕ	R	2.2	8.9	245.0	0.8	318	2.5	☐	3		
838	Quercus alba	ⓗ	R	3.3	9.7	60.0		91		☐	3		

 # stems: 20

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
FRPE	1			58				
DIVI	2			34				
FRPE	3			90				

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

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Plot (continued): 100046-01-0021

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data: ddh (mm)	Height (cm)	DBH (cm)	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

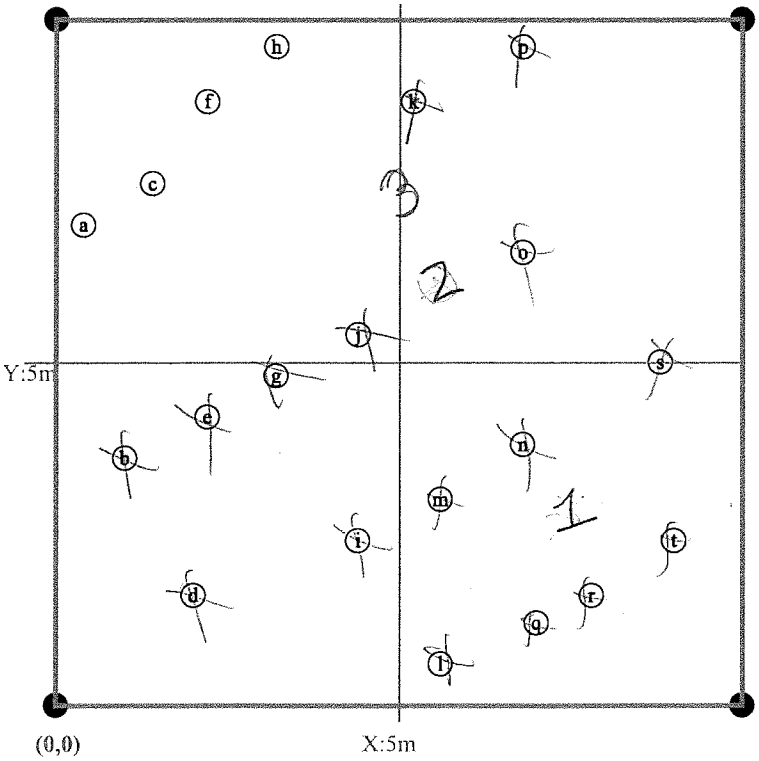
Form WS2, ver 9.1

Map of stems on plot 100046-01-0021

X-axis: 296 °

 # stems: 20
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0022

VMD Year (1-5): 5 Date: 9/21/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.87211 Datum: NAD27

Longitude or UTM-E: -79.857371 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 145

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
SB	
JS	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
840	Platanus occidentalis	ⓓ	R	2.4	9.2	145.0	0.1	198	.5	☐	3		
841	Platanus occidentalis	ⓒ	R	1.5	8.0	200.0	0.4	260	1.0	☐	3		
843	Quercus nigra	ⓐ	R	0.5	0.5	70.0		96		☐	3		
844	Quercus nigra	ⓑ	R	1.5	2.0	150.0	0.2	730	.5	☐	3		
846	Quercus phellos	ⓔ	R	3.5	5.0	105.0	*DBH?*	206	.3	☐	3		
848	Quercus phellos	ⓕ	R	5.5	7.9	220.0	0.4	290	2.5	☐	3		
849	Quercus phellos	ⓗ	R	6.4	9.5	90.0		180	.2	☐	3		
850	Fraxinus pennsylvanica	ⓛ	R	9.4	8.7	67.0		103		☐	3		
852	Liriodendron tulipifera	ⓙ	R	8.0	6.3	25.0		X		☐			
858	Quercus phellos	ⓘ	R	7.3	0.6	35.0		70		☐	3		
859	Quercus phellos	ⓚ	R	8.2	1.8	75.0		130	.1	☐	3		
1742	Quercus phellos	ⓖ	R	5.7	0.3	165.0	0.3	220	.4	☐	3		

 # stems: *12*

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
LITU	1			49				

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

Plot (continued): 100046-01-0022

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data: ddh (mm)	Height (cm)	DBH (cm)	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
CEOC		—				—					
FRPE		—				—					
LIST		—				—					
		—				—					
		—				—					
		—				—					
		—				—					

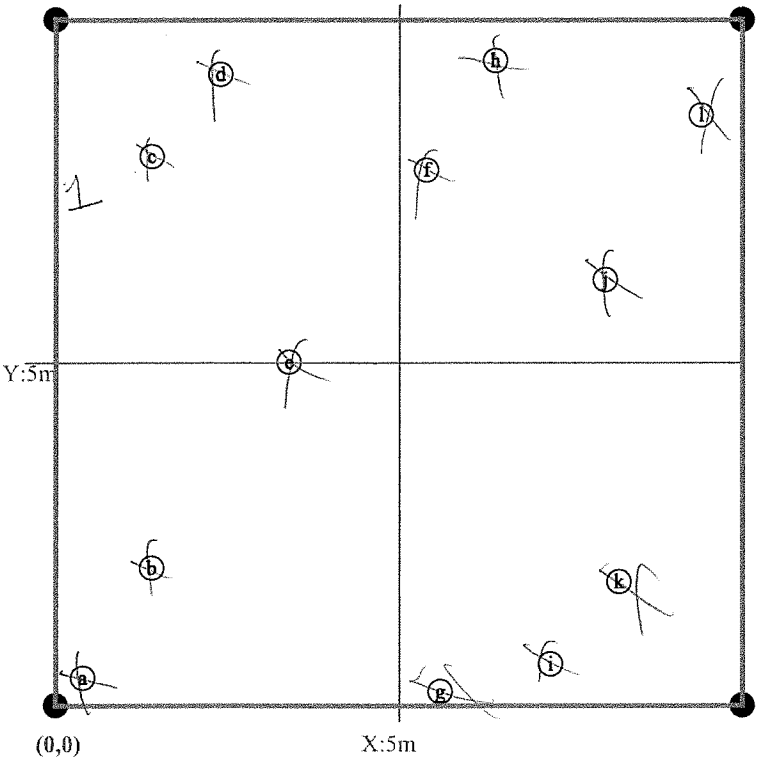
**Required if cut-off >10cm or subsample ? 100%. ●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10 Form WS2, ver 9.1

Map of stems on plot 100046-01-0022

X-axis: 145 °

N

 # stems: 12
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0023

VMD Year (1-5): 5 Date: 9/21/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.871967 Datum: NAD27

Longitude or UTM-E: -79.858474 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 240

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
JS	
SB	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
863	Fraxinus pennsylvanica	z	R	9.7	0.5	51.0		71		☐	3		
864	Quercus phellos	A	R	9.8	3.6	88.0		102	.2	☐	3		
866	Liriodendron tulipifera	w	R	8.2	2.7	*Missing*		X		☐	0		
867	Liriodendron tulipifera	u	R	7.4	1.9	61.0		X		☐	0		
868	Platanus occidentalis	r	R	6.5	1.2	100.0		120		☐	3		
869	Platanus occidentalis	o	R	5.8	0.6	71.0		86		☐	2		
870	Quercus phellos	a	R	0.6	0.4	141.0	0.1	193	.1	☐	3		
871	Quercus phellos	d	R	1.7	1.1	69.0		135		☐	3		
872	Platanus occidentalis	g	R	2.8	1.8	90.0		108		☐	3		
873	Quercus phellos	j	R	3.9	2.5	90.0		190	.2	☐	3		
874	Quercus phellos	m	R	4.8	3.2	110.0	*DBH?*	160	.2	☐	3		
875	Platanus occidentalis	p	R	5.9	4.2	120.0	*DBH?*	170	.5	☐	3		
876	Quercus phellos	s	R	6.7	5.1	110.0	*DBH?*	192	.3	☐	3		
877	Platanus occidentalis	v	R	7.7	5.9	96.0		131		☐	3		
878	Quercus phellos	x	R	8.6	6.8	103.0	*DBH?*	192	.4	☐	3		
879	Quercus phellos	y	R	9.3	7.7	70.0		121		☐	3		
880	Platanus occidentalis	B	R	9.8	8.1	80.0		108		☐	3		
881	Fraxinus pennsylvanica	t	R	7.0	9.8	47.0		56		☐	3		
882	Betula nigra	q	R	6.1	8.9	*Missing*		X		☐	0		
883	Quercus alba	n	R	5.4	7.9	76.0		95		☐	3		
884	Quercus rubra	l	R	4.7	7.0	105.0	*DBH?*	172	.1	☐	3		
885	Betula nigra	k	R	3.8	6.0	90.0		146	.1	☐	3		
886	Betula nigra	h	R	3.0	5.4	110.0	*DBH?*	152	.1	☐	3		
887	Quercus alba	e	R	2.2	4.4	62.0		91		☐	3		
888	Quercus alba	c	R	1.1	3.5	80.0		92		☐	3		
889	Quercus phellos	b	R	0.7	6.6	73.0		160	.1	☐	3		
892	Quercus phellos	f	R	2.6	8.6	108.0	*DBH?*	173	.5	☐	3		
893	Quercus phellos	i	R	3.2	9.3	105.0	*DBH?*	203	.5	☐	3		

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

Plot (continued): 100046-01-0023					Sep 2022 Data				THIS YEAR'S DATA						
ID	Species	map char	source	X (m)	Y (m)	ddh (mm)	Height (cm)	DBH (cm)	ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

 # stems: 28 New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES				SAPLINGS — DBH			TREES — DBH		
		Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	Sub-Sapl	0-1 cm	1-2.5	2.5-	5-	=10 (write DBH)
FRPE		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					

**Required if cut-off >10cm or subsample ? 100%.

Form WS2, ver 9.1

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

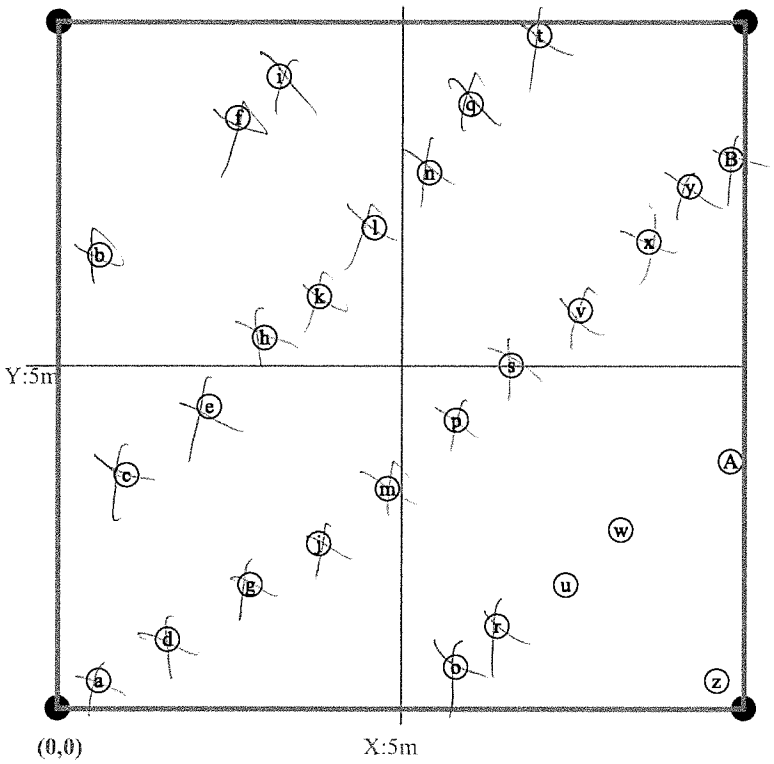
Map of stems on plot 100046-01-0023

CAPITAL LETTERS represent stems that are different from stems marked with lowercase letters (i.e. "A" is different from "a").

X-axis: 240 °

N

 # stems: 28
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0024

VMD Year (1-5): 5	Date: 9/21/23 - / /	Party:	Role:	Date last planted:	
Taxonomic Standard:		JS		New planting date m/yy?	/
Taxonomic Standard DATE:		SB		☐ Check box if plot was not	
Latitude or UTM-N: (dec.deg. or m)	35.871508	Datum: NAD27		Notes: sampled, specify reason below	
Longitude or UTM-E:	-79.857562	UTM Zone: 17N			
Coordinate Accuracy (m):	0.5	X-Axis bearing (deg): 330			
Plot Dimensions: X:	10	Y: 10	☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X		

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
896	Quercus phellos	a	R	0.5	2.1	185.0	0.7	250	3.0	☐	3		
897	Quercus phellos	b	R	0.7	3.1	124.0	*DBH?*	230	1.0	☐	3		
900	Liriodendron tulipifera	c	R	0.8	6.8	60.0		X		☐	0		
901	Quercus rubra	d	R	0.9	8.1	80.0		100		☐	3		
903	Fraxinus pennsylvanica	k	R	3.2	9.3	97.0		118		☐	3		
904	Platanus occidentalis	j	R	3.3	8.0	101.0	*DBH?*	122		☐	3		
905	Platanus occidentalis	i	R	3.3	6.6	175.0	0.2	225	.8	☐	3		
906	Platanus occidentalis	h	R	3.2	5.2	120.0	*DBH?*	172	.3	☐	3		
907	Quercus phellos	g	R	3.2	3.7	117.0	*DBH?*	210	.3	☐	3		
908	Platanus occidentalis	f	R	3.2	2.2	190.0	0.3	218	.5	☐	3		
909	Fraxinus pennsylvanica	e	R	3.1	0.7	70.0		80		☐	3		
910	Fraxinus pennsylvanica	l	R	5.6	1.2	73.0		90		☐	3		
911	Quercus phellos	m	R	5.6	2.6	99.0		106		☐	3		
912	Quercus phellos	n	R	5.6	4.1	119.0	*DBH?*	222	.5	☐	3		
913	Quercus rubra	o	R	5.7	5.5	150.0	0.2	228	.5	☐	3		
914	Quercus phellos	r	R	5.8	6.9	120.0	*DBH?*	184	.3	☐	3		
915	Quercus phellos	p	R	5.7	8.2	200.0	0.5	260	1.0	☐	3		
916	Quercus rubra	q	R	5.7	9.5	86.0		155	.1	☐	3		
919	Quercus phellos	v	R	8.6	7.5	135.0	*DBH?*	218	.3	☐	3		
921	Quercus rubra	u	R	8.5	3.5	71.0		71		☐	2	Browsed	
922	Quercus rubra	t	R	8.4	2.1	37.0		35		☐	2	Browsed	
923	Quercus phellos	s	R	8.1	0.3	190.0	0.3	290	2.5	☐	3		

 # stems: 22

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
QUAL	T			101				

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

Plot (continued): 100046-01-0024

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data: ddh (mm)	Height (cm)	DBH (cm)	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
BAHA											
Winged Elm											

**Required if cut-off >10cm or subsample ?100%.

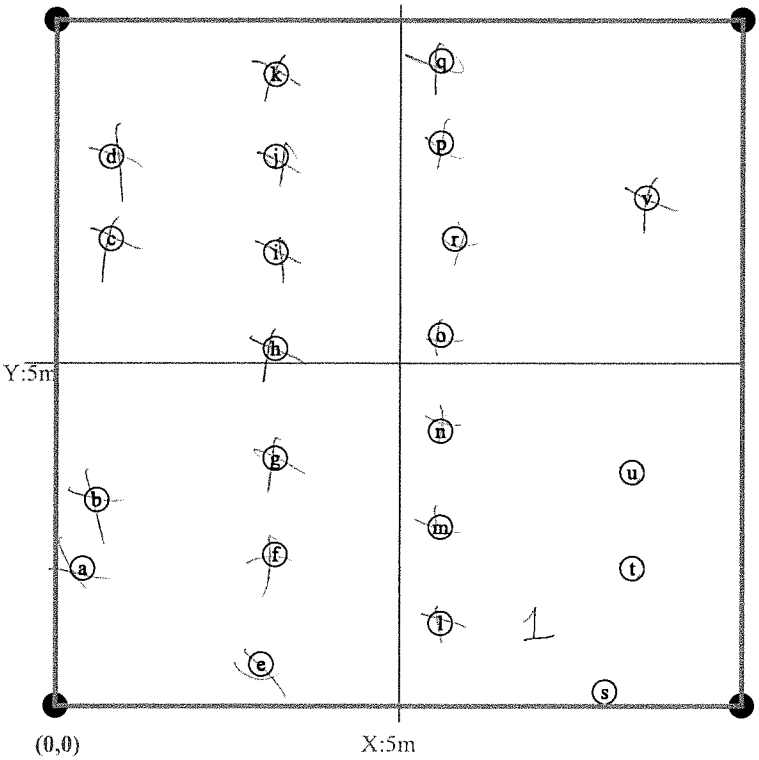
Form WS2, ver 9.1

Map of stems on plot 100046-01-0024

X-axis: 330 °

 # stems: 22
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0025

VMD Year (1-5): 5 Date: 9/21/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.871297 Datum: NAD27

Longitude or UTM-E: -79.858635 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 282

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
JS	
SB	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
925	Quercus phellos	a	R	0.4	0.4	200.0	0.6	290	1.0	☐	3		
927	Liriodendron tulipifera	f	R	3.3	1.3	152.0	0.2	210	.8	☐	3		
929	Quercus rubra	m	R	6.1	1.7	126.0	*DBH?*	170	.1	☐	3		
930	Quercus phellos	p	R	7.4	2.0	155.0	0.2	240	1.0	☐	3		
932	Quercus rubra	t	R	9.9	5.0	57.0		60		☐	3		
933	Quercus alba	s	R	8.9	4.8	55.0		60		☐	3		
934	Quercus rubra	q	R	7.6	4.8	30.0		54		☐	3		
935	Fraxinus pennsylvanica	n	R	6.1	4.5	63.0		94		☐	3		
936	Quercus rubra	j	R	4.7	4.1	59.0		72		☐	2		
937	Quercus rubra	g	R	3.3	3.9	49.0		96		☐	3		
939	Quercus rubra	b	R	0.8	3.3	70.0		70		☐	2	Browsed	
940	Quercus rubra	d	R	1.5	6.0	50.0		61		☐	3		
941	Quercus rubra	e	R	2.8	6.5	60.0		63		☐	2	Browsed	
942	Quercus rubra	i	R	4.2	6.7	55.0		60		☐	3		
943	Quercus rubra	l	R	5.5	7.0	55.0		61		☐	3		
944	Platanus occidentalis	o	R	7.1	7.1	190.0	0.6	240	.8	☐	3		
945	Quercus phellos	r	R	8.5	7.2	90.0		172	.4	☐	3		
946	Quercus phellos	u	R	9.8	7.3	140.0	0.1	212	.6	☐	3		
947	Fraxinus pennsylvanica	k	R	5.1	9.4	65.0		81	.	☐	3		
948	Quercus alba	h	R	3.6	9.3	140.0	0.1	225	.7	☐	3		
949	Quercus alba	c	R	0.9	8.9	138.0	0.1	191	.2	☐	3		

 # stems: 21

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS Entry Tool ver. 2.5.0

Plot (continued): 100046-01-0025					Sep 2022 Data				THIS YEAR'S DATA						
ID	Species	map char	source	X (m)	Y (m)	ddh (mm)	Height (cm)	DBH (cm)	ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
FRPE		—	2, 10	20	20	—					
QURU		—				—					
		—				—					
		—				—					
		—				—					
		—				—					
		—				—					

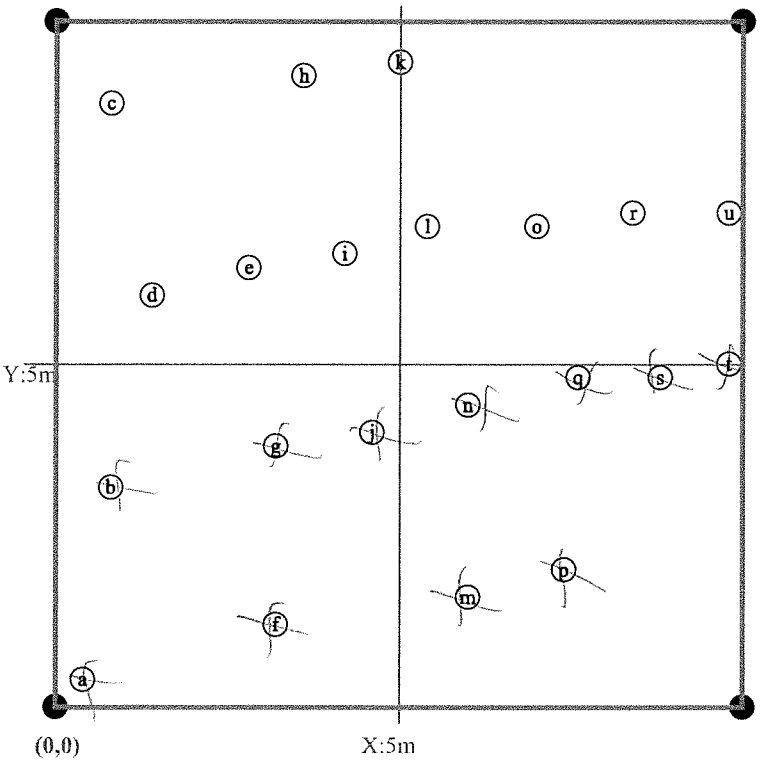
**Required if cut-off >10cm or subsample ? 100%. ●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10 Form WS2, ver 9.1

Map of stems on plot 100046-01-0025

X-axis: 282 °

 # stems: 21
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0026

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NO-DATA*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0026

VMD Year (1-5): 5 Date: 10/31/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.861439 Datum: NAD27

Longitude or UTM-E: -79.892888 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 20

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
IH	
SD	

Date last planted:

New planting date m/yy?

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	DBH 1 cm	NO-DATA*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
1	Liriodendron tulipifera	a	R	0.5	0.7	200.0	0.3	☐	380	1.2	☐	3		
2	Fraxinus pennsylvanica	h	R	5.1	0.7	300.0	1.2	☐	370	2.0	☐	1		
3	Platanus occidentalis	g	R	3.8	2.1	450.0	3.0	☐	600	6.0	☐			
4	Fraxinus pennsylvanica	e	R	2.5	3.4	300.0	1.8	☐	390	2.1	☐			
5	Fraxinus pennsylvanica	c	R	0.9	4.8	250.0	1.0	☐	290	1.3	☐			
6	Fraxinus pennsylvanica	b	R	0.6	9.3	260.0	0.9	☐	350	1.4	☐			
7	Fraxinus pennsylvanica	d	R	2.0	7.9	355.0	2.2	☐	380	2.6	☐			
8	Fraxinus pennsylvanica	f	R	3.4	6.4	285.0	1.0	☐	390	1.4	☐			
9	Fraxinus pennsylvanica	i	R	5.0	5.1	230.0	0.8	☐	300		☐			
10	Fraxinus pennsylvanica	k	R	6.4	3.7	*Missing*		☐	X	X	☐			
11	Fraxinus pennsylvanica	m	R	7.8	1.9	310.0	1.0	☐	380	1.7	☐			
12	Fraxinus pennsylvanica	o	R	9.0	0.5	280.0	1.0	☐	390	1.5	☐			
13	Quercus phellos	p	R	9.9	4.9	135.0	*DBH?*	☐	240	1.9	☐			
14	Quercus phellos	n	R	8.3	6.8	280.0	1.5	☐	380	2.2	☐			
15	Quercus phellos	l	R	6.7	8.0	280.0	1.8	☐	400	2.5	☐			
16	Quercus phellos	j	R	5.4	9.3	330.0	2.0	☐	450	3.0	☐			

 # stems: *16*

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0026

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NO-DATA	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
JUVI											
LIST											
FRPE											
ULAM											

**Required if cut-off >10cm or subsample ? 100%.

Form WS2, ver 9.1

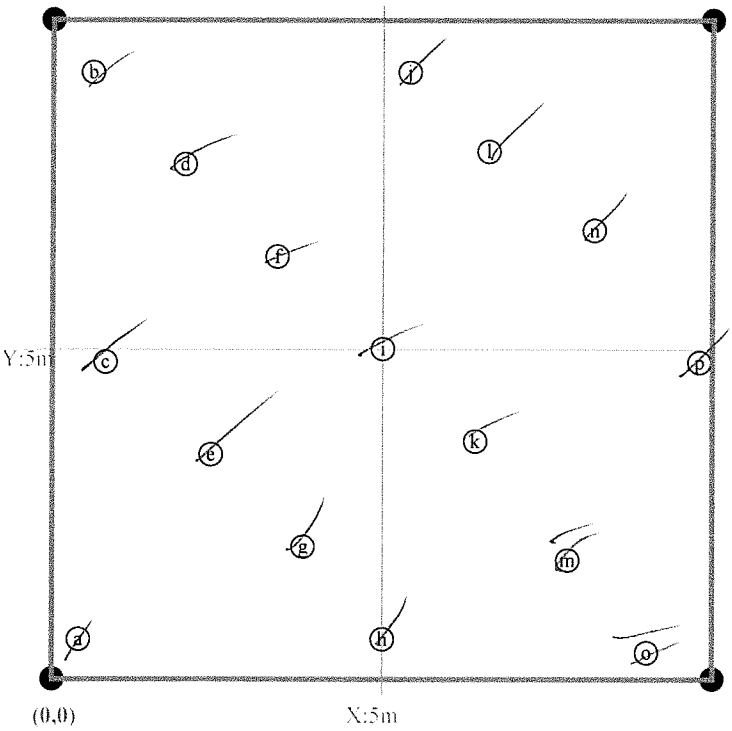
Map of stems on plot 100046-01-0026

X-axis: 20 °

N

 # stems: 16

map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0027

VMD Year (1-5): 5 Date: 10/31/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.861855 Datum: NAD27

Longitude or UTM-E: -79.892601 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 12

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
HH	
JD	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	NO-GO*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
19	Fraxinus pennsylvanica	ⓐ	R	0.6	0.7	280.0	1.9	☐	380	2.4	☐	3		
20	Platanus occidentalis	ⓗ	R	5.2	0.2	750.0	7.0	☐	800	1.6	☐			
22	Quercus phellos	ⓒ	R	1.2	4.8	350.0	1.3	☐	420	2.3	☐			
23	Quercus phellos	ⓑ	R	0.6	6.9	350.0	2.6	☐	470	3.5	☐			
25	Fraxinus pennsylvanica	ⓓ	R	1.8	9.4	425.0	2.5	☐	500	4.0	☐			
26	Fraxinus pennsylvanica	ⓔ	R	2.1	7.7	355.0	1.7	☐	440	3.0	☐			
27	Fraxinus pennsylvanica	ⓕ	R	2.4	6.1	300.0	1.0	☐	400	2.4	☐			
28	Fraxinus pennsylvanica	ⓖ	R	2.9	4.2	200.0	1.2	☐	400	2.1	☐			
29	Platanus occidentalis	ⓘ	R	5.6	2.3	800.0	8.0	☐	850	11	☐			
30	Fraxinus pennsylvanica	ⓚ	R	7.2	2.0	230.0	0.9	☐	370	1.5	☐			
33	Platanus occidentalis	ⓙ	R	5.6	9.0	700.0	7.1	☐	800	10	☐	↓		

 # stems: 11 New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0027

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data: ddh (mm)	Height (cm)	DBH (cm)	NOTES	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
WLAM											

**Required if cut-off >10cm or subsample ? 100%.

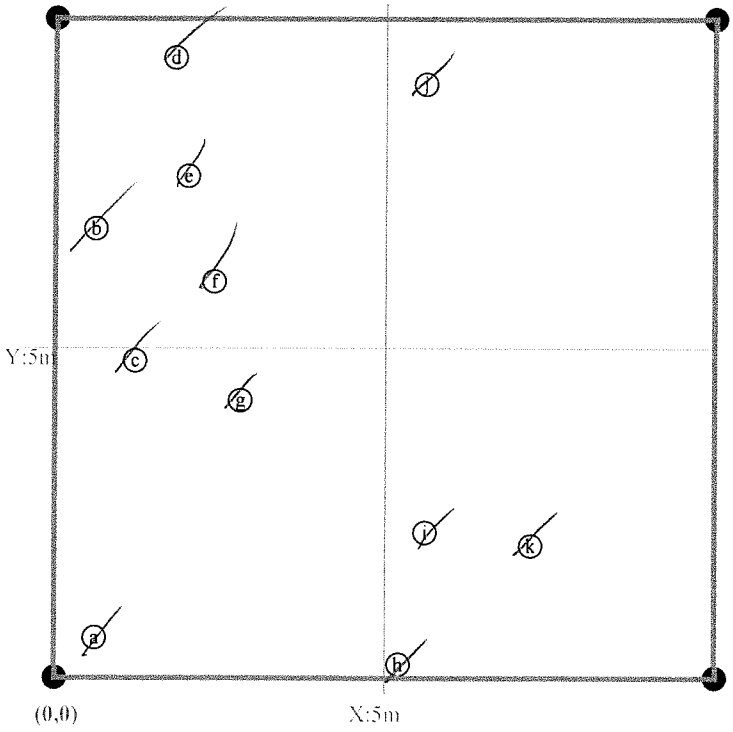
Form WS2, ver 9.1

Map of stems on plot 100046-01-0027

X-axis: 12 °

 # stems: 11
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0028

VMD Year (1-5): 5 Date: 10/31/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.86266 Datum: NAD27

Longitude or UTM-E: -79.891993 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 33

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: / Role:
- LH
- JD

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	NOTES*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
36	Fraxinus pennsylvanica	a	R	0.3	0.7	310.0	1.6	☐	380	2.6	☐	3		
37	Betula nigra	d	R	1.8	0.7	500.0	4.0	☐	650	6.0	☐	|		
41	Fraxinus pennsylvanica	o	R	7.8	0.7	215.0	0.5	☐	320	1.0	☐	|		
42	Quercus rubra	s	R	9.6	0.7	135.0	*DBH?*	☐	140	.2	☐	|		
43	Betula nigra	p	R	8.0	3.4	400.0	3.0	☐	480	4.2	☐	|		
44	Betula nigra	l	R	6.7	3.2	500.0	3.2	☐	600	4.7	☐	|		
45	Betula nigra	i	R	5.2	3.0	425.0	3.3	☐	460	3.7	☐	|		
46	Platanus occidentalis	g	R	3.8	2.9	575.0	4.5	☐	700	6.0	☐	|		
47	Quercus phellos	e	R	1.8	2.7	240.0	1.0	☐	340	1.8	☐	|		
49	Platanus occidentalis	c	R	1.3	5.5	650.0	5.0	☐	800	7.0	☐	|		
50	Platanus occidentalis	f	R	2.7	5.8	475.0	3.0	☐	700	5.0	☐	|		
51	Quercus phellos	h	R	4.3	5.9	300.0	1.0	☐	420	2.1	☐	|		
52	Platanus occidentalis	k	R	5.9	6.0	450.0	3.0	☐	620	4.7	☐	|		
53	Platanus occidentalis	m	R	7.4	6.2	575.0	4.0	☐	700	5.6	☐	|		
54	Quercus phellos	q	R	9.3	5.6	400.0	1.4	☐	420	2.0	☐	|		
55	Quercus nigra	r	R	9.2	7.9	130.0	*DBH?*	☐	80		X	|		
56	Quercus nigra	n	R	7.6	7.9	400.0	2.7	☐	600	3.6	☐	|		
57	Quercus nigra	j	R	5.7	7.9	300.0	1.0	☐	550	3.0	☐	|		
1359	Fraxinus pennsylvanica	b	R	0.6	9.0	350.0	2.0	☐	400	2.5	☐	V		

 # stems: 19

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
QUPH	1			400			C	

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0028

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NO-ZOO	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
FRPE											

**Required if cut-off >10cm or subsample ? 100%.

Form WS2, ver 9.1

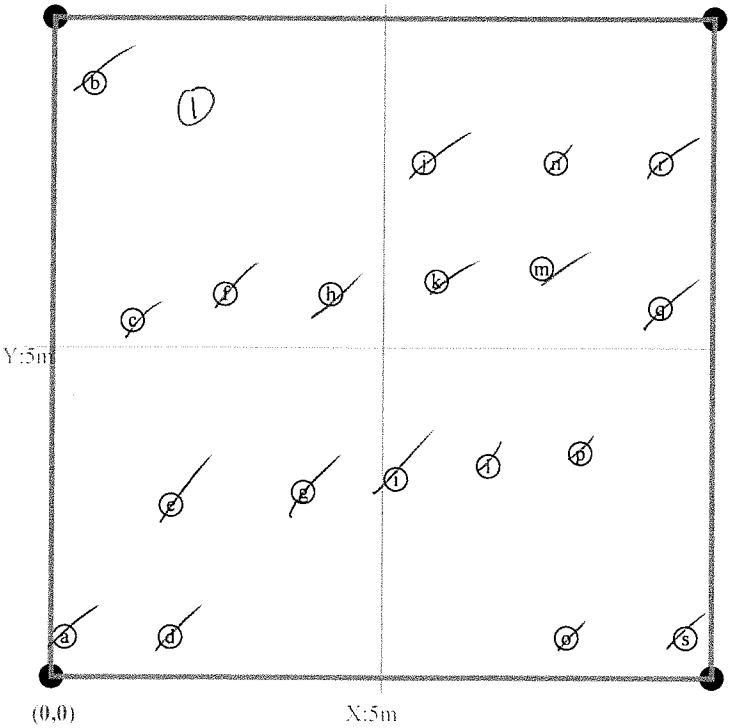
Map of stems on plot 100046-01-0028

X-axis: 33 °

N

 # stems: 19

map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0029

VMD Year (1-5): 5 Date: 10/31/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.862879 Datum: NAD27

Longitude or UTM-E: -79.890904 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 90

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
IH	
JD	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	NOT OK*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
62	Quercus phellos	ⓑ	R	1.1	0.3	230.0	1.0	☐	310	2.0	☐	3		
65	Fraxinus pennsylvanica	ⓕ	R	3.4	3.1	180.0	0.2	☐	290	1.4	☐			
66	Quercus phellos	ⓘ	R	5.1	2.7	140.0	0.1	☐	300	1.3	☐			
67	Fraxinus pennsylvanica	ⓛ	R	6.6	2.2	140.0	0.1	☐	180	.4	☐			
68	Fraxinus pennsylvanica	ⓝ	R	8.2	1.7	165.0	0.2	☐	290	1.0	☐			
69	Fraxinus pennsylvanica	ⓞ	R	9.8	1.1	310.0	0.8	☐	380	1.6	☐			
72	Platanus occidentalis	ⓙ	R	5.3	5.8	330.0	1.6	☐	450	2.8	☐			
73	Quercus nigra	ⓗ	R	4.0	5.9	250.0	1.0	☐	370	2.2	☐			
75	Quercus nigra	ⓓ	R	1.6	6.2	130.0	*DBH?*	☐	160	.5	☐			
77	Betula nigra	ⓐ	R	0.6	9.0	310.0	1.1	☐	400	2.0	☐			
78	Quercus nigra	ⓒ	R	1.5	8.6	115.0	*DBH?*	☐	210		☐			
79	Betula nigra	ⓔ	R	2.5	8.4	350.0	2.6	☐	390	1.9	☐			
80	Betula nigra	ⓖ	R	3.9	8.2	290.0	1.1	☐	400	2.0	☐			
82	Betula nigra	ⓚ	R	6.2	7.9	*Missing*		☐	X	X	☐			
83	Betula nigra	ⓜ	R	7.5	7.7	360.0	2.5	☐	450	3.7	☐	V		

 # stems: *15*

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0029

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data: ddh (mm)	Height (cm)	DBH (cm)	NOTES*	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
ULAM											
Winged elm											

**Required if cut-off >10cm or subsample ? 100%.

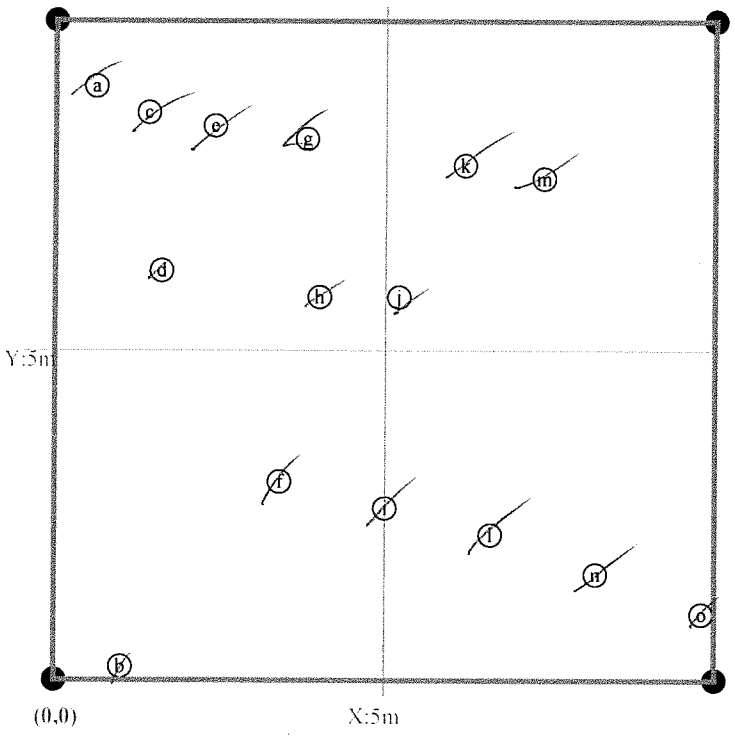
●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

Form WS2, ver 9.1

Map of stems on plot 100046-01-0029

X-axis: 90° N

 # stems: 15
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0030

VMD Year (1-5): 5 Date: 10/31/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.86044 Datum: NAD27

Longitude or UTM-E: -79.889453 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 210

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
HI	
JD	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	NOCES*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
86	Liriodendron tulipifera	p	R	8.4	0.6	65.0		☐	110		☐	3		
88	Platanus occidentalis	s	R	9.2	4.5	425.0	3.0	☐	600	5.1	☐	1		
89	Quercus phellos	q	R	8.4	3.6	330.0	1.7	☐	400	2.8	☐			
90	Platanus occidentalis	n	R	7.4	2.9	450.0	3.2	☐	450	4.9	☐			
91	Platanus occidentalis	l	R	6.3	2.1	400.0	2.4	☐	640	4.5	☐			
92	Platanus occidentalis	j	R	5.2	1.2	425.0	3.7	☐	660	4.8	☐			
93	Platanus occidentalis	h	R	4.1	0.2	460.0	4.3	☐	680	5.5	☐			
94	Liriodendron tulipifera	a	R	0.6	0.5	375.0	3.2	☐	600	5.0	☐			
96	Liriodendron tulipifera	f	R	2.8	2.4	400.0	3.9	☐	640	6.0	☐			
101	Quercus rubra	o	R	7.5	6.4	100.0		☐	110		☐			
102	Quercus rubra	r	R	8.5	7.3	270.0	1.2	☐	390	3.0	☐			
103	Quercus rubra	t	R	9.8	8.7	55.0		☐	70		☐			
104	Quercus nigra	m	R	6.5	9.6	290.0	1.5	☐	450	3.2	☐			
105	Betula nigra	k	R	5.5	8.8	340.0	2.6	☐	540	4.1	☐			
106	Quercus nigra	i	R	4.6	8.0	235.0	0.4	☐	400	1.9	☐			
107	Quercus nigra	g	R	3.6	7.1	270.0	0.8	☐	410	2.2	☐			
108	Quercus nigra	e	R	2.7	6.1	220.0	0.7	☐	420	2.5	☐			
109	Quercus nigra	c	R	1.7	5.2	135.0	*DBH?*	☐	210	1.6	☐			
110	Quercus nigra	b	R	0.7	4.2	270.0	1.0	☐	400	2.1	☐			
112	Platanus occidentalis	d	R	1.7	8.6	330.0	1.0	☐	490	3.0	☐	↓		

 # stems: 20

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0030

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTES #	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
ULAm											

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

Form WS2, ver 9.1

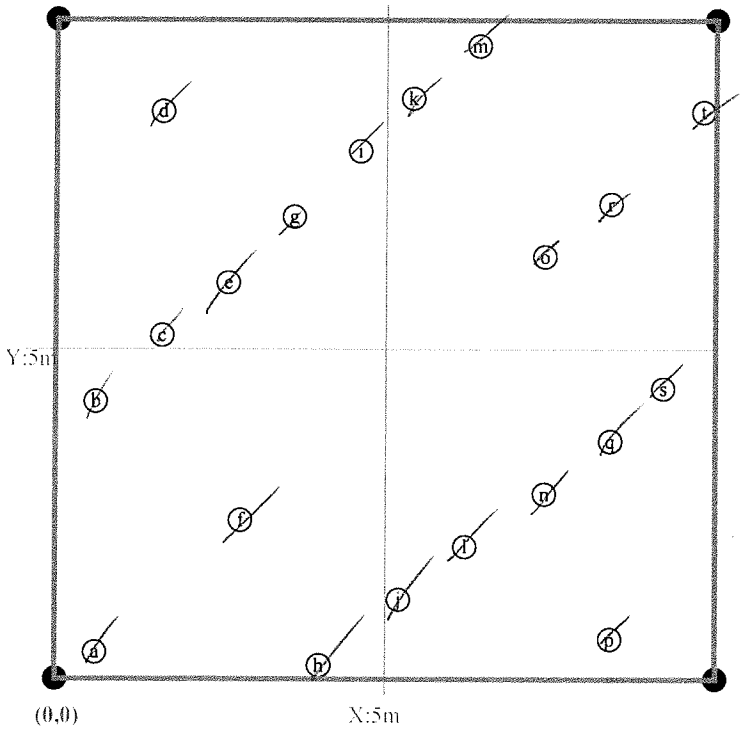
Map of stems on plot 100046-01-0030

→ X-axis: 210°

 # stems: 20

map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0031

VMD Year (1-5): 5 Date: 10/31/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.862382 Datum: NAD27

Longitude or UTM-E: -79.890278 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 115

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
IH	
JD	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	NO LIVE*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
115	Platanus occidentalis	a	R	0.4	0.7	650.0	4.9	☐	700	8.0	☐	3		
116	Quercus nigra	j	R	3.6	0.9	75.0		☐	75		☐			
117	Quercus phellos	g	R	2.8	2.2	150.0	0.1	☐	210	.7	☐			
118	Fraxinus pennsylvanica	e	R	2.3	3.4	280.0	2.5	☐	310	2.9	☐			
119	Fraxinus pennsylvanica	d	R	1.5	4.8	300.0	1.0	☐	400	2.0	☐			
120	Platanus occidentalis	c	R	0.9	5.9	450.0	2.1	☑	650	4.7	☐			
121	Betula nigra	b	R	0.4	7.1	*Missing*		☐	X	X	☐			
122	Quercus phellos	f	R	2.3	8.9	160.0	0.2	☐	210	.7	☐			
123	Quercus phellos	h	R	2.9	7.6	130.0	*DBH?*	☐	140	.2	☐			
124	Platanus occidentalis	i	R	3.4	6.1	550.0	3.0	☐	700	6.9	☐			
125	Quercus phellos	k	R	4.4	5.0	150.0	0.1	☐	150	.2	☐			
126	Quercus phellos	l	R	4.8	4.0	245.0	0.4	☐	250	.7	☐			
127	Quercus phellos	m	R	5.6	3.0	130.0	*DBH?*	☐	150	.2	☐			
128	Quercus phellos	n	R	6.4	1.4	200.0	0.4	☐	300	1.5	☐			
130	Quercus nigra	u	R	9.9	0.4	60.0		☐	60		☐			
131	Betula nigra	s	R	9.3	1.8	*Missing*		☐	X	X	☐			
132	Quercus phellos	q	R	8.7	3.3	230.0	0.4	☐	300	1.0	☐			
138	Platanus occidentalis	o	R	7.2	9.5	*Missing*		☐	X	X	☐			
139	Platanus occidentalis	p	R	8.1	8.4	600.0	3.3	☐	650	5.0	☐			
140	Platanus occidentalis	r	R	9.1	7.2	575.0	3.0	☐	650	5.3	☐			
141	Platanus occidentalis	t	R	9.7	6.0	*Missing*		☐	X	X	☐			

 # stems: 21

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

***Notes by ID:** 120-Growing sideways

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0031

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTE#	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

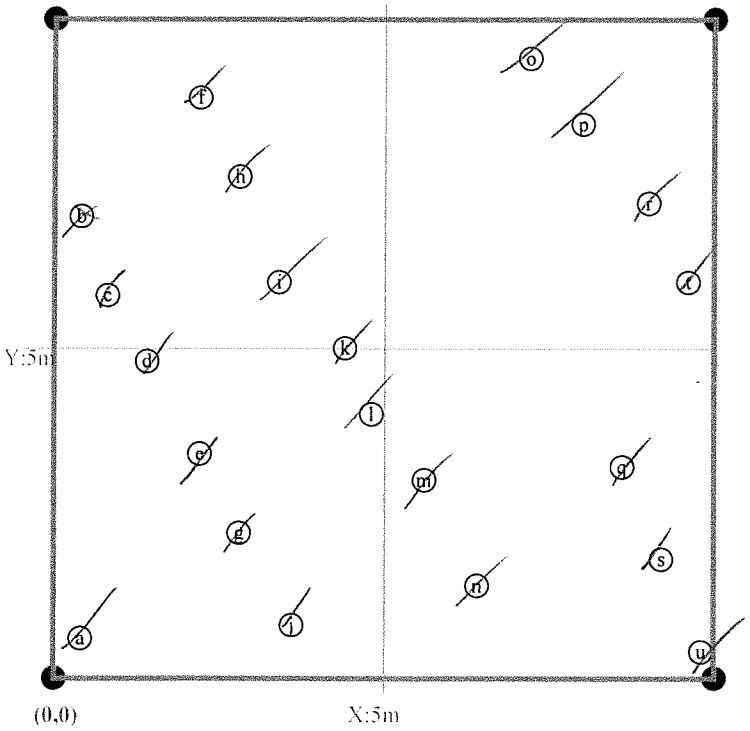
Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
FRPE											
CEOC (SOG)											
JUPI											

**Required if cut-off >10cm or subsample ? 100%. ●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10 Form WS2, ver 9.1

Map of stems on plot 100046-01-0031

X-axis: 115° N

 # stems: 21
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0032

VMD Year (1-5): 5 Date: 10/31/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.865236 Datum: NAD27

Longitude or UTM-E: -79.892324 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 145

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
HF	
JD	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	2022 dead	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
146	Liriodendron tulipifera	m	R	9.0	0.3	70.0		☐	60		☐	1		
147	Quercus phellos	j	R	7.6	0.5	*Missing*		☑	X	X	☐	3		
148	Quercus nigra	i	R	6.6	1.0	210.0	0.3	☐	310	1.0	☐	1		
149	Quercus nigra	g	R	5.0	1.5	240.0	1.0	☐	400	2.0	☐	1		
150	Platanus occidentalis	d	R	3.7	1.6	350.0	1.4	☐	510	2.8	☐	1		
153	Platanus occidentalis	c	R	1.7	3.9	550.0	3.1	☐	670	5.9	☐	1		
154	Platanus occidentalis	e	R	4.6	3.3	600.0	3.4	☐	650	5.5	☐	1		
155	Platanus occidentalis	h	R	6.5	2.9	600.0	3.6	☐	610	4.5	☐	1		
157	Platanus occidentalis	n	R	9.6	1.8	400.0	2.2	☐	500	3.2	☐	1		
161	Quercus phellos	f	R	4.6	4.6	260.0	0.4	☐	350	1.4	☐	1		
163	Quercus nigra	b	R	1.5	5.0	115.0	*DBH?*	☐	170	.4	☐	1		
164	Quercus phellos	a	R	0.5	8.9	200.0	0.7	☐	290	1.2	☐	1		
169	Quercus phellos	k	R	8.1	8.3	215.0	0.7	☐	340	1.2	☐	1		
171	Platanus occidentalis	l	R	8.8	9.6	500.0	3.9	☐	620	5.6	☐	✓		

 # stems: *14*

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

***Notes by ID:** 147-overgrown

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0032

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTES*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
CIST											
ULAM											
ACRU											
JUNI											

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

Form WS2, ver 9.1

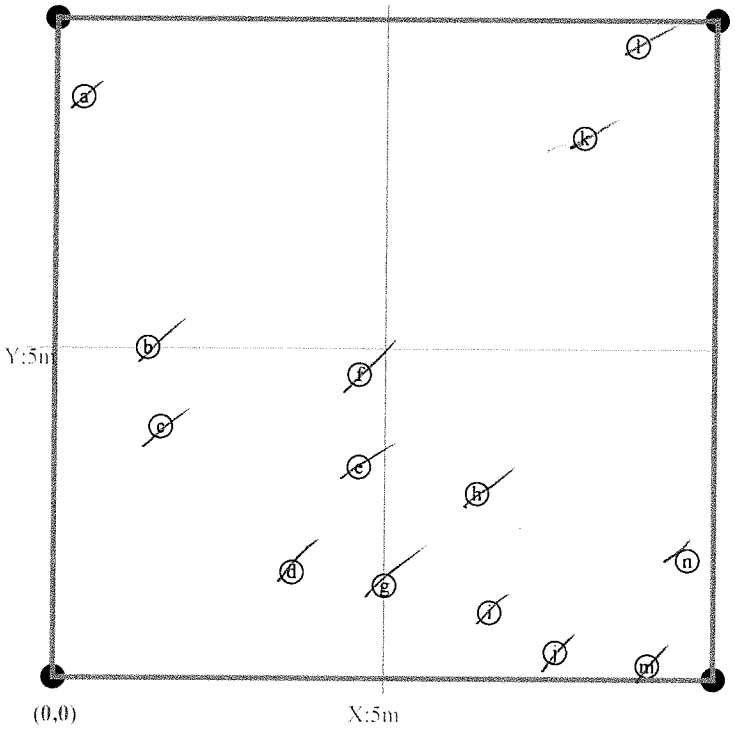
Map of stems on plot 100046-01-0032

X-axis: 145 °

N

 # stems: 14

map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0033

VMD Year (1-5): 5 Date: 10 / 31 / 23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.864251 Datum: NAD27

Longitude or UTM-E: -79.891899 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 0

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
HH	
SD	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	NOTES	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
173	Fraxinus pennsylvanica	a	R	0.7	0.5	250.0	0.8	☐	330	1.2	☐	3		
174	Quercus rubra	d	R	1.8	0.3	55.0		☐	80		☐	|		
176	Quercus rubra	i	R	4.5	0.4	45.0		☐	60		☐	|		
177	Quercus rubra	n	R	5.7	0.5	105.0	*DBH?*	☐	150	.2	☐	|		
178	Platanus occidentalis	p	R	6.9	0.6	400.0	2.0	☐	520	3.8	☐	|		
181	Betula nigra	s	R	8.6	2.0	450.0	3.9	☐	600	5.0	☐	|		
182	Quercus alba	q	R	7.0	2.0	80.0		☐	90		☐	|		
183	Betula nigra	m	R	5.5	1.9	330.0	2.2	☐	420	3.1	☐	|		
185	Quercus nigra	f	R	2.2	2.3	245.0	2.0	☐	340	3.0	☐	|		
186	Quercus alba	c	R	1.3	3.5	155.0	0.2	☐	270		☐	|		
187	Quercus phellos	g	R	2.4	3.5	200.0	0.5	☐	320	1.1	☐	|		
189	Quercus alba	k	R	4.9	3.5	165.0	0.4	☐	210	.7	☐	|		
190	Quercus alba	o	R	6.0	3.5	265.0	1.1	☐	380	2.3	☐	|		
191	Quercus alba	r	R	7.3	3.5	230.0	1.0	☐	310	1.8	☐	|		
192	Quercus alba	t	R	8.6	3.5	*Missing*		☐	X	X	☐	|		
193	Quercus alba	v	R	9.8	3.5	190.0	0.3	☐	280	.8	☐	|		
194	Fraxinus pennsylvanica	u	R	9.3	5.6	245.0	0.7	☐	320	1.3	☐	|		
197	Quercus rubra	l	R	5.2	5.4	125.0	*DBH?*	☐	240	.8	☐	|		
198	Quercus phellos	h	R	3.6	5.4	290.0	1.6	☐	330	2.4	☐	|		
200	Fraxinus pennsylvanica	b	R	0.8	5.7	320.0	1.5	☐	400	2.2	☐	|		
202	Quercus alba	e	R	2.0	7.9	200.0	0.7	☐	230	1.6	☐	|		
204	Quercus nigra	j	R	4.7	7.6	200.0	0.3	☐	400	1.8	☐	V		

 # stems: 22

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0033

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NO-AK*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
ACRU											

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

Form WS2, ver 9.1

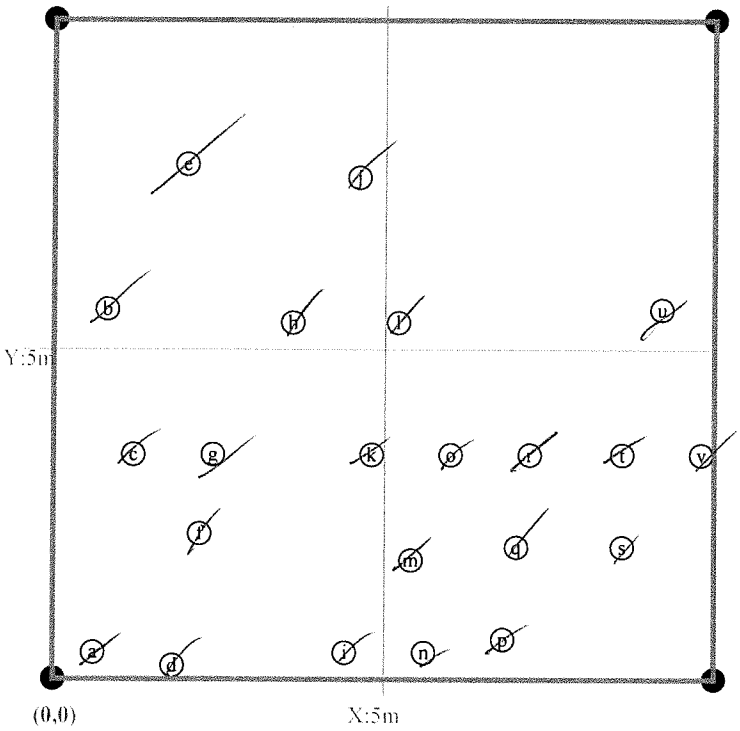
Map of stems on plot 100046-01-0033

X-axis: 0°

 # stems: 22

map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0034

VMD Year (1-5): 5	Date: 10/31/23 - / /	Party: HH / JD	Role:
Taxonomic Standard:			
Taxonomic Standard DATE:			
Latitude or UTM-N: (dec.deg. or m)	35.863814	Datum: NAD27	
Longitude or UTM-E:	-79.891026	UTM Zone: 17N	
Coordinate Accuracy (m):	0.5	X-Axis bearing (deg): 115	
Plot Dimensions: X:	10	Y: 10	☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Date last planted:
New planting date m/yy? /
☐ Check box if plot was not sampled, specify reason below
Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	NO-CAS*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
208	Quercus nigra	a	R	0.4	0.5	355.0	2.3	☐	490	4.3	☐	3		
209	Quercus phellos	j	R	4.5	0.6	255.0	0.9	☐	370	2.0	☐			
210	Quercus phellos	e	R	2.4	2.6	275.0	1.0	☐	350	2.1	☐			
211	Quercus phellos	b	R	0.4	4.8	310.0	1.8	☐	420	3.0	☐			
212	Liriodendron tulipifera	c	R	0.7	8.4	235.0	0.3	☐	410	1.8	☐			
213	Quercus rubra	d	R	1.4	7.6	92.0		☐	180	.3	☐			
214	Quercus rubra	f	R	2.4	7.0	110.0	*DBH?*	☐	250	.7	☐			
215	Platanus occidentalis	g	R	3.5	5.7	200.0	0.2	☐	269	.9	☐			
216	Quercus nigra	i	R	4.2	4.9	160.0	0.2	☐	310	1.6	☐			
217	Platanus occidentalis	k	R	6.0	3.1	425.0	2.5	☐	500	4.0	☐			
218	Platanus occidentalis	m	R	6.8	2.3	450.0	3.0	☐	500	4.1	☐			
219	Quercus phellos	o	R	7.8	1.4	155.0	0.2	☐	380	1.9	☐			
220	Quercus rubra	p	R	8.6	5.0	60.0		☐	70		☐			
222	Quercus rubra	l	R	6.3	7.0	80.0		☐	90		☐			
224	Platanus occidentalis	h	R	3.9	9.4	210.0	0.3	☐	340	1.0	☐			
225	Quercus rubra	n	R	7.7	9.6	150.0	0.2	☐	190	.7	☐			
226	Quercus nigra	q	R	8.8	8.8	140.0	0.1	☐	210	.8	☐			

 # stems: 17

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Plot (continued): 100046-01-0034

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTE*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
ACNE											
LIST											

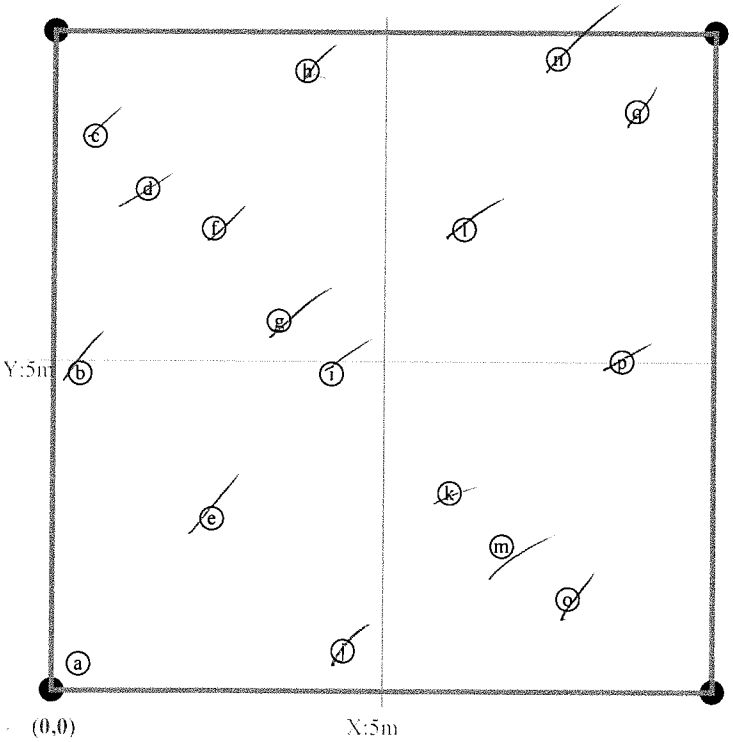
**Required if cut-off >10cm or subsample ? 100%.

Form WS2, ver 9.1

Map of stems on plot 100046-01-0034

X-axis: 115° N

 # stems: 17
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0035

VMD Year (1-5): 5 Date: 10/31/22 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.865627 Datum: NAD27

Longitude or UTM-E: -79.889474 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 100

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
HH	
JD	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes: Deer Damage all Data

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	NO-GO	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
228	Quercus phellos	ⓐ	R	0.4	0.3	90.0		☐	95		☐	2		
229	Quercus phellos	ⓑ	R	0.6	2.0	*Missing*		☐	X	X	☐	X		
230	Quercus nigra	ⓒ	R	0.7	3.5	50.0		☐	55		☐	2		
232	Quercus phellos	ⓓ	R	1.1	7.1	49.0		☐	49		☐	2		
233	Quercus rubra	ⓔ	R	1.4	8.8	*Missing*		☐	X	X	☐	X		
235	Platanus occidentalis	ⓕ	R	2.9	8.0	110.0	*DBH?*	☐	125		☐	3		
236	Platanus occidentalis	ⓖ	R	3.2	0.3	190.0	0.3	☐	240	.6	☐	3		
237	Platanus occidentalis	ⓗ	R	3.9	2.0	120.0	*DBH?*	☐	135	.1	☐	3		
238	Platanus occidentalis	ⓘ	R	4.7	3.9	*Missing*		☐	X	X	☐	X		
243	Fraxinus pennsylvanica	ⓛ	R	7.6	5.1	81.0		☐	90		☐	2		
244	Quercus rubra	ⓚ	R	7.0	3.1	50.0		☐	55		☐	2		
245	Quercus rubra	ⓙ	R	6.2	1.1	20.0		☐	55		☐	2		
247	Quercus nigra	ⓜ	R	9.9	2.1	95.0		☐	99		☐	2		

 # stems: 13

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0035

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTES	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

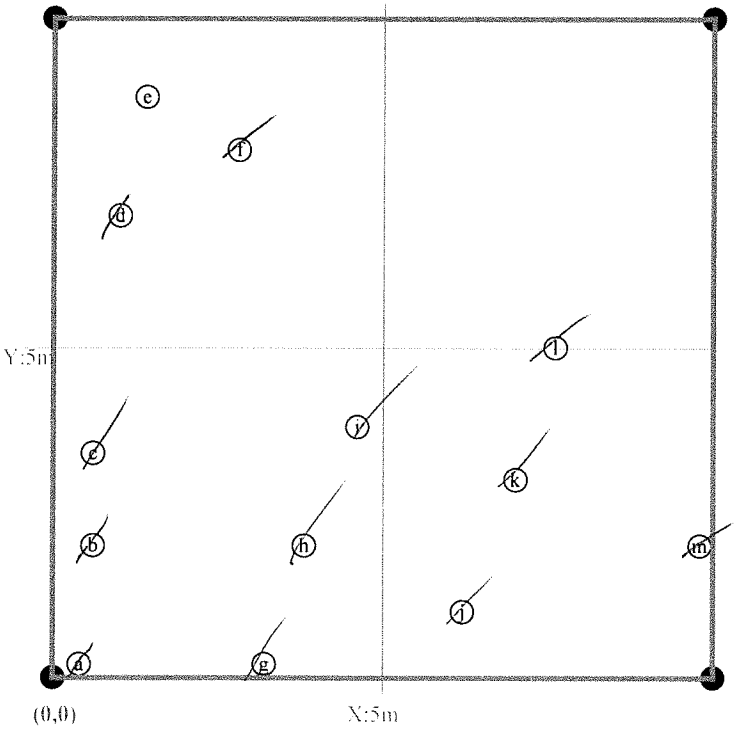
Form WS2, ver 9.1

Map of stems on plot 100046-01-0035

→ X-axis: 100 °

N

 # stems: 13
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0036

VMD Year (1-5): 5 Date: 10/31/23 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.864865 Datum: NAD27

Longitude or UTM-E: -79.888955 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 154

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
HI	
JD	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes: Deer Damage Oaks

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	DOA*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
248	Platanus occidentalis	a	R	0.4	0.3	375.0	2.0	☐	480	4.0	☐	3		
249	Fraxinus pennsylvanica	c	R	0.8	3.7	90.0		☐	90		☐	2		
252	Quercus nigra	m	R	9.3	0.6	150.0	0.2	☐	180	.3	☐	3		
253	Platanus occidentalis	k	R	8.1	1.4	260.0	1.0	☐	380	2.0	☐	3		
254	Quercus nigra	j	R	6.9	2.6	50.0		☐	70		☐	2		
255	Quercus nigra	h	R	5.7	3.9	85.0		☐	90		☐	2		
256	Quercus nigra	g	R	4.9	4.0	70.0		☐	80		☐	2		
257	Platanus occidentalis	e	R	3.7	5.2	320.0	1.3	☐	400	2.1	☐	3		
258	Quercus nigra	d	R	2.1	6.2	90.0		☐	90		☐	2		
259	Platanus occidentalis	b	R	0.6	7.7	375.0	1.9	☐	470	3.3	☐	3		
260	Quercus phellos	f	R	4.2	9.8	58.0		☐	60		☐	2		
261	Quercus phellos	i	R	5.8	8.5	75.0		☐	80		☐	2		
263	Platanus occidentalis	n	R	9.9	4.5	350.0	1.4	☐	500	3.0	☐	3		
264	Quercus phellos	l	R	8.9	9.6	90.0		☐	90		☐	2		

 # stems: *14*

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0036

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTES	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
LIST		___		10	15	___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

Form WS2, ver 9.1

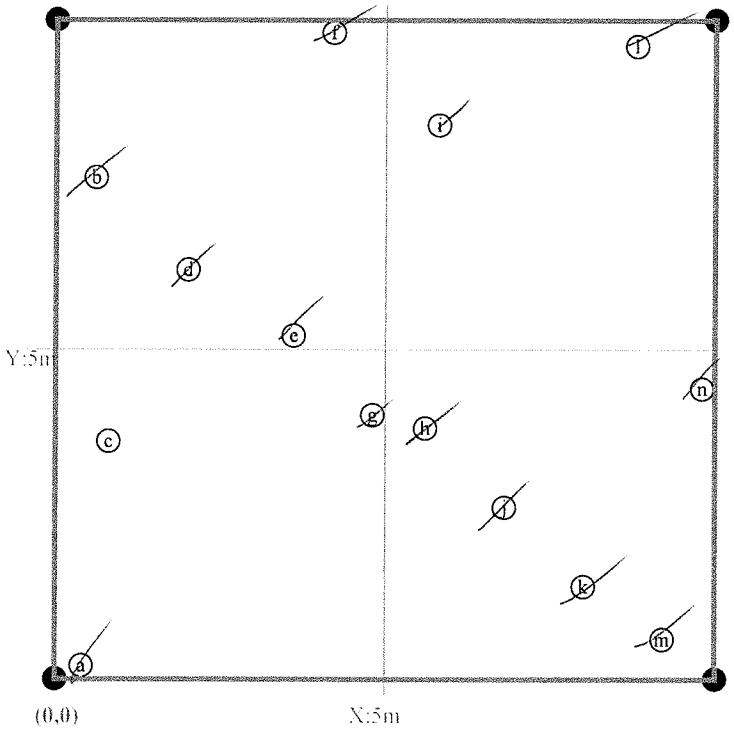
Map of stems on plot 100046-01-0036

X-axis: 154 °

N

 # stems: 14

map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100046-01-0037

VMD Year (1-5): 5 Date: 10 / 31 / 22 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) 35.8641 Datum: NAD27

Longitude or UTM-E: -79.888841 UTM Zone: 17N

Coordinate Accuracy (m): 0.5 X-Axis bearing (deg): 240

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
HH	
JD	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes: oaks, deer damage

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Sep 2022 Data Height 1cm*	Sep 2022 Data DBH 1 cm	NOCS*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
266	Fraxinus pennsylvanica	(f)	R	1.2	0.3	65.0		☐	70		☐	2		
267	Quercus alba	(e)	R	0.9	1.8	45.0		☐	50		☐			
268	Quercus alba	(d)	R	0.6	3.1	55.0		☐	55		☐			
269	Fraxinus pennsylvanica	(b)	R	0.5	4.4	50.0		☐	50		☐			
270	Quercus alba	(c)	R	0.4	5.9	52.0		☐	52		☐			
272	Quercus alba	(a)	R	0.3	8.8	60.0		☐	60		☐			
273	Quercus alba	(h)	R	3.5	9.3	80.0		☐	80		☐			
274	Quercus alba	(g)	R	3.5	7.5	67.0		☐	68		☐			
275	Quercus phellos	(j)	R	3.6	5.7	85.0		☐	90		☐	3		
276	Quercus rubra	(i)	R	3.7	3.4	66.0		☐	66		☐	1		
277	Platanus occidentalis	(k)	R	4.1	1.4	280.0	1.4	☐	380	2.0	☐	3		
278	Quercus phellos	(p)	R	7.0	1.2	65.0		☐	65		☐	2		
279	Quercus nigra	(o)	R	6.7	3.0	45.0		☐	45		☐	1		
280	Quercus phellos	(n)	R	6.5	4.8	60.0		☐	60		☐			
281	Quercus rubra	(l)	R	6.3	6.8	50.0		☐	50		☐			
282	Quercus rubra	(m)	R	6.3	8.9	*Missing*		☐	Y	Y	☐			
283	Quercus phellos	(s)	R	9.4	9.9	50.0		☐	50		☐			
284	Quercus phellos	(r)	R	9.4	8.0	68.0		☐	65		☐			
285	Quercus phellos	(q)	R	9.5	6.1	95.0		☐	80		☐			
286	Quercus phellos	(u)	R	9.6	3.9	88.0		☐	80		☐			
287	Quercus phellos	(t)	R	9.7	1.9	80.0		☐	80		☐			

 # stems: 21

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100046-01-0037

ID	Species	map char	source	X (m)	Y (m)	Sep 2022 Data ddh (mm)	Height (cm)	DBH (cm)	NOTES*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

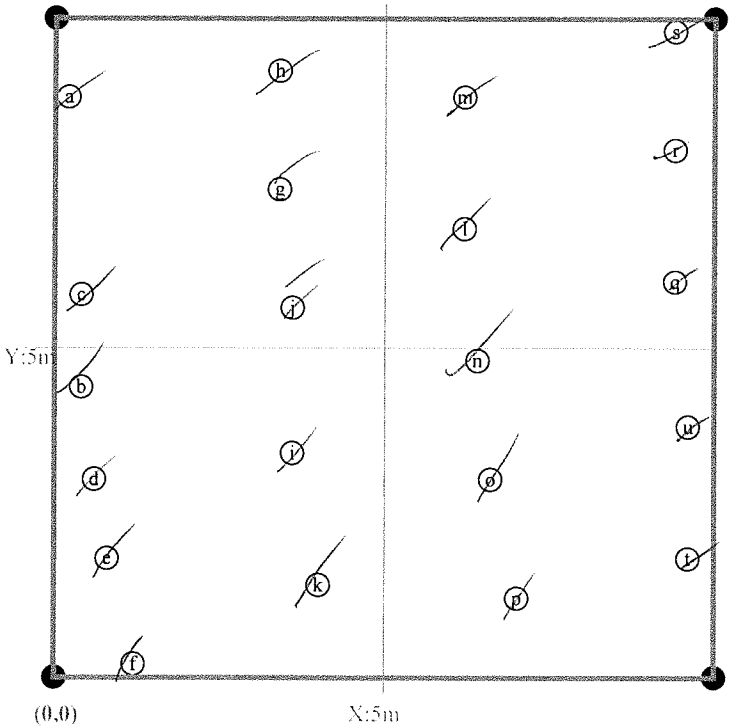
Form WS2, ver 9.1

Map of stems on plot 100046-01-0037

X-axis: 240 °

 # stems: 21
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

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*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.