CHENEY ENGINEERING CO., INC.
53 Mellen Street
Needham, MA 02494
Tel. 781-444-2188

ly 25, 2016

Ralph Parmigiane, Chair
c/o Leslee Willitts, Conservation Agent
Medfield Conservation Commission
459 Main Street
Medfield, MA 02052

Via: Hand Delivery

Re: Medfield Meadows LLC
#49 Dale St, Medfield

Dear Chairman Parmigiane and Members of the Commission:

On behalf of the Applicant, Medfield Meadows LLC, Cheney Engineering Co., Inc. respectfully submits this Request for Determination of Applicability (RDA) to see if the site is subject to jurisdiction under the Act. Application is being filed under the Massachusetts Wetland Protection Act only.

As required, enclosed are eight copies plus the original of the RDA submission package. The following information is included for your review:

- RDA
- Assessing Map
- "Wetland Resource Evaluation Report" by Ecotec Inc., dated 7/25/2016
- ILSF Analysis & Engineering Calculations Letter by Cheney Eng. Co., Inc
- "Wetlands Plan" by Cheney Engineering Co., Inc., dated 7/22/2016

If you have any questions concerning this submission, please do not hesitate to contact me.

Sincerely,

Cheney Engineering Co., Inc.

Ardi Rrapi

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

MEDFIELD
City/Town

WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

1. Applicant:

John Kelly / Medfield Meadows LLC — Name
johnpkelly86@gmail.com — E-Mail Address
12 Haven St. — Mailing Address
Dover — City/Town
MA — State
02030 — Zip Code
619-794-4889 — Phone Number
Fax Number (if applicable)

2. Representative (if any):

Cheney Engineering Co., Inc — Firm
Ardi Rrapi — Contact Name
ardi.rrapi@cheney-eng.com — E-Mail Address
53 Mellen St. — Mailing Address
Needham — City/Town
MA — State
02494 — Zip Code
781-444-2188 — Phone Number
Fax Number (if applicable)

B. Determinations

1. I request the Medfield (Conservation Commission) make the following determination(s). Check any that apply:

☒ a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.

☐ b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.

☐ c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.

☐ d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Name of Municipality

☐ e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).

C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

49 Dale St.	Medfield
Street Address	City/Town
42	18
Assessors Map/Plat Number	Parcel/Lot Number

b. Area Description (use additional paper, if necessary):

See "Wetland Resource Evaluation Report" by EcoTec, Inc.

c. Plan and/or Map Reference(s):

Wetlands Plan	7/22/2016
Title	Date
Title	Date
Title	Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

No work is proposed at this time.

C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

No work is proposed at this time.

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

☐ Single family house on a lot recorded on or before 8/1/96

☐ Single family house on a lot recorded after 8/1/96

☐ Expansion of an existing structure on a lot recorded after 8/1/96

☐ Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96

☐ New agriculture or aquaculture project

☐ Public project where funds were appropriated prior to 8/7/96

☐ Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision

☐ Residential subdivision; institutional, industrial, or commercial project

☐ Municipal project

☐ District, county, state, or federal government project

☐ Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)

D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

CLIFFORD A. MONAC & SUSAN H. MONAC
Name

54 COUNTRY WAY
Mailing Address

MEDFIELD
City/Town

MA
State

02052
Zip Code

Signatures:

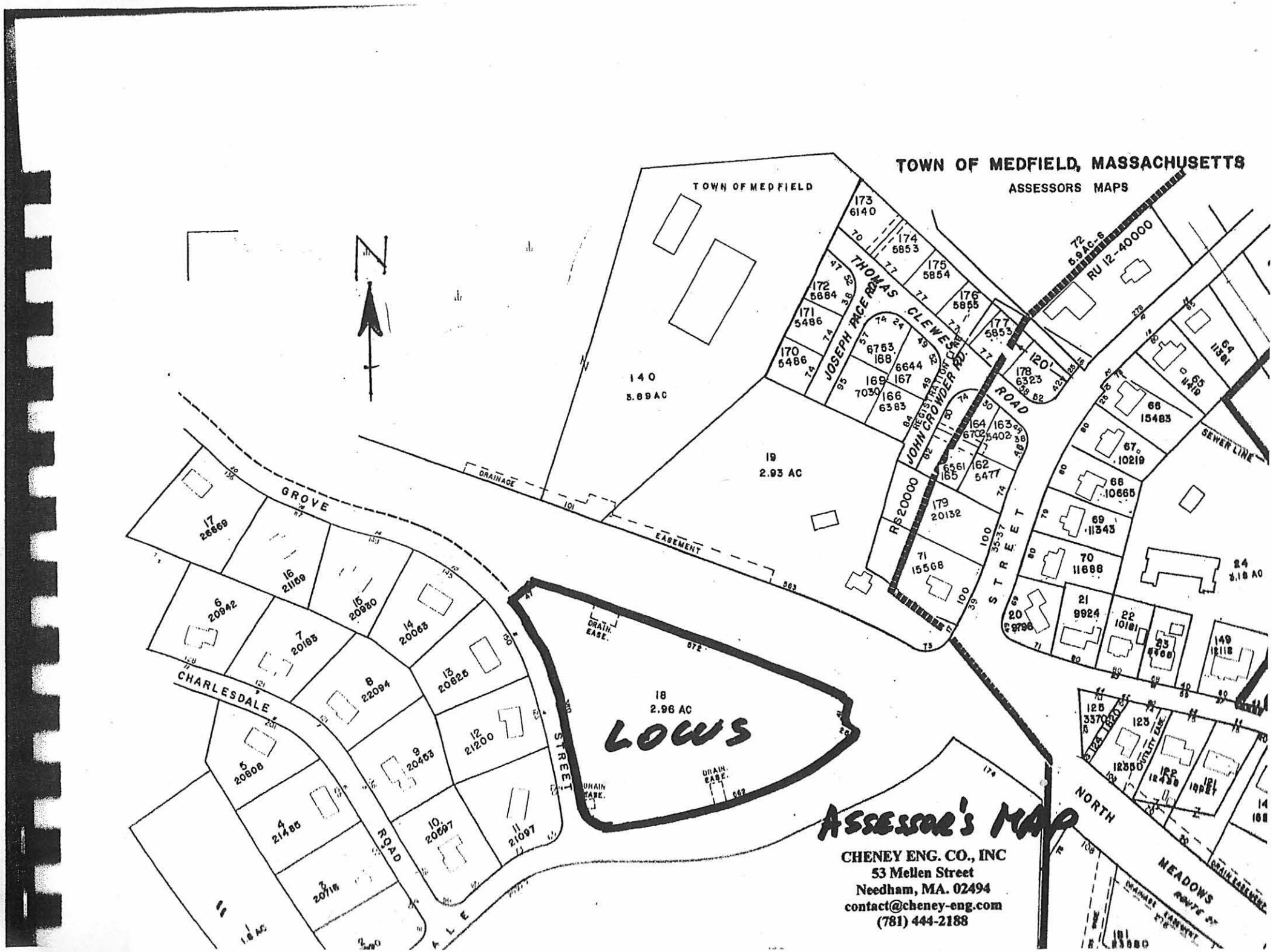
I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

John Kelly
Signature of Applicant

7/22/2016
Date

Signature of Representative (if any)

7/22/2016
Date


TOWN OF MEDFIELD, MASSACHUSETTS
ASSESSORS MAPS
TOWN OF MEDFIELD
140
8.89 AC
19
2.93 AC
18
2.96 AC
LOWS
ASSESSOR'S MAP
GROVE
CHARLESDALE
ROAD
STREET
JOSEPH PRICE RD.
THOMAS CLEWES LANE
JOHN CROWDER RD.
REGISTRATION ROAD
NORTH MEADOWS
SEWER LINE
EASEMENT
DRAINAGE
DRAIN. EASE.
RU 12-40000
RS20000
CHENEY ENG. CO., INC
53 Mellen Street
Needham, MA. 02494
contact@cheney-eng.com
(781) 444-2188

EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES
102 Grove Street
Worcester, MA 01605-2629
508-752-9666 – Fax: 508-752-9494

July 25, 2016

Mr. Ardi Rrapi
Cheney Engineering Co., Inc.
53 Mellen Street
Needham, MA 02494

RE: Wetland Resource Evaluation, 49 Dale Street, Medfield, Massachusetts

Dear Mr. Rrapi:

On April 20, 2016, EcoTec, Inc. inspected the above-referenced property for the presence of wetland resources as defined by: (1) the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40; the "Act") and its implementing regulations (310 CMR 10.00 *et seq.*; the "Regulations"); and (2) the Town of Medfield Wetlands Bylaw (Article IX; the "Bylaw") and Rules and Regulations ("Bylaw Regulations"). John P. Rockwood, Ph.D., PWS conducted the inspection.

The subject site consists of a 2.96±-acre parcel located to the northwest of Dale Street, northeast of Grove Street, and south of North Meadow Street in west-central Medfield, Massachusetts. The site consists of a large depressed area that is predominately upland. Plant species observed in the upland forest include northern red oak (*Quercus rubra*), white oak (*Quercus alba*), eastern white pine (*Pinus strobus*), red maple (*Acer rubrum*), American elm (*Ulmus americana*), American beech (*Fagus grandifolia*), and American plum (*Prunus americana*) trees, saplings, and/or shrubs; oriental bitter-sweet (*Celastrus orbiculata*) climbing woody vines; arrow-wood (*Viburnum dentatum*), America yew (*Taxus canadensis*), common winterberry (*Ilex verticillata*), and winged euonymus (*Euonymus alata*) shrubs; and lowbush blueberry (*Vaccinium angustifolium*), hayscented fern (*Dennstaedtia punctilobula*), upland sedge (*Carex pensylvanica*), and wild-lily-of-the-valley (*Maianthemum canadense*) ground cover. The wetland resources observed on the site are described below.

The site was inspected, and areas suspected to qualify as wetland resources were identified. No lakes, ponds, rivers, streams, or creeks or vegetated wetlands bordering on such a water body or waterway were observed on or within 100 feet of the site. As such, no Bordering Vegetated Wetlands, Bank, or Land Under Water Bodies and Waterways were delineated on or within 100 feet of the site. Bordering Vegetated Wetlands and Bank have a 100-foot Buffer Zone under the Act/Regulations. Given the above, a 100-foot buffer Zone under the Regulations does not occur on the site.

Two isolated depressed areas predominated by wetland plant species were observed in the southeastern/eastern portions of the site. The boundary of Isolated Vegetated Wetlands within these areas was delineated based upon a predominance of wetland plant species and evidence of wetland hydrology, including hydric soils. The plant taxonomy used in this report is based on the *National List of Plant Species that Occur in Wetlands: Massachusetts* (Fish and Wildlife Service, U.S. Department of the Interior, 1988). Field Data Forms completed for observation plots located in the wetlands and uplands near flag A2 is attached. The table below provides the Flag Numbers, Flag Type, and Wetland Types and Locations for the delineated wetland resources.

Flag Numbers	Flag Type	Wetland Types and Locations
Start A1 to A18 connect to A1	Blue Ground Flags	Boundary of Isolated Vegetated Wetland under the Bylaw located in the southeastern portion of the site. This wetland contains a certifiable vernal pool.[1]
Start B1 to B25 connect to B1	Blue Ground Flags	Boundary of Isolated Vegetated Wetland under the Bylaw located in the eastern portion of the site.

1. The maximum observed extent of flooding based upon leaf staining was contained within the wetland flags at or below elevation 147.5.

Two Isolated Vegetated Wetlands were observed and delineated in the southeastern/eastern portions of the site with Blue Ground Flags. These wetland areas are further described as follows:

- Wetland A, the larger of these two areas, is located in the southeastern portion of the site. Plant species observed in this area include red maple (*Acer rubrum*) and American elm (*Ulmus americana*) trees, saplings, and/or shrubs; poison ivy (*Toxicodendron radicans*) climbing woody vines and ground cover; highbush blueberry (*Vaccinium corymbosum*), common winterberry (*Ilex verticillata*), and arrow-wood (*Viburnum dentatum*) shrubs; and cinnamon fern (*Osmunda cinnamomea*) ground cover. Hydric soils and other evidence of wetland hydrology, including high groundwater, saturated soils, and evidence of flooding, were observed within the delineated wetland. At the time of the inspection, an 8 foot by 20 foot pocket of water 6 inches deep was observed in the lowest portion of this wetland. Despite the above observation, this area clearly holds greater than 200 cubic feet of water in most years. Several fairy shrimp, an obligate vernal pool invertebrate, were netted and documented in this area at that time. No amphibians were noted during the inspection.
- Wetland B, the smaller area, is located in the eastern portion of the site. Plant species observed in this area include red maple (*Acer rubrum*) and American elm (*Ulmus americana*) trees, saplings, and/or shrubs; poison ivy (*Toxicodendron radicans*) climbing woody vines and ground cover; common winterberry (*Ilex verticillata*) and silky dogwood (*Cornus amomum*) shrubs; and cinnamon fern (*Osmunda cinnamomea*) and sensitive fern (*Onoclea sensibilis*) ground cover. Hydric soils and other evidence of wetland hydrology, including high groundwater, saturated soils, and evidence of flooding, were observed within the delineated wetland. This area did not contain standing water at the time of the inspection.

As noted above, these two isolated wetlands do not border a creek, stream, river, pond, or lake; accordingly, they would not be regulated as Bordering Vegetated Wetlands under the Act/Regulations. Section 10.57(2)(b)1. of the Regulations states that "Isolated Land Subject to Flooding is an isolated depression or closed basin without an inlet or an outlet. It is an area that at least once per year confines standing water to a volume of at least ¼ acre-feet and to an average depth of at least six inches." These two areas are not contiguous and are separated by an upland saddle at elevation 150. Engineering calculations conducted by Cheney Engineering Co., Inc. in accordance with 310 CMR 10.57(2)(b) and the ILSF Definition Policy issued January 25, 1985 and revised March 1, 1995 (see calculations on Site Plan and Letter from Cheney Engineering Co., Inc., dated July 22, 2016 demonstrate that neither of these two areas are capable of holding the requisite volume of water to be regulated as Isolated Land Subject to Flooding under the Regulations to a conservative elevation of 148.5. Isolated Land Subject to Flooding does not have a 100-foot Buffer Zone under the Regulations. Based upon the above, these two areas are not subject to jurisdiction under the Act and its Regulations. Wetlands A and B are both, however, subject to regulation under the Bylaw and Bylaw Regulations as any Freshwater Wetland (e.g., Isolated Vegetated Wetland). Isolated Vegetated Wetlands would have a 100-foot Buffer Zone under the Bylaw/Bylaw Regulations. Wetland A is also subject to regulation under the Bylaw and Bylaw Regulations as it contains a Certifiable Vernal Pool based upon the above-noted fairy shrimp observation. Based upon observations in the field, the Mean Annual High-water Line ("MAHWL") of the depression was determined to be elevation 147.5, based upon evidence of the maximum observed extent of flooding. The boundary of the Vernal Pool resource area is 100 feet outward from the MAHWL of the depression. Certifiable Vernal Pools have a 100-foot Buffer Zone under the Bylaw/Bylaw Regulations.

Bordering Land Subject to Flooding is an area that floods due to a rise in floodwaters from a bordering waterway or water body. Where flood studies have been completed, the boundary of Bordering Land Subject to Flooding is based upon flood profile data prepared by the National Flood Insurance Program. Section 10.57(2)(a)3. states that "The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm." Based upon a review of the Flood Insurance Rate Map, Norfolk County, Massachusetts, Map Number 25021C0154E, Effective Date July 17, 2012 (attached), the site and immediate surroundings are mapped as Other Areas: Zone X, which is defined as areas located outside of the 0.2% annual chance flood (i.e., outside of 500-year floodplain). As such, Bordering Land Subject to Flooding would not occur on the site. Bordering Land Subject to Flooding does not have a 100-foot Buffer Zone under the Regulations, but has a 100-foot Buffer Zone under the Bylaw/Bylaw Regulations.

The Massachusetts Rivers Protection Act amended the Act to establish an additional wetland resource area: Riverfront Area. Based upon a review of the current USGS Map (i.e., Medfield Quadrangle, dated 1987, attached) and observations made during the site inspection, there are no mapped or significant unmapped streams located within 200 feet of the site. Accordingly,

Riverfront Area would not occur on the site. Riverfront Area does not have a Buffer Zone under the Act/Regulations or Bylaw/Bylaw Regulations.

The Regulations require that no project may be permitted that will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures set forth at 310 CMR 10.59. Based upon a review of the *Massachusetts Natural Heritage Atlas*, 13th edition, Priority Habitats and Estimated Habitats, Medfield Quadrangle, valid from October 1, 2008 (attached), there are no Estimated Habitats [for use with the Act and Regulations (310 CMR 10.00 *et seq.*)], Priority Habitats [for use with Massachusetts Endangered Species Act (M.G.L. Ch. 131A; "MESA") and MESA Regulations (321 CMR 10.00 *et seq.*)], or Certified Vernal Pools on or in the immediate vicinity of the site. It should be noted that Vernal Pool Habitat is not a resource area under the Regulations; it is simply a type of wildlife habitat that must occur within a wetland resource area under the Regulations in order to be afforded protection under the Regulations.

In conclusion, no wetland resource areas (i.e., Areas Subject to Protection under the Act) or 100-foot Buffer Zone subject to regulation under the Act and Regulations occur on the site. Two isolated depressions on the site (i.e., Wetlands A and B) are subject to regulation under the Bylaw and Bylaw Regulations as Freshwater Wetlands (e.g., Isolated Vegetated Wetlands) and Wetland A contains a Certifiable Vernal Pool. The MAHWL, resource area boundaries, and the respective 100-foot Buffer Zones under the Bylaw and Bylaw Regulations are shown on the Site Plan.

The reader should be aware that the regulatory authority for determining wetland jurisdiction rests with local, state, and federal authorities. A brief description of my experience and qualifications is attached. If you have any questions, please feel free to contact me at any time.

Cordially,
ECOTEC, INC.

John P. Rockwood

John P. Rockwood, Ph.D., PWS
Chief Environmental Scientist

Attachments (5, 8 pages)

18/wr/MEDFIELD49DALEWRE

Isolated Vegetated Wetland Delineation Field Data Form

Applicant: Prepared by: EcoTec, Inc. Project location: 49 Dale Street, Medfield DEP File # :

Section I. Vegetation	Observation Plot Number: A2		Transect Number: Up		Date of Delineation: 4/20/2016	
A. Sample Layer and Plant Species (by common/scientific name)			B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category *
Tree	Red Maple	*Acer rubrum*	20	29	Yes	FAC*
	Northern Red Oak	*Quercus rubra*	20	29	Yes	FACU-
	Eastern White Pine	*Pinus strobus*	30	43	Yes	FACU
Shrub	Eastern White Pine	*Pinus strobus*	15	33	Yes	FACU
	Red Maple	*Acer rubrum*	10	22	Yes	FAC*
	Northern Red Oak	*Quercus rubra*	10	22	Yes	FACU-
	Arrow-wood	*Viburnum dentatum*	10	22	Yes	FAC*
Ground Cover	Upland Sedge	*Carex pensylvanica*	20	31	Yes	NL
	Lowbush Blueberry	*Vaccinium angustifolium*	20	31	Yes	FACU-
	Wild-lily-of-the-valley	*Maianthemum canadense*	20	31	Yes	FAC-
	Eastern White Pine	*Pinus strobus*	5	8	No	FACU

Vegetation conclusions:

Number of dominant wetland indicator plants: 3 Number of dominant non-wetland indicator plants: 7

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? No

Transect A2 Up (Cont.)

Section II. Indicators of Hydrology

1. Soil Survey

Is there a published soil survey for this site? -

title/date: -
map number: -
soil type mapped: -
hydric soil inclusions: -

Are field observations consistent with soil survey? -

Remarks: -

2. Soil Description

Horizon	Depth (inches)	Matrix Color	Mottle Color
A	0-6	10 YR 3/2 Loam	-
B	6-20	10 YR 5/4 Sandy Loam	-

Remarks: **Terminated at 20 inches; groundwater not encountered.**

3. Other: -

Conclusion: Is soil Hydric? **No.**

Other Indications of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☐	☑
Wetland hydrology present:		
hydric soil present	☐	☑
other indicators of hydrology present	☐	☑
Sample location is in an IVW	☐	☑

Isolated Vegetated Wetland Delineation Field Data Form

Applicant: Prepared by: EcoTec, Inc. Project location: 49 Dale Street, Medfield DEP File # :

Section I. Vegetation	Observation Plot Number: A2	Transect Number: Wet	Date of Delineation: 4/20/2016

A. Sample Layer and Plant Species (by common/scientific name)			B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category *
Tree	Red Maple	*Acer rubrum*	30	75	Yes	FAC*
	American Elm	*Ulmus americana*	10	25	Yes	FACW-*
Shrub	Common Winterberry	*Ilex verticillata*	40	100	Yes	FACW+*

Vegetation conclusions:

Number of dominant wetland indicator plants: 3 Number of dominant non-wetland indicator plants: 0

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? Yes

Transect A2 Wet (Cont.)

Section II. Indicators of Hydrology

1. Soil Survey

Is there a published soil survey for this site? -

title/date: -
map number: -
soil type mapped: -
hydric soil inclusions: -

Are field observations consistent with soil survey? -

Remarks: -

2. Soil Description

Horizon	Depth (inches)	Matrix Color	Mottle Color
A	0-5	10 YR 2/1 Loam	Pore Linings
B1	6-14	2.5 Y 5/2 Sandy Loam	10 YR 5/6 and 2.5 Y 6/1
B2	14-20	2.5 Y 5/1 Fine Sandy Loam	10 YR 5/6 and 2.5 Y 6/1

Remarks: Terminated at 20 inches; groundwater was not encountered.

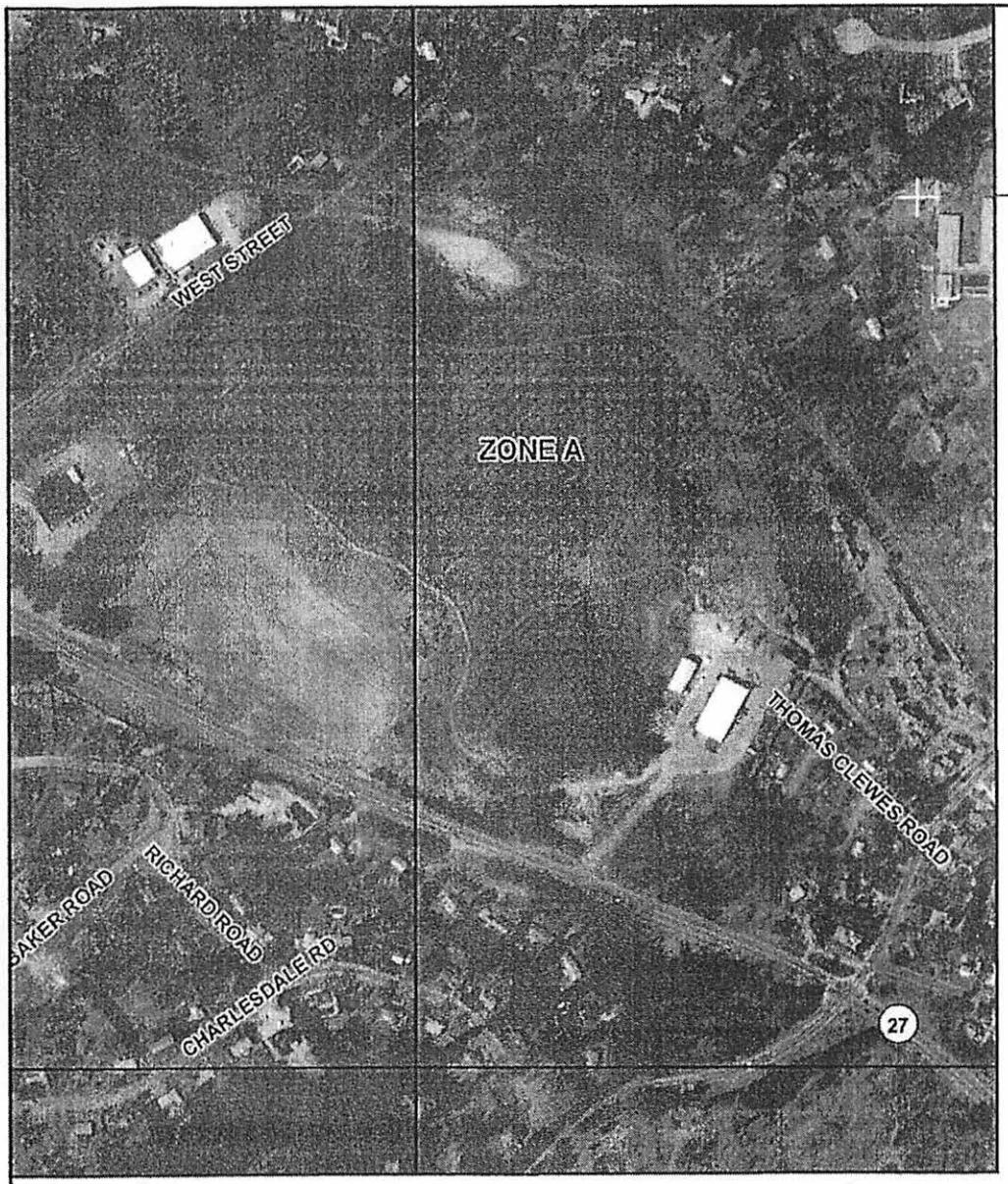
3. Other: -

Conclusion: Is soil Hydric? Yes

Other Indications of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☑ Oxidized rhizospheres: Within 6 inches
- ☑ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☑	☐
Wetland hydrology present:		
hydric soil present	☑	☐
other indicators of hydrology present	☑	☐
Sample location is in an IVW	☑	☐



4674000mN

42° 11' 15"

71° 18' 45"

MAP SCALE 1" = 500'

250 0 500 1000

FEET

METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0154E

FIRM

FLOOD INSURANCE RATE MAP

NORFOLK COUNTY, MASSACHUSETTS (ALL JURISDICTIONS)

PANEL 154 OF 430

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

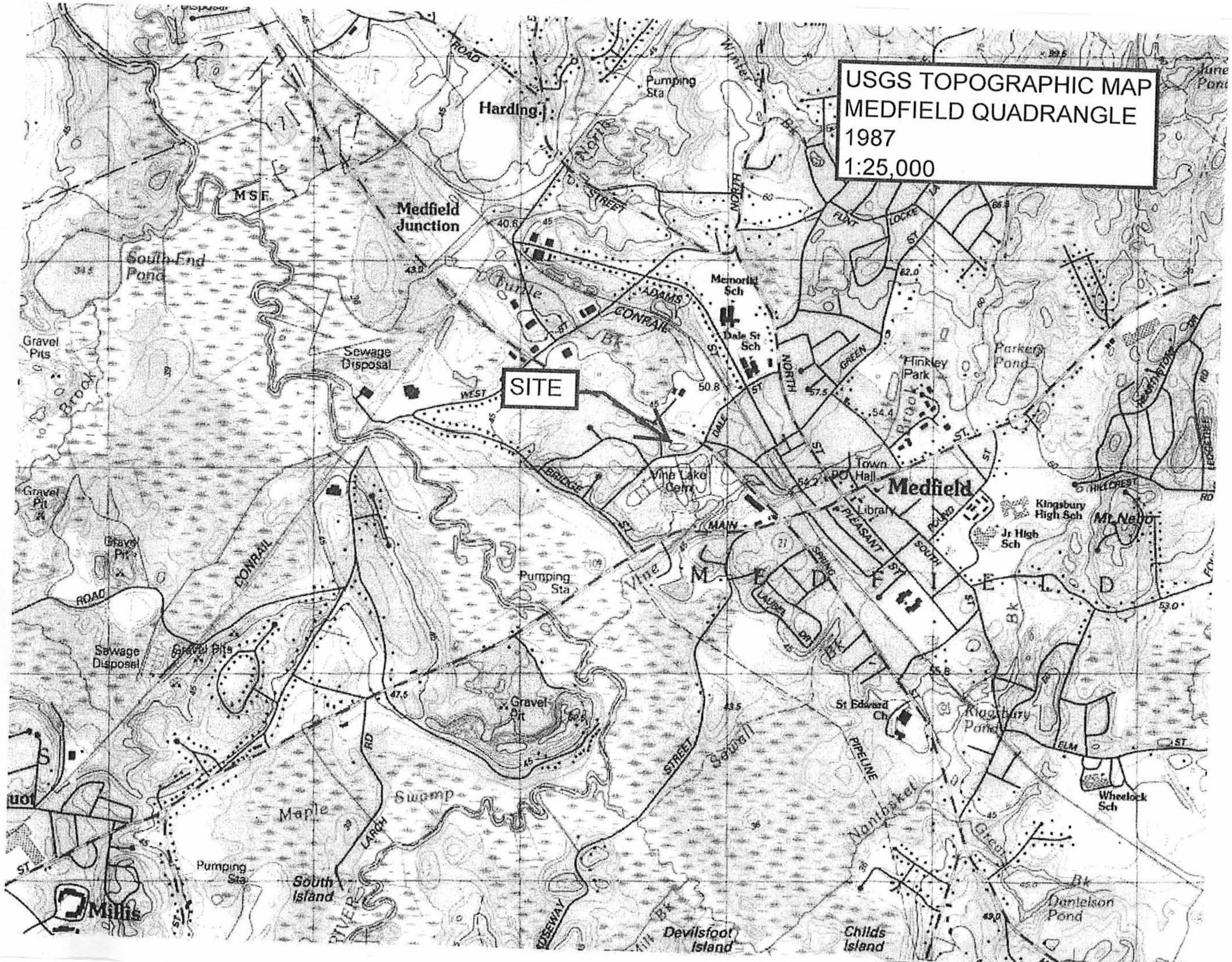
COMMUNITY	NUMBER	PANEL	SUFFIX
DOVER, TOWN OF	250238	0154	E
MEDFIELD, TOWN OF	250242	0154	E
MILLIS, TOWN OF	250244	0154	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
25021C0154E

EFFECTIVE DATE
JULY 17, 2012

Federal Emergency Management Agency

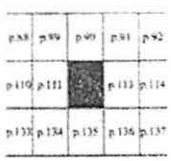

USGS TOPOGRAPHIC MAP
MEDFIELD QUADRANGLE
1987
1:25,000
SITE
Medfield
Medfield Junction
Harding
South End Pond
Sewage Disposal
Gravel Pits
Pumping Sta
Memorial Sch
Dale St Sch
Hinkley Park
Parker Pond
Town Hall
Library
Vine Lake Cem
Kingsbury High Sch
Jr High Sch
Mt Nebo
St Edward Ch
Kingsbury Pond
Wheelock Sch
Danielson Pond
Childs Island
Devilsfoot Island
South Island
Maple Swamp
Millis
CONRAIL
PIPELINE
M E D F I E L D

Priority Habitats and Estimated Habitats - Effective October 1, 2008

Priority Habitats for use with the MA Endangered Species Act Regulations (321 CMR 10)
Estimated Habitats for use with the MA Wetlands Protection Act Regulations (310 CMR 10)

Produced by the Natural Heritage & Endangered Species Program website: www.nhesp.org

Page Index



Priority Habitat of Rare Species
Priority Habitat of Rare Species and also Estimated Habitat of Rare Wildlife
Certified Vernal Pool (as of July 31, 2008)

N

0 0.5 1 2 Miles

Medfield Quad

EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES
102 Grove Street
Worcester, MA 01605-2629
508-752-9666 – Fax: 508-752-9494

John P. Rockwood, Ph.D., PWS
Chief Environmental Scientist

Dr. John P. Rockwood has been with EcoTec, Inc. since October 1999. Dr. Rockwood was previously a Chief Environmental Scientist at Sanford Ecological Services, Inc. of Southborough, Massachusetts from September 1990 to October 1999. Dr. Rockwood was certified in August 2002 and recertified in March 2008 and January 2013 as a Professional Wetland Scientist (PWS) by the Society of Wetland Scientists, the leading professional organization in the field. His project experience includes wetland resource evaluation, delineation, and permitting at the local, state, and federal levels; wildlife habitat evaluation; pond and stream evaluation; vernal pool evaluation, certification, construction/replication, and monitoring; rare species habitat and impact assessment; wetland replacement, replication, and restoration area design, construction, and monitoring; and expert testimony preparation. He has served as a consultant to municipalities, conservation commissions, the development community, engineering and survey firms, industry, and citizen's groups. He has managed and participated in a wide variety of wetlands-related projects ranging in scope from single-family house lots to subdivisions, commercial developments, golf courses, a water park, and a regional mall. He has assessed the potential impacts of stormwater runoff, landfill leachate, and/or hazardous waste disposal sites on rare vertebrate and/or invertebrate species, and has conducted and/or directed surveys, delineated actual habitat, conducted habitat evaluations, and/or developed mitigation strategies necessary to protect rare vertebrate, invertebrate, and plant species and their habitats from proposed development-related impacts. He has conducted a drift fence study for the marbled salamander. He has conducted and led preconstruction sweeps for the spotted turtle, wood turtle, and eastern box turtle. He has filed MESA Project Review Checklists and has prepared applications for Conservation and Management Permits under MESA. He has conducted environmental impact assessments, and has prepared MEPA documentation related to an office park, an MBTA commuter train station, a water park, residential subdivisions, a landfill, and a regional mall. Dr. Rockwood also has extensive experience in the area of environmental site assessment related to possible oil and/or hazardous material contamination. He has conducted numerous environmental assessments, several including subsurface investigations, for sites located in Massachusetts, and has conducted preliminary environmental assessments for properties located in New York, New Hampshire, and Rhode Island. He has conducted ecological risk assessments (i.e., Stage I Environmental Screenings and Stage II Environmental Risk Characterizations) for a number of disposal sites in Massachusetts, including several disposal sites that had the potential to affect state-listed vertebrate and invertebrate species, and has utilized the EPA Rapid Bioassessment Protocol for macroinvertebrates to assess potential impacts of disposal sites and hazardous material releases on streams and rivers in Massachusetts and New York. He has served as the environmental contractor to the Franklin Consolidated Office of the Federal Deposit Insurance Corporation (FDIC-FCO) for 16 months, where he reviewed environmental reports, prepared scopes-of-work for site assessments, and provided technical advice to FDIC employees related to environmentally compromised assets. Dr. Rockwood has designed, conducted, and evaluated numerous surface water and groundwater monitoring programs. His prior research includes a laboratory study of the effects of low pH and aluminum on dragonfly nymphs and a field survey of the impact of chlorinated sewerage effluent of algal periphyton community dynamics. Dr. Rockwood is the co-author of a text book on aquatic biology, and is the principal author of three peer-reviewed research publications in the field of aquatic toxicology that address the effect of low pH and aluminum on nymphs of the dragonfly *Libellula julia*. Dr. Rockwood has served as the as the Editor of the AMWS Newsletter from November 2004 to October 2010 and as Assistant Editor from May 2003 to November 2004 and October 2010 to January 2012. He has served as President of the Association of Massachusetts Wetland Scientists from November 2013 to December 2015 and currently serves on the AMWS Board of Directors as Immediate Past President.

Education:
Doctor of Philosophy (Ph.D.): Aquatic Pollution Biology – Plant and Soil Sciences
University of Massachusetts at Amherst, 1989
Bachelor of Science (B.S.): Environmental Sciences, *Summa Cum Laude*
University of Massachusetts at Amherst, 1984

Professional Affiliations:
Society for Freshwater Science
Sigma Xi, Full Member
Association of Massachusetts Wetland Scientists, Voting Member
Society of Wetland Scientists
Massachusetts Association of Conservation Commissioners

Certifications:
Society of Wetlands Scientists Professional Wetland Scientist, Certification Number 1349
OSHA Health and Safety Training, 40-Hour Training, 29 CFR 1910.120
OSHA Health and Safety Training, 8-Hour Supervisor Training
OSHA Health and Safety Training, 8-Hour Refresher Training

CHENEY ENGINEERING CO., INC
53 Mellen Street
Needham, MA 02494
Tel. 781-444-2188

7/22/2016

To: John Rockwood, Ph.D., PWS
Chief Environmental Scientist
EcoTec, Inc.

From: Ron Tiberi PE

Re: 49 Dale St, Medfield
ILSF Analysis & Engineering Calculations.

Dear John,

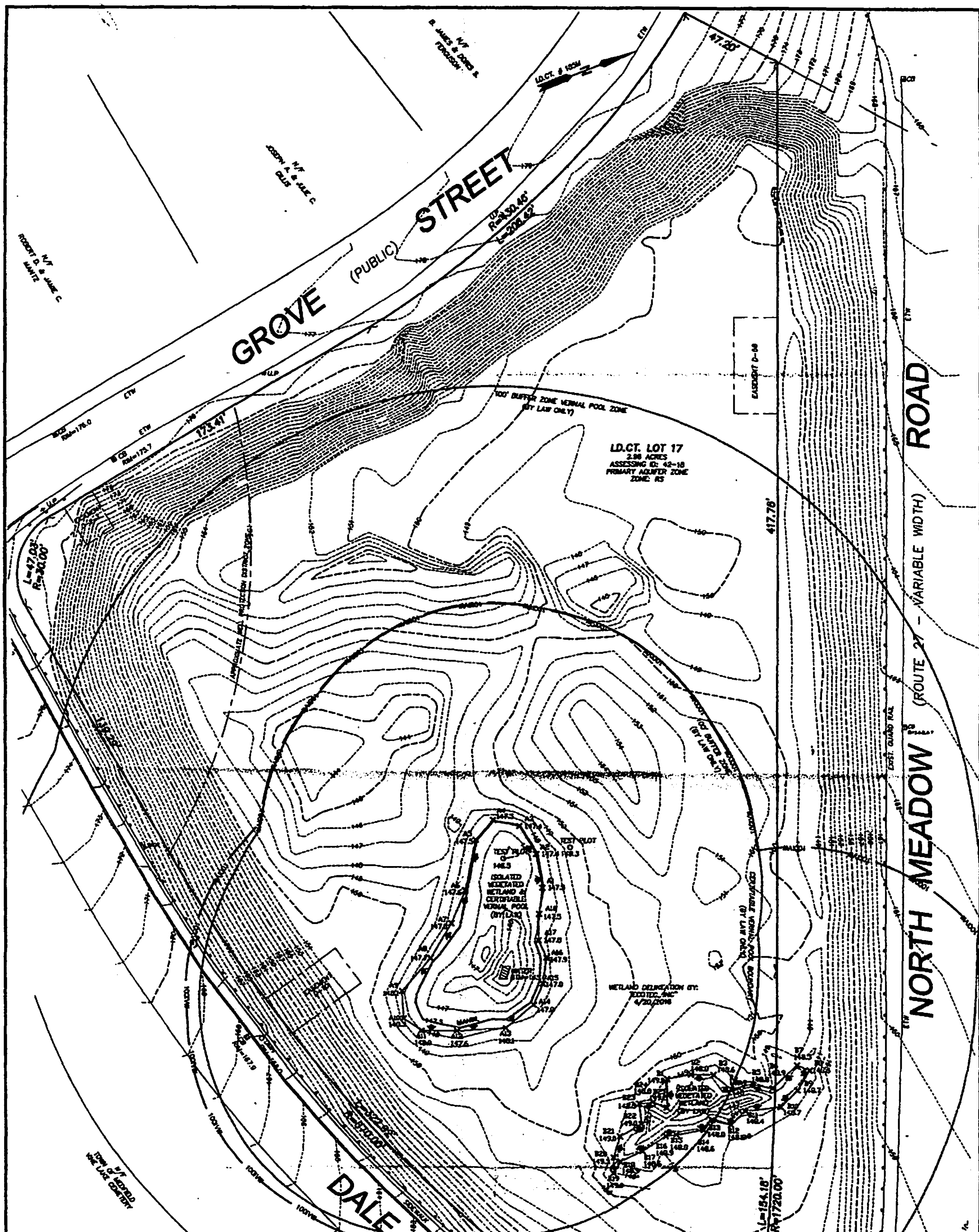
At your request we analyzed the two depression areas to see if they can be considered Isolated Land Subject to Flooding under the local and state wetlands protection regulations.

As shown on the tabulations on our plan neither location qualify based on volume as Isolated Land Subject to Flooding under the act.

If there are any questions, please do not hesitate to call me.

Sincerely
Cheney Engineering Co., Inc.

Ron Tiberi
PE. 34773



VOULUME CALCS FOR AREA "B"

ELEVATION	AREA (FT^2)	VOL. (FT^3)	CUMUL. (FT^3)
146.5	0		
147.0	22	6	6
147.5	104	41	47
148.0	446	153	200
148.5	1062	363	563

563 FT^3 < 10890 FT^3 = 1/4 ACRE-FEET

VOULUME CALCS FOR AREA "A"

ELEVATION	AREA (FT^2)	VOL. (FT^3)	CUMUL. (FT^3)
145.0	0		
145.5	87	21	21
146.0	286	93	114
146.5	670	240	354
147.0	2344	756	1110
147.5	3676	1480	2590
148.0	4670	2114	4704
148.5	6368	2817	7521

7521 FT^3 < 10890 FT^3 = 1/4 ACRE-FEET

NOTE:
THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY AND PLANS PROVIDED BY CURRENT OWNER.

WETLANDS PLAN
#49 DALE STREET
MEDFIELD, MASSACHUSETTS
NORFOLK COUNTY
AS PREPARED FOR
RQC LLC

CHENEY ENGINEERING CO., INC.
53 MELLEN STREET
NEEDHAM, MA 02494
TEL. 781-444-2136

DATE: 7/22/2016
PROJECT # 6001
REV.