

Emergency Watershed Protection-Floodplain Easement Program Connecticut, Hurricane Sandy

STATEMENT OF WORK

Final Restoration of 26 Floodplain Easements

This Statement of Work describes the work required at the following easements in West Haven, Connecticut:

“Group A”, also referred to as “2025 Properties”:

- 37 Third Ave Extension (1R2J)
- 52 Marion Street (1RCT)
- 158 Jones Street (1SJ3)
- 42 Marshall Street (1R30)
- 39 Marshall Street (1R2D)
- 120 Brown Street (1R2N)
- 304 Peck Street (1R56)
- 330 Peck Street (1R5B)

“Group B”, also referred to as “2018 Properties”:

- 153 May Street (1F2H)
- 94-96 Blohm Street (1F51)
- 84 Blohm Street (1F4P)
- 80 Blohm Street (1F2D)
- 44 Blohm Street (1FN1)
- 40 Blohm Street (1F2C)
- 36 Blohm Street (1F4N)
- 120 Third Ave Extension (1F2B)
- 114 Third Ave Extension (1F40)
- 92 Third Ave Extension (1F28)
- 70 Third Ave Extension (1F1Y)
- 68 Third Ave Extension (1F1X)

- 66 Third Ave Extension (1FN0)
- 72-74 Third Ave Extension (1F1Z)
- 64 Third Ave Extension (1FN3)
- 62 Third Ave Extension (1F1V)
- 58 Third Ave Extension (1FNH)
- 25 Third Ave Extension (1F1Z)

1) DESCRIPTION

- a) The work consists of all labor, equipment, materials, services, insurance, permits, licenses, notifications, and other incidentals necessary and proper to implement the prescribed planting plans (attached to this Statement of Work) and maintain plantings throughout the course of the plant warranty period (1 year after planting). The work consists of the following:

1. Mobilization/Demobilization
2. Site preparation including all safety barriers and necessary warning signs
3. Site preparation for seeding and planting
4. Seeding and seed stabilization measures
5. Invasive Plant Management
6. Shrub Planting as Prescribed in the Planting Plan
7. Clean-Up
8. Watering plants until establishment and providing a plant warranty for one full year after planting.

- b) The following items are covered under this Statement of Work:

1. Mobilization and demobilization from the sites as necessary to perform the work.
2. Raking or resurfacing disturbed areas such that the original grade is maintained
3. Seedbed preparation and seeding of entire area with the Ernst annual mix in the spring (only applies to Group A properties) and Pinelands NEPP Upland Seed Mix in the fall (all properties) in accordance with the prescribed planting plan and Implementation Requirements: *Wildlife Habitat Planting – 420*.
4. Treatment of invasive plants in accordance with the Implementation Requirements:
 - i. *Brush Management (314) and Herbaceous Weed Treatment (315)*
 - ii. *Wildlife Habitat Planting – 420*
5. Procuring and Planting of the following 61 shrubs (2 gal+):
 - i. (6) Pussy willow (*Salix discolor*)
 - ii. (11) Winterberry (*Ilex verticillata*)
 - iii. (7) Silky dogwood (*Swida amomum*)
 - iv. (8) Beach Plum (*Prunus maritima*)
 - v. (14) Elderberry (*Sambucus nigra*)
 - vi. (9) Serviceberry (*Amelanchier canadensis*)
 - vii. (3) Red osier dogwood (*Swida sericea*)
 - viii. (3) Swamp azalea (*Rhododendron viscosum*)
6. Mulching in accordance with the prescribed planting plan and Implementation

Requirement: *Wildlife Habitat Planting – 420*.

7. Disposal of refuse including silt fencing, tree debris, removed sod/vegetation, trash, or other non-desirables encountered during planting.
8. Watering and plant maintenance to guarantee the plantings for one full year after planting.

- c) The contract will be managed and overseen the City of West Haven (the “Sponsor”).
- d) Work days and hours will be limited to Monday through Friday during daylight hours, and in accordance with local regulations.

2) MOBILIZATION/DEMobilIZATION

Mobilization and demobilization shall be in accordance with *Construction Specification 8 – Mobilization and Demobilization* (attached).

3) SEEDING AND MULCHING

A seedbed shall be prepared as outlined in the following documents (attached):

- a) Conservation Implementation Requirements *Wildlife Habitat Planting – 420*
- b) Seeding, Sprigging, and Mulching shall be in accordance with Construction Specification 6 – Seeding, Sprigging, and Mulching.

Bid Item 1:

Group A: Mow site and seed with the Ernst Annual wildflower seed mix (or equivalent seed mix approved by NRCS) and mulch with straw in May or early June 2027.

This work will be paid under Bid Item 1 on a per property basis as follows:

Bid Item 1: Ernst Annual wildflower seed mix

Easement Addresses	Bid Item	Unit	Estimated Quantity
37 Third Ave Extension 52 Marion Street 158 Jones Street 42 Marshall Street 39 Marshall Street 120 Brown Street 304 Peck Avenue 330 Peck Avenue	1	Per easement property	8

Payment for Bid Item 1 will not be approved until a minimum of 90% of area is covered by established seed. Perform the work in accordance with Wildlife Habitat Planting (420) Implementation Requirements.

Bid Item 4:

Group A: Prepare for fall seeding by mowing the eight properties again in early fall. Seed with the NEPP Upland seed mix (or equivalent seed mix approved by NRCS) in November 2027. Perform the work in accordance with Wildlife Habitat Planting (420) Implementation Requirements.

Group B: Prepare for fall seeding by mowing the 18 properties in early fall 2029. Seed the properties in November 2029 with NEPP Upland seed mix (or equivalent seed mix approved by NRCS). Perform the work in accordance with Wildlife Habitat Planting (420) Implementation Requirements.

Bid Item 4: NEPP Upland seed mix

Easement Addresses	Bid Item	Unit	Estimated Quantity
37 Third Ave Extension 52 Marion Street 158 Jones Street 42 Marshall Street 39 Marshall Street 120 Brown Street 304 Peck Avenue 330 Peck Avenue 153 May Street 94-96 Blohm Street 84 Blohm Street 80 Blohm Street 44 Blohm Street 40 Blohm Street 36 Blohm Street 120 Third Ave Extension 114 Third Ave Extension 92 Third Ave Extension 70 Third Ave Extension 68 Third Ave Extension 66 Third Ave Extension 72-74 Third Ave Extension 64 Third Ave Extension 62 Third Ave Extension 58 Third Ave Extension 25 Third Ave Extension	4	Per easement property	26

4) SHRUB PLANTING

Bid Items 5A through 5F:

The work shall consist of purchasing the plants listed in the Wildlife Habitat Planting Plan (Implementation Requirements 420), storage when necessary, site preparation and installation according to the prescribed planting plan, watering, and maintenance in order to provide a one-year plant warranty after planting.

In addition to the above, planting shall follow the prescribed planting plans for numbers, location, and species of plants. See Implementation Requirements 420 – *Wildlife Habitat Planting* and Drawing Set titled “West Haven – Hurricane Sandy EWP-FPE, Final Site Restorations” (11 sheets) for additional requirements and planting layouts.

Measurement and payment for shrub plantings will be on a lump sum basis per easement. The work will be paid under Bid Items 5A through 5F as follows:

Bid Items 5A through 5F: Shrub Plantings

Easement Address	Bid Item	Unit	Estimated Quantity
52 Marion Street	5A	Lump Sum	1
158 Jones Street	5B	Lump Sum	1
42 Marshall Street	5C	Lump Sum	1
39 Marshall Street	5D	Lump Sum	1
304 Peck Avenue	5E	Lump Sum	1
330 Peck Avenue	5F	Lump Sum	1

5) INVASIVE PLANT CONTROL

Bid Items 2A through 2Z and 3A through 3Z:

The work shall consist of treatment of woody (Bid Items 2A through 2Z) and herbaceous (Bid Items 3A through 3Z) invasive plants on all 26 easements over the course of three consecutive years.

Perform invasive plant treatments throughout the project to ensure long-term control and increase chances of success. Perform invasive plant treatments in accordance with Implementation Requirements *Brush Management (314) and Herbaceous Weed Treatment (315)*.

Treat woody and herbaceous invasives on the eight Group A properties throughout the growing season from 2027 to 2029, mainly through chemical means. Treat woody and herbaceous invasives on the 18 Group B properties starting in fall 2026 and continuing through the fall of 2029 through mechanical and chemical means.

Measurement and payment for invasives treatments will be on a per easement basis per calendar year of treatment, under the following Bid Items:

Bid Items 2A through 2Z: Treat Invasives – Woody

Easement Address	Bid Item	Unit	Estimated Quantity
52 Marion Street	2A	Each year	3
158 Jones Street	2B	each year	3
42 Marshall Street	2C	each year	3
39 Marshall Street	2D	each year	3
304 Peck Ave	2E	each year	3
330 Peck Ave	2F	each year	3
37 Third Ave Ext	2G	each year	3
120 Brown Street	2H	each year	3
153 May Street	2I	each year	4
94-96 Blohm Street	2J	each year	4
84 Blohm Street	2K	each year	4
80 Blohm Street	2L	each year	4
44 Blohm Street	2M	each year	4
40 Blohm Street	2N	each year	4
36 Blohm Street	2O	each year	4
120 Third Ave Extension	2P	each year	4
114 Third Ave Extension	2Q	each year	4
92 Third Ave Extension	2R	each year	4
70 Third Ave Extension	2S	each year	4
68 Third Ave Extension	2T	each year	4
66 Third Ave Extension	2U	each year	4
72-74 Third Ave Extension	2V	each year	4
64 Third Ave Extension	2W	each year	4
62 Third Ave Extension	2X	each year	4
58 Third Ave Extension	2Y	each year	4
25 Third Ave Extension	2Z	each year	4

Bid Items 3A through 3Z: Treat Invasives – Herbaceous

Easement Address	Bid Item	Unit	Estimated Quantity
52 Marion Street	3A	each year	3
158 Jones Street	3B	each year	3
42 Marshall Street	3C	each year	3
39 Marshall Street	3D	each year	3
304 Peck Ave	3E	each year	3
330 Peck Ave	3F	each year	3
37 Third Ave Ext	3G	each year	3
120 Brown Street	3H	each year	3

153 May Street	3I	each year	4
94-96 Blohm Street	3J	each year	4
84 Blohm Street	3K	each year	4
80 Blohm Street	3L	each year	4
44 Blohm Street	3M	each year	4
40 Blohm Street	3N	each year	4
36 Blohm Street	3O	each year	4
120 Third Ave Extension	3P	each year	4
114 Third Ave Extension	3Q	each year	4
92 Third Ave Extension	3R	each year	4
70 Third Ave Extension	3S	each year	4
68 Third Ave Extension	3T	each year	4
66 Third Ave Extension	3U	each year	4
72-74 Third Ave Extension	3V	each year	4
64 Third Ave Extension	3W	each year	4
62 Third Ave Extension	3X	each year	4
58 Third Ave Extension	3Y	each year	4
25 Third Ave Extension	3Z	each year	4

6) CLEAN-UP

All areas disturbed by the work shall be restored to an acceptable condition at no additional expense to the Sponsor or NRCS.

Dispose of all refuse encountered on the easements, including silt fencing, tree debris, removed sod/vegetation, trash, wood, or other non-desirables encountered during planting.

Clean-up is considered subsidiary to all bid items. No direct payment will be made.

7) CONTRACTOR QUALITY CONTROL

The Contractor is responsible for developing, implementing, and maintaining a quality control system to ensure that the specified quality is achieved for all materials and work performed. Quality control is considered subsidiary to all bid items. No direct payment will be made.

NRCS and the Sponsor shall be given free access to all sites and related records for the duration of the contract. Inspection of all plants, seed, and mulch shall be performed by a qualified NRCS staff member prior to planting. Plants, seed, and mulch not meeting NRCS requirements shall be replaced at no additional cost to the Sponsor or NRCS.

8) GENERAL

- a) Prior to all activities outlined in this statement of work, become thoroughly familiar with the site, site conditions, and all portions of the work falling within this section.
- b) The following documents are incorporated as part of this Statement of Work and are attached:
 - 1. Conservation Practice Implementation Requirements
 - i. *Brush Management (314) and Herbaceous Weed Treatment (315)*
 - ii. *Wildlife Habitat Planting (420)*
 - 2. Construction Specification 8 – Mobilization and Demobilization
 - 3. Construction Specification 6 – Seeding, Sprigging, and Mulching
 - 4. Drawing Set Titled “West Haven – Hurricane Sandy EWPP-FPE, Final Site Restorations,” 11 sheets, approved July 2026.

Brush Management (314) and Herbaceous Weed Treatment (315)

Implementation Requirements

Producer:	Town of West Haven	Contract #:	
Location	52 Marion, 158 Jones, 120 Brown, 37 3rd Ext, 39 & 42 Marshall, 304 & 330 Peck (Properties demolished in 2025) 153 May, Blohm St: 94-96, 80, 84, 44, 40, 36. 3rd Ave Ext: 120,114, 92, 70, 68, 66, 72-74, 64, 62, 58, 25 (2018)		
Planner:	Erin King	Date:	4/23/2026

DEFINITION

The management or removal of woody plants (non-herbaceous or succulent) including those that are invasive and noxious; and the removal or control of herbaceous weeds including invasive, noxious and prohibited plants.

PURPOSE

The practice is used to accomplish one or more of the following purposes: a) Create the desired plant community consistent with the ecological site or a desired state within the site description, b) Restore or release desired vegetative cover, c) Protect soils, control erosion, reduce sediment, improve water quality or enhance hydrology, d) Maintain, modify, or enhance fish and wildlife habitat, e) Improve forage accessibility, quality and quantity for livestock and wildlife, f) Manage fuel loads to achieve desired conditions.

CRITERIA

The Criteria, Considerations, and Specifications for this practice shall be in concurrence with the CT Field Office Technical Guide and the CT Conservation Practice Standard for these practices. **See Standard for all required Criteria.**

PRACTICE REQUIREMENTS

This practice is to be used on all lands except active cropland, where the removal, reduction or manipulation of plants is desired. The practice does not apply to the removal of vegetation by prescribed fire, or the removal of vegetation to facilitate a land use change.

Control of plants can be accomplished through mechanical, chemical, or biological means as well as a combination of methods.

The targeted species as well as the time of year can have significant impacts on the effectiveness of the prescribed control method. In most cases, multiple treatments, either multiple treatments per growing season, or treatments over multiple years will be required to achieve effective control.

Invasive plants are aggressive and tend to be prolific seed producers. The control phase of woody invasive species is typically within the first 3-4 years of initiating treatment. In following years, continued management on the part of the landowner will be required.

To be considered completed and successful for practice payment an approved treatment method will have been applied to a minimum 90% of the targeted vegetation for each treatment instance. The

minimum 90% percent performance criteria refers to evidence of treatment in the field. For mechanical treatments, 90% or more of the vegetation must be cut, mowed, or masticated. For foliar chemical treatments, 90% or more of the vegetation must show evidence of necrosis. For basal bark treatments, 90% or more of the vegetation must either show evidence of necrosis or evidence of adequate basal bark treatment with a visible tracker dye.

Chemical applicators performing foliar applications will revisit the site a minimum of one time (depending on herbicide used) after the initial treatment to determine efficacy of the initial application coverage and treat areas/plants that were missed to achieve the minimum 90% performance criteria. Therefore, it is critical that consideration be given to the site, targeted vegetation, herbicide, and application method to allow for ample time during the permissible treatment windows for a complete treatment to occur. NRCS staff must be able to visually validate evidence of necrosis, or evidence of basal bark treatment on a minimum of 90% of the vegetation within a treatment area for payment.

Permissible Treatment Windows

With well-established or dense infestations of invasive plants, implementing mechanical control first to reduce the total biomass and the overall amount of herbicide required is often advisable. If a combined mechanical/ chemical treatment program is prescribed, the mechanical treatment must be completed early enough to allow for one full growing season of the targeted species before initiating a chemical application.

Woody Plant control is best achieved in August and September, just prior to senescence. However, not all invasive plant control can be confined to only those two months of the year. Factors such as impact on wildlife, in particular migratory birds and pollinators should be considered when planning brush management treatments. Targeted species, site conditions, various treatment methods and/or the integration of multiple treatment options (i.e., mechanical, and chemical) may necessitate various treatments and / or treatment times. Refer to the following table for permissible treatment windows.

Treatment Type	Treatment Window	Notes
Chemical – Foliar	April - September	Foliar application must be done during the growing season. Targeted plants must have already leafed out for an early season treatment or are not showing signs of senescence for a late season treatment. Local conditions and target species on site will dictate when treatment is possible within the permissible treatment window. Some species leaf out earlier than others, likewise some species show evidence of senescence earlier in the season than others. Application timing needs to consider the range of species on site. If possible, avoid foliar application of herbicides during the period when the targeted vegetation is flowering to avoid impacts on pollinators.
Chemical – Cut Stump	Year Round	Cut stump treatments can be done year-round, provided the target plants are not frozen or the stumps saturated in water. Concentrated herbicide is to be applied directly to the cut stump with a low-pressure spray or a brush within 10 minutes of the stump being cut. A tracker dye is required for cut stump treatments.
Chemical – Basal Bark	Year Round	Basal bark treatments can be done year-round, provided the target plants are not frozen and provided snow or water does not prevent the application of the herbicide to the ground line. Typical application is from ground line up 18” around the entire stem, however, always follow manufacture’s label for application. NRCS has found that basal bark treatments of large vines or vines with significant overhead foliage in the canopy layer during the growing season have limited success. Consideration should be given to treating large vines during the dormant season to improve the effectiveness of the treatment. A tracker dye is required for basal bark treatments.
Chemical – Hack & Squirt	Year Round	Hack & Squirt treatments can be done year-round, provided the targeted plants are not frozen. Avoid periods of heavy sap flow or severe drought, as the treatment will be ineffective. A tracker dye is required for hack and squirt treatments.
Mechanical	Year Round	Mechanical control can be done year-round, with the best time being August or September. Mechanical removal of large shrubby vegetation over breast height (4.5’) should be avoided between April 15 th and August 15 th to avoid impact on migratory birds. If possible, consideration should also be given to avoid periods when the targeted vegetation is flowering, to avoid impacts on pollinators.
Biological	April – September	Biological control with grazing animals needs to occur during the growing season. Consider stocking density, rotational grazing, and fencing requirements.

NRCS Pest Management Policy

NRCS Pest Management Policy GM-190, 404 B, 404.1 requires that when conservation planning includes pest management, risk assessment for probable treatment method(s) will be performed. When pesticides will be used, Windows Pesticide Screening Tool (WIN-PST) must be run to determine the potential risk of any pesticide.

WIN-PST was run (foliar application, broadcast treatment, high rainfall) for the most common herbicides used in Connecticut. The following pesticides were all assessed and rated as “Low” or “Very Low” risk to humans and fish. Therefore, no mitigations are required when one or more of the following herbicides are used.

The following herbicides are exempt from having individual WIN-PST assessments completed by NRCS planning staff. If an herbicide is planned, other than what is listed below, or something other than a foliar, basal bark, or cut stump application method then an individual WIN-PST assessment must be completed by NRCS planning staff to determine if any mitigation is necessary. NRCS is not allowed to make chemical recommendations. Herbicide recommendations need to be documented as having come from a reputable source like UConn Extension or a licensed certified applicator.

Active Ingredient(s)	Common Name(s)	Exposure Adjusted Toxicity Level - Human	Exposure Adjusted Toxicity Level - Aquatic	Exposure Adjusted Toxicity Level - Sediment
Glyphosate	Accord, Roundup, Rodeo	Very Low / Low	Very Low / Low	Very Low
Imazapyr	Arsenal, Chopper	Very Low / Low	Very Low / Low	Very Low
Metsulfuron-methyl	Escort	Very Low / Low	Very Low / Low	Very Low
Paclobutrazol	Clipper	Very Low / Low	Very Low / Low	Very Low
Sulfometuron-methyl	Oust	Very Low / Low	Very Low / Low	Very Low
Triclopyr	Garlon 3a, Garlon 4, Pathfinder II	Very Low / Low	Very Low / Low	Very Low

Any chemical application must be done as per the directions on the manufacturer’s label. It is required that a CT licensed applicator is hired for the treatments. A list of licensed applicators can be found by searching Connecticut’s eLicense website [eLicense Online \(ct.gov\)](https://www.ct.gov/ELicense) and generating a list (roster) under the Pesticide Management Program tab.

All work shall be in compliance with NRCS program policy and rules, and local and state laws. This includes but is not limited to the Connecticut Forest Practices Act and state and local wetlands regulations.

All necessary federal, state, and municipal permits, approvals or waivers must be obtained before work commences and are the responsibility of the landowner.

This practice may be associated with other conservation practices to ensure full functionality and that resource concerns are addressed. See Conservation Plan for additional practices. Additional practices may include CPS-666 Forest Stand Improvement, CPS – 647 Early Successional Habitat Development, CPS-612 Tree Shrub Establishment, and CPS-655 Forest Trails and Landings which may include Temporary Stream Crossings.

Implementation Requirement Sheet
314 – Brush Management: Invasive Woody Plant Control and 315 – Herbaceous Weed Treatment

PURPOSE OF TREATMENT (check all that apply)

☐ Create the desired plant community consistent with the ecological site or a desired state within the site description.	☐ Protect soils, control erosion, reduce sediment, improve water quality, or enhance hydrology.
☒ Restore or release desired vegetative cover.	☐ Maintain, modify, or enhance fish and wildlife habitat.
☐ Improve forage accessibility, quality and quantity for livestock and wildlife.	☐ Manage fuel loads to achieve desired conditions.

INVASIVE PLANTS TO CONTROL

Species	Growth Form (Tree, Shrub, Vine)	Woody or Herbaceous	Coverage / Density* at time of assessment
Asiatic bittersweet	Vine	Woody	Light
Autumn olive	Tree	Woody	Light
English ivy	Vine	Woody	Light
Japanese barberry	Shrub	Woody	Light
Japanese honeysuckle	Vine	Woody	Light
Japanese knotweed	Forb	Herbaceous	Variable
Mugwort	Forb	Herbaceous	Heavy
Multiflora rose	Shrub	Woody	Light
Phragmites	Grass	Herbaceous	Variable
Privet	Shrub	Woody	Light
Swallowwort	Forb	Herbaceous	Light
Wisteria	Vine	Woody	Light

Additional Specifications and Notes (Fact Sheets and other guidance documents provided should be listed here):

Only those species observed are listed. Any invasive plants that are found but aren't listed must still be treated.

***Coverage/Density Classifications:**

Heavy: Greater than 75% of the treatment area is covered.

Moderate: Greater than 25% and less than 75% of the treatment area is covered.

Light: Less than 25% of the treatment area is covered.

TREATMENT PLAN FOR GROUP B PROPERTIES

First Treatment			
Is Treatment Required Before a Silvicultural Practice	☐ Yes ☐ No ☒ N/A		
Treatment Method (Check all that apply)	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> ☒ Chemical – Foliar ☒ Chemical – Basal Bark ☒ Chemical – Cut Stump ☒ Chemical – Hack & Squirt </td> <td style="width: 50%; border: none; vertical-align: top;"> ☒ Mechanical – Hand saw / brush saw ☒ Mechanical – Brush Hog ☒ Mechanical – Forestry Mower ☐ Biological </td> </tr> </table>	☒ Chemical – Foliar ☒ Chemical – Basal Bark ☒ Chemical – Cut Stump ☒ Chemical – Hack & Squirt	☒ Mechanical – Hand saw / brush saw ☒ Mechanical – Brush Hog ☒ Mechanical – Forestry Mower ☐ Biological
☒ Chemical – Foliar ☒ Chemical – Basal Bark ☒ Chemical – Cut Stump ☒ Chemical – Hack & Squirt	☒ Mechanical – Hand saw / brush saw ☒ Mechanical – Brush Hog ☒ Mechanical – Forestry Mower ☐ Biological		
Planned Treatment Window:	August 2026 - Sept 2027		
Planned Herbicide(s) if applicable:	Refer to page 3		
Source of Chemical Recommendation:	Licensed herbicide applicator		
Implementation Notes: Special considerations, techniques, timing, mitigation, or other factors.	Brush hog/forestry mow during window of 8/15/26 - 4/15/27 and cut stump and treat the larger autumn olives, vines and any other large woody invasives immediately after. Foliar herbicide of herbaceous species during 5/1/2027 - 9/1/2027. Black swallowwort needs to be sprayed in May or June. Phragmites control is most effective if sprayed August - September and if cut multiple times during growing season.		

Second Treatment			
Is Treatment Required Before a Silvicultural Practice?	☐ Yes ☐ No ☒ N/A		
Treatment Method (Check all that apply)	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> ☒ Chemical – Foliar ☒ Chemical – Basal Bark ☒ Chemical – Cut Stump ☒ Chemical – Hack & Squirt </td> <td style="width: 50%; border: none; vertical-align: top;"> ☐ Mechanical – Hand saw / brush saw ☒ Mechanical – Brush Hog ☐ Mechanical – Forestry Mower ☐ Biological </td> </tr> </table>	☒ Chemical – Foliar ☒ Chemical – Basal Bark ☒ Chemical – Cut Stump ☒ Chemical – Hack & Squirt	☐ Mechanical – Hand saw / brush saw ☒ Mechanical – Brush Hog ☐ Mechanical – Forestry Mower ☐ Biological
☒ Chemical – Foliar ☒ Chemical – Basal Bark ☒ Chemical – Cut Stump ☒ Chemical – Hack & Squirt	☐ Mechanical – Hand saw / brush saw ☒ Mechanical – Brush Hog ☐ Mechanical – Forestry Mower ☐ Biological		
Planned Treatment Window:	Nov 2027 - Sept 2028		
Planned Herbicide(s) if applicable:	Refer to page 3		
Source of Chemical Recommendation:	Licensed herbicide applicator		
Implementation Notes: Special considerations, techniques, timing, mitigation, or other factors.	Brush hog once during Nov 2027 - April 2028 window. Foliar spray May - September 2028.		

Third Treatment			
Note: If the first two control treatments are successful, the third level of treatment may not be required, and the project can move into a management phase.			
Is Treatment Required Before a Silvicultural Practice?	☐ Yes ☐ No ☒ N/A		
Treatment Method (Check all that apply)	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> ☒ Chemical – Foliar ☒ Chemical – Basal Bark ☒ Chemical – Cut Stump ☒ Chemical – Hack & Squirt </td> <td style="width: 50%; border: none; vertical-align: top;"> ☐ Mechanical – Hand saw / brush saw ☒ Mechanical – Brush Hog ☐ Mechanical – Forestry Mower ☐ Biological </td> </tr> </table>	☒ Chemical – Foliar ☒ Chemical – Basal Bark ☒ Chemical – Cut Stump ☒ Chemical – Hack & Squirt	☐ Mechanical – Hand saw / brush saw ☒ Mechanical – Brush Hog ☐ Mechanical – Forestry Mower ☐ Biological
☒ Chemical – Foliar ☒ Chemical – Basal Bark ☒ Chemical – Cut Stump ☒ Chemical – Hack & Squirt	☐ Mechanical – Hand saw / brush saw ☒ Mechanical – Brush Hog ☐ Mechanical – Forestry Mower ☐ Biological		
Planned Treatment Window:	Nov 2028 - Nov 2029		
Planned Herbicide(s) if applicable:	Refer to page 3		
Source of Chemical Recommendation:	Licensed herbicide applicator		
Implementation Notes: Special considerations, techniques, timing, mitigation, or other factors.	Mow/brush hog area in Nov 2028 - April 2029 window. Foliar spray during growing season of 2029.		

TREATMENT PLAN FOR GROUP A PROPERTIES

First Treatment	
Treatment Method (Check all that apply)	☒ Chemical – Foliar ☒ Chemical – Basal Bark ☒ Chemical – Cut Stump ☒ Chemical – Hack & Squirt ☐ Mechanical – Hand saw / brush saw ☐ Mechanical – Brush Hog ☐ Mechanical – Forestry Mower ☐ Biological
Planned Treatment Window:	May - September 2027
Planned Herbicide(s) if applicable:	Refer to page 3
Source of Chemical Recommendation:	Licensed herbicide applicator
Implementation Notes: Special considerations, techniques, timing, mitigation, or other factors.	Cut stump larger woody vines and shrubs. Foliar spray the herbaceous species and smaller woody shrubs. Black swallowwort needs to be sprayed in May or June. Phragmites control is most effective if sprayed August - September.

Second Treatment	
Treatment Method (Check all that apply)	☒ Chemical – Foliar ☒ Chemical – Basal Bark ☒ Chemical – Cut Stump ☒ Chemical – Hack & Squirt ☐ Mechanical – Hand saw / brush saw ☐ Mechanical – Brush Hog ☐ Mechanical – Forestry Mower ☐ Biological
Planned Treatment Window:	May - September 2028
Planned Herbicide(s) if applicable:	Refer to page 3
Source of Chemical Recommendation:	Licensed herbicide applicator
Implementation Notes: Special considerations, techniques, timing, mitigation, or other factors.	Spot treat

Third Treatment	
Note: If the first two control treatments are successful, the third level of treatment may not be required, and the project can move into a management phase.	
Treatment Method (Check all that apply)	☒ Chemical – Foliar ☒ Chemical – Basal Bark ☒ Chemical – Cut Stump ☒ Chemical – Hack & Squirt ☐ Mechanical – Hand saw / brush saw ☐ Mechanical – Brush Hog ☐ Mechanical – Forestry Mower ☐ Biological
Planned Treatment Window:	May - August 2029
Planned Herbicide(s) if applicable:	TBD
Source of Chemical Recommendation:	Licensed herbicide applicator
Implementation Notes: Special considerations, techniques, timing, mitigation, or other factors.	Spot treat



Wildlife Habitat Planting – 420

Implementation Requirements

Lifespan: 5 years

Client:	City of West Haven	Location:	52 Marion, 158 Jones, 120 Brown, 37 3rd Ext, 39 & 42 Marshall, 304 & 330 Peck (Properties demolished in 2025) 153 May, Blohm St: 94-96, 80, 84, 44, 40, 36, 3rd Ave Ext: 120-114, 92, 70, 68, 66, 72-74, 64
Program:	EWP-FPE	Date:	4/23/2026
Easement Addresses:	52 Marion, 158 Jones, 120 Brown, 37 3rd Ext, 39 & 42 Marshall, 304 & 330 Peck (Group A - properties demolished in 2025) 153 May, Blohm St: 94-96, 80, 84, 44, 40, 36, 3rd Ave Ext: 120-114, 92, 70, 68, 66, 72-74, 64, 62, 58, 25 (Group B - 2018)		



Native bees foraging on New England Aster
Photo: Eric Venturini

DEFINITION

Establishing wildlife habitat by planting herbaceous vegetation or shrubs.

PURPOSE

This practice may be applied to accomplish one or more of the following:

- Improve degraded wildlife habitat for the target wildlife species or guild.
- Establish wildlife habitat that resembles the historic, desired, and reference native plant community.

WHERE USED

This practice applies to lands where inadequate wildlife habitat is identified as a primary resource concern, and a plant community inventory or wildlife habitat evaluation indicates a benefit in altering the current vegetative conditions (species diversity, richness, structure, and pattern) by establishing herbaceous plants or shrubs. The use of annuals that persist over the life of the practice, and annuals that serve as a nurse crop to support the establishment of the persistent vegetative species are appropriate under this conservation practice. See Conservation Practice Standard for conditions where practices do and do not apply.

CRITERIA, CONSIDERATIONS, AND SPECIFICATIONS

The Criteria, Considerations, and Specifications for this practice shall be in concurrence with CT Field Office Technical Guide and the CT Conservation Practice Standard for this practice. See [Standard](#) for all required Criteria.

WILDLIFE HABITAT PLANTING (420) PLAN

Refer to attached Conservation Plan Map(s) for location of area(s) to be treated.

Designed By: Erin King	Title: Biologist	Date: 4/17/2026
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Objectives	
☐ Improve degraded wildlife habitat for target wildlife species	Target wildlife species:
☒ Establish wildlife habitat that resembles the historic, desired and reference native plant community.	Target native plant community: (species composition, age, structure or density, or desired site characteristics) Native shrubs, grasses, and herbaceous plants

Planting Type		
☐ Native Warm Season Grasses	☐ Combination Native Warm and Cool Season Grasses	☒ Native Shrubs
☐ Native Cool Season Grasses	☒ Native Wildflowers and Grasses	☐ Other
☐ Native Wildflowers		

Site Preparation (check all that apply)
☐ Site preparation not required (e.g. recently cropped, with no likelihood of aggressive weed problems).
☒ Mow or brush hog and apply a non-persistent herbicide.
☐ Solarize site to control and kill existing vegetation.
☐ Use a smother crop such as buckwheat.
☐ Repeated shallow cultivation.
☐ Minimal site preparation: Scalp-mow or shallow cultivation.
☐ Other (describe):
For the Group A properties (2025 properties): Mow in November 2026, before seeding with NEPP upland seed mix. In May or early June 2027, seed with Ernst annual mix and mulch. Spot treat the invasives throughout the following growing seasons in accordance with Implementation Requirements 314 and 315. Additional seeding requirements described below. For the Group B properties (2018 properties): Brush hog and herbicide for three years (see 314 and 315 IRs). Seed in fall of third year.

HERBACEOUS PLANTING SPECIFICATIONS FOR GROUP B (2018 PROPERTIES)				
Planting Date(s)				
Plant Hardiness Zone	Warm-Season Grasses (with/without forbs & legumes)		Cool-Season Grasses (with/without forbs & legumes)	
	Spring Planting	Dormant Planting¹	Spring Planting	Fall Planting¹
☒ 6	☐ Apr 15 – June 15	☐ Oct 1 – Dec 15	☐ Mar 20 – May 20	☐ Aug 1 – Oct 15
☒ 7	☐ Apr 1 – June 15	☒ Oct 15 – Dec 31	☐ Mar 1 – May 1	☐ Aug 15 – Oct 15
1. If ground is covered in snow or frozen, delay seeding until spring.				
Seeding Depth ☐ Just below surface to ¼ inch ☒ ¼ to ½ inch ☐ Other:				
Planting Equipment ☐ Native seed drill ☐ Conventional seed drill ☒ Broadcast seeder ☐ Other (describe):		Planting Method ☐ No-till plant into residue or clean seed bed. ☐ No-till plant into a spring cover crop. If the cover crop is tall or thick, mow it prior to planting. The cover crop may also be “burned down” with an herbicide prior to planting. ☒ Broadcast seed onto a firm, prepared seedbed, and incorporate using a cultipacker, rake, or drag. For small or fluffy seed, mix a filler (e.g., fine-grain sand, polenta, etc.) with the seed for even distribution. ☐ Other (describe):		
Lime and Fertilizer ☐ If the pH is below 5.5, lime can be applied to achieve a pH of 6.2 to 6.5. ☒ Do not apply lime or fertilizer. Typically, lime and fertilizer are not recommended for native plantings.				

Seeding Information – seed tag will be needed for certification

Address	Dominant Soil Type (Include texture and drainage)	Seed Mix Description	Seeding Rate (Total Planting Rate (PLS/ac)	Acres	Total Seed Needed (PLS)
ALL	235B/308	NEPP Upland Mix	7.52	2.64	20

Additional Specifications and Notes (Fact Sheets and other guidance documents provided should be listed here) or attached (record 3 each of early, mid, and late blooming species here if not attached):

See attached table 1 for breakdown of total seed needed by easement address.

Years 1 - 3 (2026 to 2028): brush hog lots in winter or early spring (before 4/15) and apply chemical-foliar during growing season (see 314 and 315 Implementation Requirements).

2029: Mow in the fall and seed with NEPP Upland seed mix 11/1 - 12/31 focusing on areas with no vegetation. According to vendor, seeding rate is 9 lbs per acre so need 24 pounds total.

HERBACEOUS PLANTING SPECIFICATIONS FOR GROUP A (2025 PROPERTIES)				
Planting Date(s)				
Plant Hardiness Zone	Warm-Season Grasses (with/without forbs & legumes)		Cool-Season Grasses (with/without forbs & legumes)	
	Spring Planting	Dormant Planting¹	Spring Planting	Fall Planting¹
☒ 6	☐ Apr 15 – June 15	☐ Oct 1 – Dec 15	☐ Mar 20 – May 20	☐ Aug 1 – Oct 15
☒ 7	☒ Apr 1–June 15(Annual)	☒ Oct 15 – Dec 31 (NEPP)	☐ Mar 1 – May 1	☐ Aug 15 – Oct 15
1. If ground is covered in snow or frozen, delay seeding until spring.				
Seeding Depth ☒ Just below surface to ¼ inch ☒ ¼ to ½ inch ☐ Other:				
Planting Equipment ☐ Native seed drill ☐ Conventional seed drill ☒ Broadcast seeder ☐ Other (describe):		Planting Method ☐ No-till plant into residue or clean seed bed. ☐ No-till plant into a spring cover crop. If the cover crop is tall or thick, mow it prior to planting. The cover crop may also be “burned down” with an herbicide prior to planting. ☒ Broadcast seed onto a firm, prepared seedbed, and incorporate using a cultipacker, rake, or drag. For small or fluffy seed, mix a filler (e.g., fine-grain sand, polenta, etc.) with the seed for even distribution. ☐ Other (describe):		
Lime and Fertilizer ☐ If the pH is below 5.5, lime can be applied to achieve a pH of 6.2 to 6.5. ☒ Do not apply lime or fertilizer. Typically, lime and fertilizer are not recommended for native plantings.				

Seeding Information – seed tag will be needed for certification

Address	Dominant Soil Type (Include texture and drainage)	Seed Mix Description	Seeding Rate (Total Planting Rate (PLS/ac)	Acres	Total Seed Needed (PLS)
see map	235B	Ernst Annual		1.73	
see map	235B	NEPP Upland	7.52	1.73	13

Additional Specifications and Notes (Fact Sheets and other guidance documents provided should be listed here) or attached (record 3 each of early, mid, and late blooming species here if not attached):

See attached table 2 for breakdown by easement address.

May 2027 - Seed with the Ernst Annual Wildflower Mix between 4/1 and 6/15. According to vendor, seeding rate is 10-12 lbs per acre. Total project acreage is 1.73 acres so will need 18 pounds. Straw mulch the seeding and water as needed until >75% establishment.

Fall 2027 - Mow and seed with Pinelands NEPP upland seed mix between 10/15 and 12/31. According to vendor, seeding rate is 9 lbs per acre so need 15 pounds.

May - September 2027, 2028 & 2029 - Spot treat invasives. Refer to Implementation Requirements 314 and 315 for more details.

Weed Control Measures During Establishment

The establishment period for shrubs is typically 2 to 3 years. During this period, controlling weeds and grasses will help reduce competition for water and other resources.

- ☐ Mow between rows or weed wack around plantings to control weeds. Be careful not to mow or cut seedlings.
- ☐ Spot spray with a low persistence herbicide (e.g., glyphosate) around plantings. Be careful not to spray shrubs and avoid spraying on windy days.

Herbicide: _____

of Treatments: _____ Timing: ☒ Late Summer/Early Fall ☐ Spring (prior to planting)

- ☒ Mulching: natural materials around each shrub (see below for more detail)

- ☐ Other methods: _____

Additional Instructions

For mulch, use woodchips or bark and spread around individual shrubs. Apply mulch in a 3-foot diameter circle around each planting, 2 to 3 inches deep, and pull back from the plant stem slightly.

Other Plantings

Plant Materials (shrubs and/or herbaceous plantings)				
Address	Species	Planting Stock (bulb, containerized, plug, bare root, other)	Rate (no., lbs, or units/acre)	Other Planting Details
39 Marshall	Asiatic bittersweet	containerized	16 total	see attached
42 Marshall	Autumn olive	containerized	7 total	see attached
304 Peck	English ivy	containerized	9 total	see attached
330 Peck	Japanese barberry	containerized	9 total	see attached
52 Marion	Japanese honeysuckle	containerized	14 total	see attached
158 Jones	Japanese knotweed	containerized	6 total	see attached
Notes (e.g., additional details as needed) elderberry spaced 8' apart. beach plum, azalea and dogwood spaced 6' apart. winterberry and serviceberry spaced 10' apart. Make sure to wait at least 72 hours after last herbicide treatment to plant shrubs. Plant in the fall of 2029.				

National Environmental Policy Act (NEPA) Review Documentation and Requirements
Cultural Resources, Threatened and Endangered Species, etc.

Additional Resources

- Jordan et al. [Organic Site Preparation for Wildflower Establishment](#). Xerces Society for Invertebrate Conservation.
- Picone, P. 1995. [Enhancing your Backyard Habitat for Wildlife](#). DEEP Wildlife Division.
- Picone, P. 2024. [Connecticut Shrub Native Tree, Shrub and Perennial Availability List](#). UCONN and CT DEEP.
- Salon P.R. and C. F. Miller. 2012. [A Guide to: Conservation Plantings on Critical Areas for the Northeast, USDA, NRCS, Big Flats Plant Materials Center](#), Corning, NY.

Note: Any changes to this plan must be approved by the NRCS representative managing the project.

SITE SELECTION

Site selection for pollinator habitat should take the following into consideration:

- **Pesticides:** Habitat must be protected from pesticides. Only sites with no to very low risk should be considered.
- **Accessibility:** New habitat should be easily accessible for planting, watering, and maintenance.
- **Sunlight:** Most wildflowers and native shrubs prefer full sunlight or at least part sun.
- **Slope:** Steep or highly erodible sites should not be disturbed.
- **Weed Pressure:** Areas with high weed pressure will take more time and effort to prepare for planting. It is important to note the primary weed composition to aid in site preparation.
- **Site History:** Factors such as past plant cover, use of pre-emergent herbicides or other chemicals, and soil compaction can affect plant establishment.
- **Soils and Habitats:** Most plants listed in the guidance document are tolerant of many soil conditions and types, however all plants establish better when matched with appropriate conditions.
- **Irrigation:** To establish plants from plugs, pots, or bare root will require irrigation. Irrigation is not usually needed for seed plantings.

SITE PREPARATION

Site preparation is critical for project success. It may require a season or more to eliminate weeds. For adequate site preparation, there should be no more than 5% vegetation coverage on the soil that will be seeded. Recently cropped fields or regularly mowed turf grass tend to have the lowest weed pressure. Avoid areas with a high density of invasive species within or nearby the site. Consider selecting another site with lower weed pressure or delaying wildlife habitat planting until invasive species have been eradicated. Site preparation is site dependent. Table 1 describes a number of options suitable for a pollinator planting and table 2 can be applied to sites where minimal site preparation is appropriate. Minimal site preparation options have a higher probability of weed pressure and a lower probability of successful establishment and are not recommended for pollinator seedings.

Table 1. Pollinator site preparation options from Xerces Society.

METHOD: NON-SELECTIVE (NON-PERSISTENT) HERBICIDE	
Where to Use • Conventional farms • Areas with low risk of erosion • Areas accessible to a sprayer	Timing • Total time: 6+ months • Begin: Early spring after the first weed growth • Plant: fall
Basic Instructions: 1. Mow existing thatch as needed before beginning herbicide treatments to expose new weed growth to the herbicide spray. 2. Apply a non-selective, non-persistent herbicide as per label as soon as weeds are actively growing in the early spring. 3. Repeat herbicide applications throughout spring, summer, and early fall as needed (whenever emerging seedlings reach 4-6"). 4. For any herbicide-resistant weeds, mow the area to prevent flowering and seed development as necessary.	

5. Plant pollinator seed mix (and any transplants) in the fall, waiting at least 72 hours after the last herbicide treatment.	
METHOD: SOLARIZATION (Figure 1)	
Where to Use • Conventional and organic farms • Areas with low risk of erosion • Areas accessible to mowing equipment • Locations with full sun • Areas < or = to 0.5 acres	Timing • Total time: 6 months • Begin: spring • Plant: late fall
Basic Instructions: 1. Mow, rake, or lightly harrow and smooth the site in the spring (raking off debris, if needed). 2. After smoothing the site, lay UV stabilized plastic (such as high tunnel plastic) burying the edges to prevent airflow between the plastic and the ground. Weigh down the center of the plastic if necessary to prevent the wind from lifting it. Use greenhouse repair tape for any rips that occur. 3. Remove the plastic in the early fall before the weather cools and the area beneath the plastic is recolonized by nearby rhizomatous weeds. 4. Immediately plant the pollinator seed mix.	
METHOD: SMOTHER CROP	
Where to Use • Conventional and organic farms • Areas with low risk of erosion • Areas accessible to equipment and irrigation • Weed pressure is low to moderate	Timing • Total time: 6 months (lower weed pressure) to a year with moderate weeds • Begin: spring • Plant: fall
Basic Instructions: 1. Spring: mow vegetation and rake off clippings as needed to clear the site. Then, as soon as the planting area is accessible lightly till. Time cultivation with dry soil conditions. 2. 2-3 weeks later: Lightly harrow to break up the clumps and kill emerging weeds. Minimize soil disturbance by using cultivation equipment that can be set to cultivate at shallow depths (<2"). 3. Late May-Early June: Prepare for seeding buckwheat in late spring when soil temperatures are around 65F. Create a smooth, firm seedbed and then immediately seed first crop of buckwheat. Avoid wet weather and delay planting if needed. • If drill seeding, use a seeding rate of 50-60 lb/acre and drill seed at 0.5-1" depth in 6-8" rows. Irrigate if needed. • If broadcast seeding: increase seeding rate to 70 lb/acre and lightly scratch seed into soil surface and cultipack with available equipment. Irrigate if needed. • If soil is very dry, irrigate planting area before seeding. 4. Early-late July: Incorporate (disk) buckwheat 6 weeks after sowing (do not disk more than 1" deep) and immediately seed a second buckwheat crop. Irrigate if needed. 5. Early fall (~6 wks after second seeding): Terminate the crop before it goes to seed (mow and rake residue). • If adequate weed control is achieved: Use a fall dormant seeding if conditions are dry. Use the spring seeding dates if site is prone to wet conditions in the fall.	

• If weedy vegetation persists: repeat steps 1-5 for an additional season before seeding wildflowers.	
METHOD: REPEATED SHALLOW CULTIVATION	
Where to Use • Flat or gently sloping, sunny or shady sites • Transitioning crop fields or sites with low weed pressure • Irrigation is available • Proper equipment is available	Timing • Total time: 6-9 months • Begin: winter/mid-spring • Plant: late fall
Basic instructions: 1. Lightly disc in early spring as soon as field is accessible and before winter/spring annuals flower. Minimize soil disturbance by setting equipment to most shallow depths possible, but deep enough to work up soil adequately. If site has dense overgrown vegetation, mow before tilling in April to early May. 2. Wait 2-3 weeks after initial till to allow existing organic matter time to decompose. 3. Begin shallow cultivation to encourage weed seed germination. Minimize soil disturbance by using cultivation equipment that can be set to cultivate at shallow depths of <2”. 4. Evaluate effectiveness of cultivation implements and adjust as necessary. 5. After cultivation, smooth and firm the soil (cultipacker, tow-behind, or push lawn roller) to enhance seed-soil contact, as weed seeds germinate more readily with good seed-soil contact. 6. Repeat mechanical shallow cultivation at 3-5 week intervals (or before weeds reach 4” high) for an entire growing season. Irrigate as needed to encourage weed germination and growth. Continue to lightly pack soil as necessary to ensure seed-soil contact. 7. After a full season of shallow cultivation, select the most appropriate option below based on current site conditions and level of weed control achieved. ○ For sites with low weed pressure – Wildflower mix can be seeded after one season. Fall dormant season seeding is recommended. ○ For sites with moderate weed pressure – Repeat cultivation process in the following growing season (year 2). Seed the wildflower mix in late fall of year 2 or in spring of year 3. Fall dormant seeding is recommended.	



Figure 1. Two silage tarps that have been overlapped and weighted down. Photo: Xerces Society/ Eric Venturini

SEEDING DATES

Seeding dates should be scheduled based on plant type and USDA Plant Hardiness Zone (Figure 2). Schedule plantings during periods when soil moisture is adequate for germination and establishment. For cool season grasses spring seeding dates from March to May, and fall seeding dates from August to October, are adequate for most of Connecticut. For warm season grasses, seeding dates occur between mid-spring and early summer. The required soil temperature for seed germination is 55°F. Dormant fall seedings are preferred from October through December when using a pollinator mix.

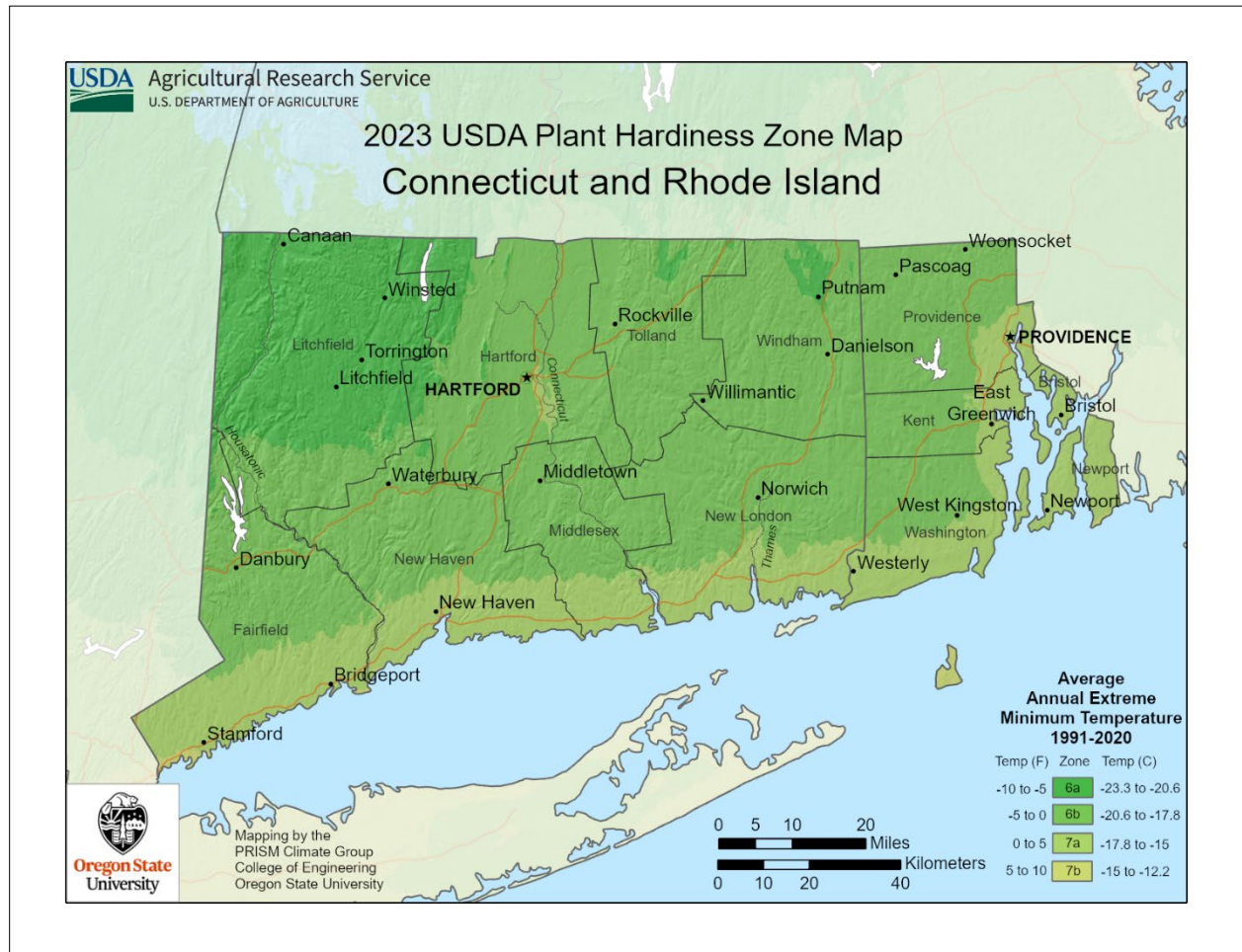


Figure 2. Plant hardiness zones in CT and RI.

SOIL FERTILITY – IF REQUIRED

Soil test samples should be sent to an appropriate soil test lab, such as the University of Connecticut Soil Nutrient Analysis Laboratory. Soil samples should be pulled from the top 4 to 6 inches of topsoil in the fall prior to planting. Follow soil test result recommendations. Apply lime during first tillage operation or at the time of planting. Apply lime and fertilizer according to a recent (less than three years) soil test. Where soil pH levels are below 5.5, apply lime to raise pH to 6.2 at a minimum. NOTE: For warm season native grasses, nitrogen application is not recommended in the seeding year. Nitrogen may be needed after the establishment year if the plants exhibit nitrogen deficiency symptoms (pale green leaves and poor growth). Otherwise, do not apply nitrogen fertilizers to establish warm season native grasses. Apply all soil amendments prior to seedbed preparation, or before planting if a no-till drill is used.

PLANTING METHODS

There are many planting techniques that can be used for the seeding (Table 3). Factors such as equipment availability should be taken into consideration. Broadcast seeding, which consists of scattering seed onto the soil surface, is a low-tech low-cost method that can be very effective on bare soil. This technique can be performed by hand, or with hand-operated crank seeders.

Table 2. Planting methods from Xerces Society

METHOD: BROADCAST SEEDERS OR HAND BROADCASTING	
Pros • Inexpensive • Easy to use • Can often accommodate poorly cleaned seed • Many models and sizes are available	Cons • Requires a smooth seed bed • Seed should be pressed into soil after planting • Difficult to calibrate • Some models can't accommodate large seeds
Basic Instructions: 1. Remove as much stubble as possible prior to seeding, creating a smooth, lightly packed seedbed. 2. Seeds of similar sizes can be mixed and bulked up with an inert carrier ingredient such as fine-grained sand, polenta, fine grained vermiculite, or gypsum. Use two to three parts bulking agent for each part seed by volume. 3. The broadcast seeding equipment used should have a flow gate that closes down small enough to provide a slow, steady flow of the smallest wildflower seed. Planting should begin with the flow gate set to the narrowest opening to allow for two perpendicular passes over the seed bed for even distribution. Very large seed can be planted separately with the flow gate set to a wider opening. 4. For small sites, seed can also be hand broadcast. 5. Do not cover the seed with soil after planting. A water-filled turf grass roller or a cultipacker should be used to press the seed into the soil surface.	
METHOD: DROP SEEDERS OR FERTILIZER SPREADERS	
Pros • Inexpensive • Easy to use • Even seed dispersal • Can accommodate large and small seed • Many models and sizes are available	Cons • Requires a smooth level seed bed • Seed should be pressed into soil after • Hand-powered tools are time consuming for large areas • Calibration requires trial and error
Basic Instructions 1. Remove as much stubble as possible prior to seeding, creating a smooth, lightly-packed seedbed. 2. Seeds of similar sizes can be mixed together and bulked up with an inert carrier ingredient such as fine-grained sand, polenta, fine grained vermiculite, or gypsum. Use two to three parts bulking agent for each part seed by volume. 3. Do not cover the seed with soil after planting. A water-filled turf grass roller or a cultipacker should be used to press the seed into the soil surface (Figure 3).	

METHOD: NATIVE SEED DRILLS	
Pros • Convenient for planting large areas • Seed box agitators and depth controls are designed for planting small and fluffy native seeds at optimal rate & depth • Can plant into a light stubble layer • Seeds are planted in even rows • Does not require seed to be pressed into soil surface after planting	Cons • Expensive and may not be available • Difficult to calibrate for small areas • Requires a tractor and experienced operator • Seed with a lot of chaff can clog delivery tubes
Basic Instructions 1. Plant only when soil is dry enough to prevent seed from sticking to the coulters. Seedbed should be level to ensure proper planting depth. 2. Keep seed separated by species until ready to plant. 3. Prior to planting, divide seed into batches of large smooth seed, small smooth seed, and tufted seed that does not flow easily. 4. Loosely fill seedboxes with the appropriate seed batch. Do not compact seed into boxes. 5. The planting depth for a particular seed should be no more than 1.5x its diameter. To achieve this for most wildflower seed set the depth controls to no deeper than ¼". Very small wildflower seed should be planting separately on the soil surface. 6. Operate drill at <5 mph, stopping periodically to check planting tubes for clogs. 7. Stop periodically to check planting depth. Some seed should be visible on soil surface.	



Figure 3. Photo of Eric Venturini using a water-filled lawn roller to press the seed into the soil after broadcasting wildflower seed.

SEEDING MIXTURES FOR POLLINATOR PLANTINGS

See [guidance document](#) for examples of seed mixes. Mixes should not contain more than 25% grass seed or any invasive species. Mixes need to contain 3 early blooming species (April to early June), 3 mid (mid-June to early August), and 3 late (mid-August to late October). The example mixes in the guidance document meet the criteria for a high diversity seed mix with species blooming throughout the growing season. Producers don't need to select the exact mixes in the guidance document, but they must receive prior approval if they are using something different.

SEEDING MIXTURES FOR WILDLIFE PLANTINGS

There are lower diversity seed mixes that also benefit wildlife such as a warm or cool season grass planting. No invasive plants may be used, and native species are recommended. Seed mixes must be approved by a NRCS biologist.

SEEDING RATE

For cool season grasses pure live seed (PLS) seeding rate should be a minimum of 10 pounds per acre for mechanical plantings. For warm season grasses, depending on the species, seeding rates range from 5 to 12 lbs. of PLS per acre. Wildflowers and legumes can be added to the seed mix at about 1 lb. PLS per acre. Many wildlife planting mixes have both warm season grasses and various forbs mixed together. Follow seeding rates of PLS from the seed supplier along with cover crop seeding rates for the selected mix when the recommended rates are higher than the rates listed above.

CERTIFICATION

Producer should communicate with NRCS prior to and during implementation activities. Documentation by NRCS staff of proper management or costumer's records shall be used for certification of this practice. Acceptable documentation includes:

- Soil Test Results. (if needed)
- Lime and Fertilizer Application and/or Manure Application Records. (if needed)
- Seed Label from the purchased mix.
- Seeding/Planting Dates

POST PLANTING MANAGEMENT

The viability and success of a wildlife planting is often dependent on management activities that occur post planting. Wildflower mixes planted from seed are slow to establish and weed control is critical in the first and second years after planting. Depending on the seed mixture selected and site conditions it may take a couple years for the planting area to adequately establish. In addition, the plant and species composition of the targeted area may change over time due to competition and the prescribed disturbance regime. Common weed strategies that can be used in the first year include:

- Spot spraying: Spot spraying with herbicides can be effective, relatively inexpensive, and require minimal labor. Care should be taken to so that herbicides do not drift or drip onto desirable plant species.
- Selective herbicides: Grass-selective herbicides can be used to control weedy grasses in broadleaf plantings.
- Mowing/String trimming: Mowing or string trimming can be utilized to keep weedy species from shading out other plants, and to prevent them from going to seed. Sites planted with perennial seed mix can be mowed occasionally (ideally as high as mower settings allow) during the first year after planting to prevent annual and biennial weeds from flowering and producing seed (Figure 4).
- Hand weeding: Hand-weeding can be effective in small areas.

For long-term maintenance, the prescribed disturbance regime will not only influence the success of the planting but will directly influence wildlife utilization. In general, planted areas should be mowed a maximum of annually to a minimum of every third year between November 1st and April 15th. If possible, mowing between March 15th and April 15th is preferred, as it allows for the planted area to serve as wintertime cover. If a greater proportion of woody vegetation is desired, the disturbance

frequency can be extended to once every three to five years to allow shrubs to grow. Established shrubs can also be retained within the planting area and not mowed.

Variations on the mowing schedule can be made to target or favor a certain species composition once the area is established, provided the variations in mowing schedules stay between the periods of August 15 to April 15. No mowing of wildlife plantings between April 15 and August 15 are permitted without NRCS approval.



Figure 4. High mowing (~8'') for weed management in a newly established pollinator meadow (first year after planting). Photo: David Williams

Floodplain Group A Easements

Date: 1/23/2026

Client(s): Town of West Haven

Assisted By: Erin.King2
STATE OFFICE
TOLLAND, CT

Legend

Water

Water

Streams

EWPP-FPE



Floodplain Group B Easements

Date: 1/23/2026

Client(s): Town of West Haven

Assisted By: Erin.King2
STATE OFFICE
TOLLAND, CT0 61030 122060
Ft

Location of Map Center: 72°56'13"W 41°15'58"N



Legend

- Natural_Diversity_Dat
- Streams
- Water
- EWPP-FPE
- Water

Address	Acres	NEPP Upland Seed mix amt (lbs)
153 May	0.21	1.89
94-96 Blohm	0.23	2.07
84 Blohm	0.15	1.35
80 Blohm	0.16	1.44
44 Blohm	0.11	0.99
40 Blohm	0.12	1.08
36 Blohm	0.12	1.08
120 3 rd Avenue Ext	0.12	1.08
114 3 rd Avenue Ext	0.26	2.34
92 3 rd Avenue Ext	0.2	1.8
70 3 rd Avenue Ext	0.13	1.17
68 3 rd Avenue Ext	0.13	1.17
66 3 rd Avenue Ext	0.13	1.17
72-74 3 rd Avenue Ext	0.13	1.17
64 3 rd Avenue Ext	0.12	1.08
62 3 rd Avenue Ext	0.11	0.99
58 3 rd Avenue Ext	0.08	0.72
25 3 rd Avenue Ext	0.13	1.17

Table 1. Group B 2018 properties and summary of 2.64 acre seeding broken down by address.

Address	Acres	Seed mix amt (lbs)	Shrub Plantings
52 Marion	0.18	1.8 Ernst 1.6 NEPP	8 beach plum 6 elderberry
158 Jones	0.16	1.6 Ernst 1.4 NEPP	6 serviceberry
120 Brown	0.23	2.3 Ernst 2 NEPP	None
37 3 rd Ave Ext	0.14	1.4 Ernst 1.3 NEPP	None
330 Peck	0.17	1.7 Ernst 1.5 NEPP	3 pussy willow 3 silky dogwood 3 winterberry
304 Peck	0.17	1.7 Ernst 1.5 NEPP	3 pussy willow 3 red osier dogwood 3 swamp azalea
42 Marshall	0.23	2.3 Ernst 2 NEPP	4 silky dogwood 3 serviceberry
39 Marshall	0.45	4.5 Ernst 4 NEPP	8 elderberry 8 winterberry

Table 2. Group A 2025 properties and summary of 1.73 acre seeding



ERNST SEEDS

Ernst Conservation Seeds
8884 Mercer Pike
Meadville, PA 16335
(800) 873-3321 Fax (814) 336-5191
www.ernstseed.com

Date: November 13, 2025

Annual Wildflower Mix - ERNMX-167

	Botanical Name	Common Name	Price/Lb
11.00 %	<i>Delphinium ajacis</i>	Rocket Larkspur	36.40
10.70 %	<i>Cosmos bipinnatus</i>	Cosmos	26.00
10.70 %	<i>Cosmos sulphureus</i>	Sulphur Cosmos	26.00
10.00 %	<i>Calendula officinalis</i>	Calendula	20.80
8.00 %	<i>Centaurea cyanus</i> - Mixed	Bachelor's Button - Mixed	18.20
7.50 %	<i>Centaurea cyanus</i>	Bachelor's Button - Blue	18.20
7.20 %	<i>Gaillardia pulchella</i>	Annual Gaillardia (Indian Blanket)	52.00
5.00 %	<i>Lavatera trimestris</i>	Tree Mallow	31.20
4.80 %	<i>Linum grandiflorum rubrum</i>	Scarlet Flax	52.00
4.50 %	<i>Gypsophila elegans</i>	Annual Baby's Breath	16.64
4.40 %	<i>Eschscholzia californica</i>	California Orange Poppy	46.80
4.20 %	<i>Dianthus barbatus</i>	Sweetwilliam	36.40
2.00 %	<i>Rudbeckia amplexicaulis</i>	Clasping Coneflower	31.20
1.80 %	<i>Chrysanthemum carinatum</i>	Painted Daisy	36.40
1.60 %	<i>Ammi majus</i>	Bishop's Flower	41.60
1.30 %	<i>Clarkia elegans</i>	Clarkia	52.00
1.00 %	<i>Rudbeckia hirta</i>	Blackeyed Susan	33.80
1.00 %	<i>Trifolium incarnatum</i> , Variety Not Stated	Crimson Clover, Variety Not Stated	3.12
0.80 %	<i>Phacelia campanularia</i>	California Bluebells	78.00
0.60 %	<i>Coreopsis tinctoria</i>	Plains Coreopsis	28.60
0.50 %	<i>Lobularia maritima</i>	Sweet Alyssum	54.60
0.50 %	<i>Papaver rhoeas</i> , Red	Corn Poppy, Red	41.60
0.50 %	<i>Silene armeria</i>	Catchfly	41.60
0.40 %	<i>Papaver rhoeas</i> , Shirley Mix	Corn Poppy/Shirley Mix	41.60
100.00 %		Mix Price/Lb Bulk:	\$31.25

Seeding Rate: 10-12 lb per acre. No cover crop is recommended with this mix.

Herbaceous Flowering Species - Herbaceous Annual; Pollinator Favorites; Uplands & Meadows

Showy the first year if planted before mid-June. With proper management, this mix will be showy the second year. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

Price quotes guaranteed for 30 days.
All prices are FOB Meadville, PA.
Please check our web site at www.ernstseed.com
for current pricing when placing orders.

Mix A: New England Pollinator Partnership (NEPP) Upland Pollinator Mix

Common Name	Scientific Name	% of mix by # of seeds per ft ²	% mix by weight	Pounds of pure live seed per acre
Common Yarrow	<i>Achillea millefolium</i>	3.00%	0.30%	0.02
Eastern Columbine	<i>Aquilegia canadensis</i>	1.50%	2.78%	0.21
Swamp Milkweed	<i>Asclepias incarnata</i>	2.00%	1.13%	0.09
Common Milkweed	<i>Asclepias syriaca</i>	1.50%	6.11%	0.47
Butterflyweed	<i>Asclepias tuberosa</i>	0.50%	2.04%	0.16
Partridge Pea	<i>Chamaecrista fasciculata</i>	1.00%	4.39%	0.34
Lanceleaf Coreopsis	<i>Coreopsis lanceolata</i>	5.00%	6.45%	0.49
Plains Coreopsis	<i>Coreopsis tinctoria</i>	1.00%	0.09%	0.01
Canada Ticktrefoil	<i>Desmodium canadense</i>	2.00%	7.87%	0.60
Purple Coneflower	<i>Echinacea purpurea</i>	3.00%	7.38%	0.56
Canada Wildrye	<i>Elymus canadensis</i>	8.00%	20.02%	1.53
Boneset	<i>Eupatorium perfoliatum</i>	3.00%	0.30%	0.02
Purple Node Joe Pye Weed	<i>Eutrochium purpureum</i>	2.50%	1.06%	0.08
White Wood Aster	<i>Eurybia divaricata</i>	5.00%	2.13%	0.16
White Avens	<i>Geum canadense</i>	0.80%	0.57%	0.04
Oxeye Sunflower	<i>Heliopsis helianthoides</i>	1.00%	2.80%	0.21
Spotted St. John's Wort	<i>Hypericum punctatum</i>	4.00%	0.36%	0.03
Wild Bergamot	<i>Monarda fistulosa</i>	2.00%	0.45%	0.03
Evening Primrose	<i>Oenothera biennis</i>	0.50%	0.10%	0.01
Tall White Beardtongue	<i>Penstemon digitalis</i>	5.00%	3.57%	0.27
Narrow Leaved Mountain Mint	<i>Pycnanthemum tenuifolium</i>	3.50%	0.17%	0.01
Virginia Mountain Mint	<i>Pycnanthemum virginicum</i>	3.50%	0.26%	0.02
Blackeyed Susan	<i>Rudbeckia hirta</i>	2.00%	0.38%	0.03
Little Bluestem (grass)	<i>Schizachyrium scoparium</i>	12.00%	14.20%	1.08
Wild Senna	<i>Senna hebecarpa</i>	0.20%	2.85%	0.22
Early Goldenrod	<i>Solidago juncea</i>	2.00%	0.22%	0.02
Wrinkleleaf Goldenrod	<i>Solidago rugosa</i>	2.00%	0.57%	0.04
Smooth Blue Aster	<i>Symphyotrichum laeve</i>	4.00%	1.13%	0.09
New England Aster	<i>Symphyotrichum novae-angliae</i>	4.00%	1.04%	0.08
Ohio Spiderwort	<i>Tradescantia ohimensis</i>	2.00%	4.46%	0.34
Blue Vervain	<i>Verbena hastata</i>	4.00%	0.77%	0.06
White Vervain	<i>Verbena urticifolia</i>	1.50%	0.57%	0.04
Culver's Root	<i>Veronicastrum virginicum</i>	5.00%	0.18%	0.01
Golden Alexanders	<i>Zizia aurea</i>	2.00%	3.32%	0.25
TOTALS:		100.00%	100.00%	7.52 lbs Pure Live Seed per Acre

NO CHANGES MAY BE MADE TO THIS DESIGN WITHOUT THE APPROVAL OF QUALIFIED NRCS STAFF

WEST HAVEN - HURRICANE SANDY EWPP-FPE FINAL SITE RESTORATIONS CITY OF WEST HAVEN, NEW HAVEN COUNTY, CONNECTICUT

SPONSORED BY:
THE CITY OF WEST HAVEN
DESIGN PROVIDED BY:
UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

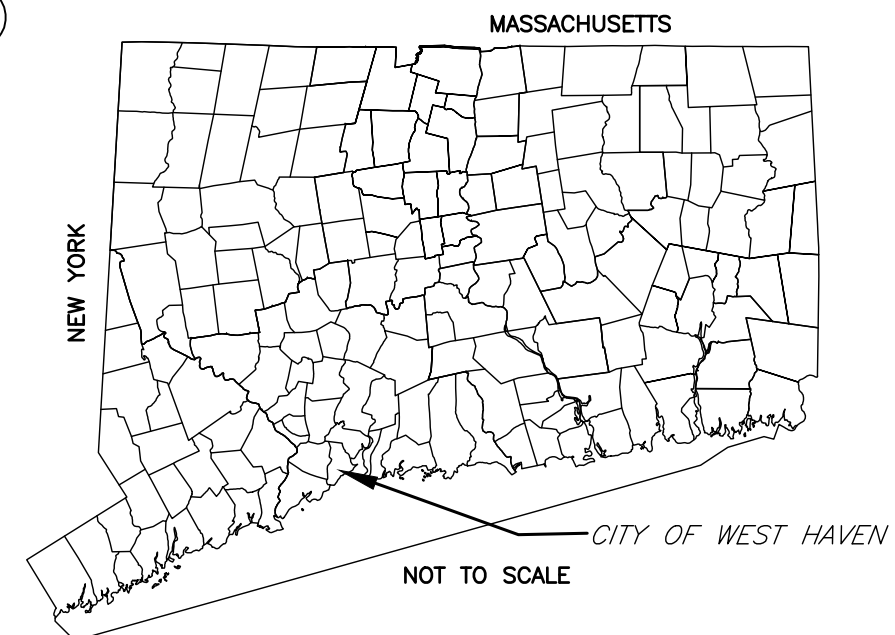
AGREEMENT NR261106XXXXC003

PROGRAM FUNDING: EMERGENCY WATERSHED PROTECTION PROGRAM (EWPP) – FLOODPLAIN EASEMENTS (FPE)
NRCS CONSERVATION PRACTICES: WILDLIFE HABITAT PLANTING (CPS 420)
BRUSH MANAGEMENT (CPS 314)
HERBACEOUS WEED TREATMENT (CPS 315)

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SHEET 11	GROUP B PROPERTY LOCATIONS

NOTE:
THIS DESIGN DRAWING SET INCLUDES FINAL PROPERTY RESTORATION WORK.



CALL BEFORE YOU DIG
TO ENSURE SAFE TROUBLE-FREE EXCAVATING
TO LOCATE UNDERGROUND UTILITY PIPE
AND CABLE ANYWHERE IN CONNECTICUT
CALL TWO FULL WORKING DAYS IN ADVANCE
1-800-922-4455 or 811

*LANDOWNER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS

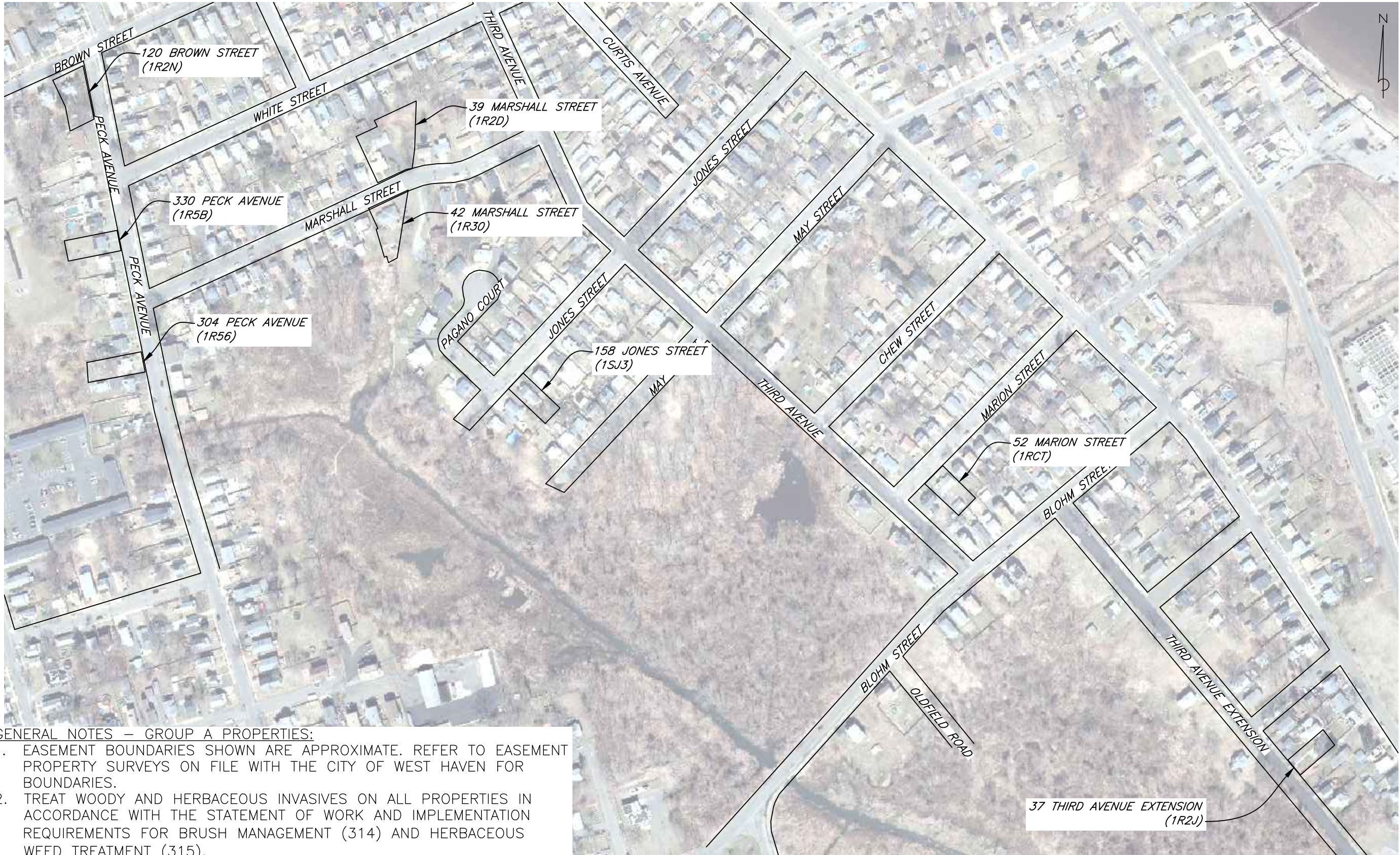
Designed	E. King	Date	5/2026
Drawn	A. Hernberg		7/2026
Checked	E. King		7/2026
Approved	E. King		7/2026

WEST HAVEN
FLOODPLAIN EASEMENT RESTORATIONS
COVER
City of West Haven
New Haven County, Connecticut

United States
Department of
Agriculture
USDA
Natural Resources
Conservation Service

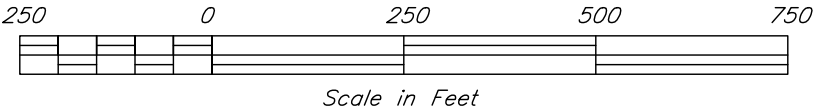
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CT-01-NH-25-02.dwg

Sheet 1 of 11

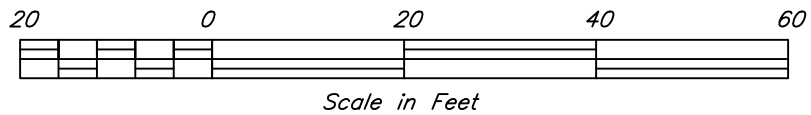


GENERAL NOTES – GROUP A PROPERTIES:

1. EASEMENT BOUNDARIES SHOWN ARE APPROXIMATE. REFER TO EASEMENT PROPERTY SURVEYS ON FILE WITH THE CITY OF WEST HAVEN FOR BOUNDARIES.
2. TREAT WOODY AND HERBACEOUS INVASIVES ON ALL PROPERTIES IN ACCORDANCE WITH THE STATEMENT OF WORK AND IMPLEMENTATION REQUIREMENTS FOR BRUSH MANAGEMENT (314) AND HERBACEOUS WEED TREATMENT (315).



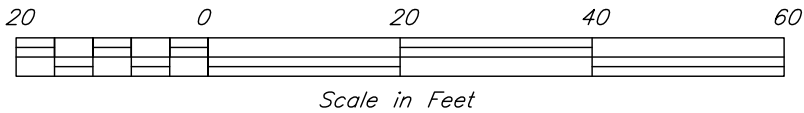
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			Drawn <i>A. Herberg</i>	<i>7/2026</i>
			Checked <i>E. King</i>	<i>7/2026</i>
			Approved <i>E. King</i>	<i>7/2026</i>
		Town of West Haven		New Haven County, Connecticut
Drawing No. <i>CT-01-NH-25-02</i> 7/31/26 10:00 AM Sheet 2 of 11				



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Checked	<i>E. King</i>		7/2026
Approved	<i>E. King</i>		7/2026

**WEST HAVEN
FLOODPLAIN EASEMENT RESTORATIONS**
120 BROWN STREET
New Haven County, Connecticut

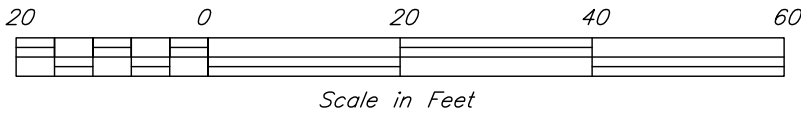




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WEST HAVEN
FLOODPLAIN EASEMENT RESTORATIONS
330 PECK AVENUE
Town of West Haven
New Haven County, Connecticut

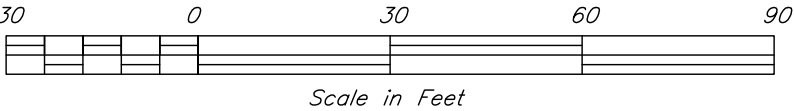
USDA
United States
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Natural Resources
Conservation Service



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WEST HAVEN
FLOODPLAIN EASEMENT RESTORATIONS
304 PECK AVENUE
Town of West Haven
New Haven County, Connecticut

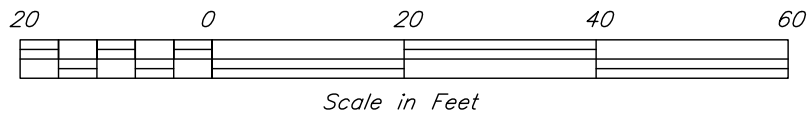




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WEST HAVEN
FLOODPLAIN EASEMENT RESTORATIONS
39 MARSHALL STREET
Town of West Haven
New Haven County, Connecticut

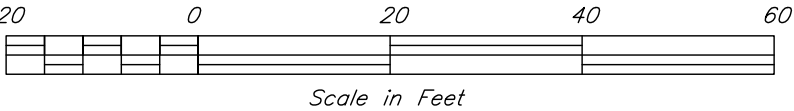




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WEST HAVEN
FLOODPLAIN EASEMENT RESTORATIONS
42 MARSHALL STREET
Town of West Haven
New Haven County, Connecticut





Designed	<i>E. King</i>	Date	<i>5/2026</i>
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Checked	<i>E. King</i>		<i>7/2026</i>
Approved	<i>E. King</i>		<i>7/2026</i>

WEST HAVEN
FLOODPLAIN EASEMENT RESTORATIONS
158 JONES STREET
New Haven County, Connecticut
Town of West Haven



United States
Department of
Agriculture

Natural Resources
Conservation Service

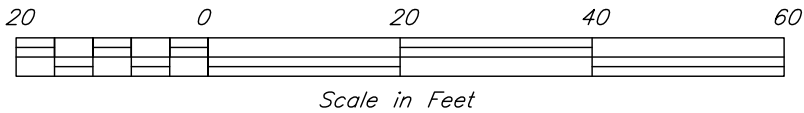


SIX (6) ELDERBERRY

APPROXIMATE EASEMENT BOUNDARY (52 MARION STREET)

EIGHT (8) BEACH PLUM

SEED AND MULCH ENTIRE EASEMENT WITH
ERNST ANNUAL WILDFLOWER MIX IN SPRING
AND SEED WITH PINELANDS NEPP UPLAND
SEED MIX IN FALL

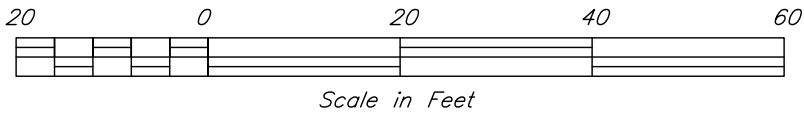


Scale in Feet

Designed	E. King	Date	5/2026
Drawn	A. Herberg	Date	7/2026
Checked	E. King	Date	7/2026
Approved	E. King	Date	7/2026

WEST HAVEN
FLOODPLAIN EASEMENT RESTORATIONS
52 MARION STREET
Town of West Haven
New Haven County, Connecticut

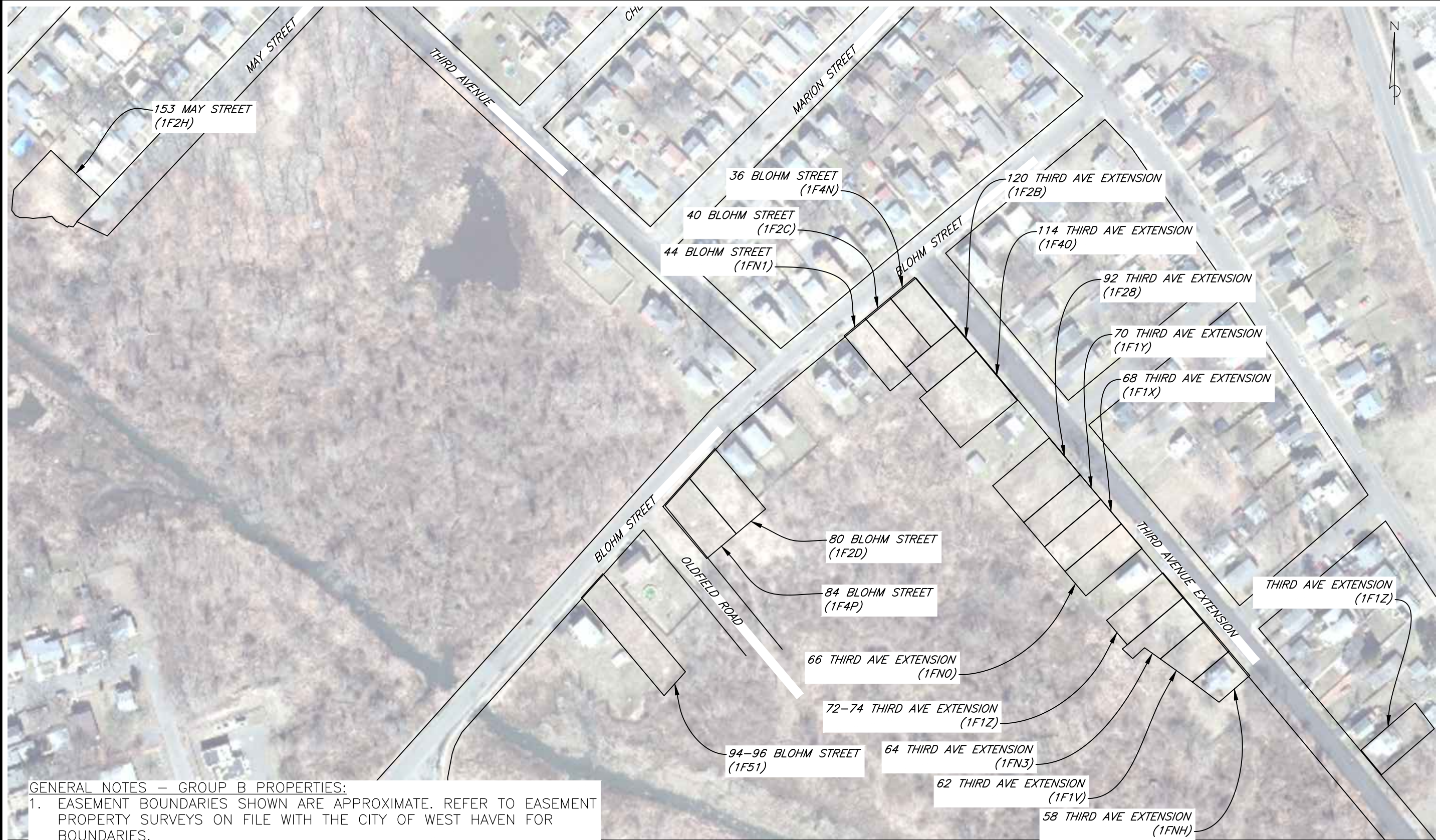




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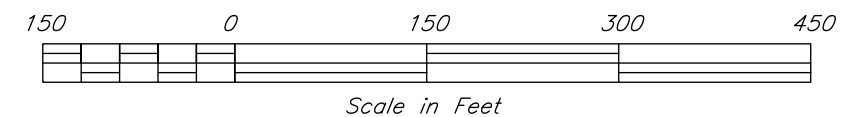
WEST HAVEN
FLOODPLAIN EASEMENT RESTORATIONS
37 THIRD AVE EXT
Town of West Haven
New Haven County, Connecticut





GENERAL NOTES – GROUP B PROPERTIES:

1. EASEMENT BOUNDARIES SHOWN ARE APPROXIMATE. REFER TO EASEMENT PROPERTY SURVEYS ON FILE WITH THE CITY OF WEST HAVEN FOR BOUNDARIES.
2. TREAT WOODY AND HERBACEOUS INVASIVES ON ALL PROPERTIES IN ACCORDANCE WITH THE STATEMENT OF WORK AND IMPLEMENTATION REQUIREMENTS FOR BRUSH MANAGEMENT (314) AND HERBACEOUS WEED TREATMENT (315).
3. SEED EACH EASEMENT WITH PINELANDS NEPP UPLAND SEED MIX IN FALL.



Date	Designed	Drawn	Checked	Approved
5/2026	E. King	A. Herberg	E. King	E. King
6/2026				
7/2026				
7/2026				

**WEST HAVEN
FLOODPLAIN EASEMENT RESTORATIONS**
GROUP B PROPERTY LOCATIONS

New Haven County, Connecticut

Town of West Haven



Drawing No.
CT-01-NH-25-02
7/31/26 9:22 AM
Sheet 11 of 11

Construction Specification 6 — Seeding, Sprigging, and Mulching

Title 210 - Engineering

Part 642 – Specifications for Construction Contracts

Subpart B – National Construction Specifications

June 2024

A. Scope

1. The work consists of preparing the area for treatment; furnishing and placing seed, sprigs, mulch, fertilizer, inoculant, lime, and other soil amendments; and anchoring mulch in designated areas as specified.
2. The following BioPreferred® product categories are applicable to this specification:
 - a. Mulch and compost materials
 - b. Erosion control materials
 - c. Fertilizers
 - d. Agricultural spray adjuvants

B. Material

1. Seed.
 - a. All seed must conform to the current rules and regulations of the state where it is being used and must be from the latest crop available. It must meet or exceed the standard for purity and germination listed in Section G.
 - b. Seed must be labeled in accordance with the state laws and the U.S. Department of Agriculture rules and regulations under the Federal Seed Act in effect on the date of invitations for bids. Bag tag figures are evidence of purity and germination. No seed will be accepted with a test date of more than 9 months before the delivery date to the site.
 - c. Seed that has become wet, moldy, or otherwise damaged in transit or storage will not be accepted. The percent of noxious weed seed allowable must be as defined in the current state laws relating to agricultural seeds. Each type of seed must be delivered in separate sealed containers and fully tagged unless an exception is granted in writing by the contracting officer.
2. Fertilizer. Unless otherwise specified, the fertilizer must be a commercial-grade fertilizer. It must meet the standard for grade and quality specified by state law. Where fertilizer is furnished from bulk storage, the contractor must furnish a supplier's certification of analysis and weight. When required by the contract, a representative sample of the fertilizer must be furnished to the contracting officer for chemical analysis.

3. Inoculants. The inoculant for treating legume seeds must be a pure culture of nitrogen-fixing bacteria prepared specifically for the species and must not be used later than the date indicated on the container or as otherwise specified. A mixing medium, as recommended by the manufacturer, must be used to bond the inoculant to the seed. Two times the amount of the inoculant recommended by the manufacturer must be used (unless seed is applied using a hydraulic seeder; then four times the amount must be used). Seed must be sown within 24 hours of treatment and must not remain in the hydraulic seeder longer than 4 hours.
4. Lime and Other Soil Amendments. Lime must consist of standard ground agriculture limestone or approved equivalent. Standard ground agriculture limestone is defined as ground limestone meeting current requirements of the state's Department of Agriculture. Other soil amendments must meet quality criteria and application requirements specified in Section G.
5. Mulch Tackifiers. Asphalt emulsion tackifiers must conform to the requirements of ASTM D977, Specification for Emulsified Asphalt. The emulsified asphalt may be rapid setting, medium setting, or slow setting. Non-asphaltic tackifiers required because of environmental considerations must be as specified in Section G.
6. Straw Mulch Material. Straw mulch must consist of wheat, barley, oat or rye straw, hay, grass cut from native grasses, or other plants as specified in Section G. The mulch material must be air-dried reasonably light in color and must not be musty, moldy, caked, or otherwise of low quality. The use of mulch that contains noxious weeds is not permitted. The contractor must provide a method satisfactory to the contracting officer for determining weight of mulch furnished.
7. Other Mulch Materials. Mulching materials, such as wood cellulose fiber mulch, mulch tackifiers, synthetic fiber mulch, netting, and mesh may be required for specialized locations and conditions. These materials, when specified, must be accompanied by the manufacturer's recommendations for methods of application.

C. Seeding Mixtures, Sod, Sprigs, and Dates of Planting

1. The application rate per acre for seed mixtures, sprigs, or sod and the date of seeding or planting must be as shown on the plans or as specified in Section G.

D. Seedbed Preparation and Treatment

1. Dress areas to be treated to a smooth, firm surface. On sites where equipment can operate on slopes safely, adequately loosen and smooth the seedbed (4 to 6 inches deep). Depending on soil and moisture conditions, disking, cultipacking, or both, may be necessary to properly prepare a seedbed. Where equipment cannot operate safely, prepare the seedbed by methods like scarifying, providing a roughened soil surface by hand so that broadcast seed will remain in place.
2. If seeding is to be accomplished immediately following construction operations, seedbed preparation may not be required except on a compacted, polished, or freshly cut soil surface.

3. Rocks larger than 6 inches in diameter, trash, weeds, and other debris that will interfere with seeding or maintenance operations must be removed or disposed of as specified in Section G.
4. Discontinue seedbed preparation when soil moisture conditions are not suitable for the preparation of a satisfactory seedbed as determined by the responsible engineer.

E. Seeding, Sprigging, Fertilizing, Mulching, and Stabilizing

1. Perform all seeding or sprigging operations in such a manner that the seed or sprigs are applied in the specified quantities uniformly in the designated areas. The method and rate of seed application must be as specified in Section G. Unless otherwise specified, seeding or sprigging must be accomplished within 2 days after final grading is completed and approved.
2. Apply fertilizer, lime, and other soil amendments as specified in Section G. When specified, the fertilizer and soil amendments must be thoroughly incorporated into the soil immediately following surface application.
3. The rate, amount, and kind of mulching or mesh must be as specified in Section G. Apply mulches uniformly to the designated areas. They must be applied to areas seeded not later than 2 working days after seeding has been performed. Stabilize straw mulch material within 24 hours of application using a mulch crimper or equivalent anchoring tool or by a suitable tackifier. When the mulch crimper or equivalent anchoring tool is used, it must have straight blades and be the type manufactured expressly for and capable of firmly punching the mulch into the soil. Where the equipment can be safely operated, it must be operated on the contour. Use hand methods where equipment cannot safely operate to perform the work required.
4. Apply the tackifier uniformly over the mulch material at the specified rate or inject it into the mulch material as it is being applied. Stabilizing materials like mesh or netting must be applied smoothly but loosely on the designated areas. The edges of these materials must be buried or securely anchored using spikes or staples as specified in Section G.
5. The contractor must maintain the mesh or netting areas until all work under the contract has been completed and accepted. Maintenance must consist of the repair of areas damaged by water erosion, wind, fire, or other causes. Such areas must be repaired to reestablish the intended condition and to the design lines and grades required by the contract. The areas must be re-fertilized, reseeded, and re-mulched before the new application of the mesh or netting.

F. Measurement and Payment

1. Method 1. For items of work for which specific unit prices are established in the contract, each area treated is measured as specified in Section G and area is calculated to the nearest 0.1 acre. Payment for treatment is made at the contract unit price for the designated treatment, which will constitute full compensation for completion of the work.

- a. When specified as an item of work, mesh or netting is measured to the nearest square yard of surface area covered and accepted. Payment is made at the contract unit price and will constitute full compensation for completion of the work.
2. Method 2. For items of work for which specific lump-sum prices are established in the contract, the quantity of work will not be measured for payment. Payment for this item is made at the contract lump-sum price for the item and will constitute full compensation for the completion of the work.
3. Method 3. For items of work for which lump-sum prices are established in the contract, payment is made as the work proceeds. Progress payments will be determined as specified in Section G. Payment of the lump-sum contract price will constitute full compensation for completion of the work.
4. All Methods. The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in Section G.

G. Items of Work and Construction Details

1. Section F – Payment, Method 2 applies. Compensation for this item will be included in the payments for Bid Items 1 and 4 as follows.
 - b. Bid Item 1 includes all work associated with seeding with Ernst Annual Wildflower Mix. This includes, but is not limited to:
 - (1) Planting seed
 - (2) Mulching
 - (3) Watering as needed to establish seed
 - c. Bid Item 4 includes all work associated with seeding with Pinelands NEPP upland seed mix. This includes, but is not limited to:
 - 1) Site preparation: Mowing prior to seeding
 - 2) Planting seed
2. All work will be in accordance with Implementation Requirements: 420 – Wildlife Habitat Planting. Where this Construction Specification and Implementation Requirements: 420 conflict, the Implementation Requirements take precedence.

Construction Specification 8 — Mobilization and Demobilization

Title 210 – Engineering

Part 642 – Specifications for Construction Contracts

Subpart B – National Construction Specifications

June 2024

A. Scope

1. The work consists of the mobilization and demobilization of the contractor's forces and equipment necessary for performing the work required under the contract. It does not include mobilization and demobilization for specific items of work for which payment is provided elsewhere in the contract. Mobilization will not be considered as work in fulfilling the contract requirements for commencement of work.

B. Equipment and Material

1. Mobilization includes all activities and associated costs for transportation of contractor's personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the contractor's operations at the site; premiums paid for performance and payment bonds including coinsurance and reinsurance agreements as applicable; and other items specified in Section D of this specification.
2. Demobilization includes all activities and costs for transportation of personnel, equipment, and supplies not required or included in the contract from the site, including the disassembly, removal, and site cleanup of offices, buildings, and other facilities assembled on the site specifically for this contract.
3. This work includes mobilization and demobilization required by the contract at the time of award. If additional mobilization and demobilization activities and costs are required during the performance of the contract as a result of changed, deleted, or added items of work for which the contractor is entitled to an adjustment in contract price, compensation for such costs will be included in the price adjustment for the item or items of work changed or added.

C. Payment

1. Payment will be made as the work proceeds after presentation of paid invoices or documentation of direct costs by the contractor showing specific mobilization and demobilization costs and supporting evidence of the charges of suppliers, subcontractors, and others. When the total of such payments is less than the lump-sum contract price, the balance remaining will be included in the final contract payment. Payment of the lump sum contract price for mobilization and demobilization will constitute full compensation for completion of the work.

2. Payment will not be made under this item for the purchase costs of materials having a residual value, the purchase costs of materials to be incorporated in the project, or the purchase costs of operating supplies.

D. Items of Work and Construction Details

1. Mobilization and Demobilization is considered subsidiary to the work. Work to be performed in conformance with this specification and the Design Package includes:
 - a. Mobilizing and demobilizing all forces, equipment, and materials necessary for performing the work required under this contract.
 - b. The Contractor shall submit a written and detailed construction schedule a minimum of 72 hours prior to beginning each phase of work.
 - c. After award of the Contract and upon receipt of a Notice to Proceed from the Sponsor, the Contractor will:
 - (1) Call 811 or 1-800-922-4455 (Call Before you Dig, CBYD) one week in advance of any scheduled excavation work to ensure underground utilities have been located and flagged. Contractor must provide the Sponsor with e-ticket of notification or other satisfactory evidence that CBYD has been notified. The Contractor is responsible for renewing the CBYD ticket as needed through the duration of the project.
 - (2) Establish operating procedures, to control the entrance and exit of equipment to and from the site, to ensure that no damage to public or private property occurs. The Contractor will use matting or other methods as necessary to protect sidewalks, curbs, and other public and private infrastructure from damage from equipment.
 - (3) The Contractor shall furnish, erect, and maintain approved safety signage to warn of any tree removal operation. In executing the work, the Contractor shall take all precautions and measures necessary to protect the public including installing adequate safety fence. Note that tree removals are not expected to be needed; if requested by NRCS at a later date, the Contractor will provide a separate cost for tree removals.
2. Section C – Payment does not apply. No separate payment will be made for Mobilization and Demobilization.