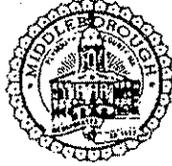


HEARINGS, MEETINGS, LICENSES
11-21-11



A hearing will be held in the Selectmen's Meeting Room at the Town Hall, 10 Nickerson Avenue, Middleborough, MA on Monday, November 21, 2011 at 7:30 PM, for the purpose of discussing a petition filed by Middleborough Gas & Electric Department and Verizon New England, Inc. to place new pole (50S) on Vernon Street to provide support to the existing pole line by removing a pole to tree guy. Anyone desiring to be heard on this matter should appear at the time and place designated.

Alfred P. Rullo, Jr.
Stephen J. McKinnon
Steven P. Spataro
Allin Frawley
Ben Quelle
BOARD OF SELECTMEN

Outside Plant Engineering



1043 Pearl Street , Floor 2
Brockton , MA 02301

September 29, 2011

Town of Middleboro
Attn: Board of Selectmen
Town Hall
10 Nickerson Avenue
Middleboro, MA 02346

Dear Selectmen,

Enclosed you will find petition # 2011B-19 from Verizon New England Inc. and Middleboro Gas and Electric Company proposing to place pole – 50S on Vernon Street. Please present at your next Board meeting for usual course of action relative to granting.

This petition does require a hearing and notice to the abutters.

Sincerely,

A handwritten signature in cursive script that reads "Daryl Crossman".

Daryl Crossman
Manager Rights of Way
(508) 580-8268 – Office
(508) 580-8292 – Fax
daryl.crossman@verizon.com - Email

DC
Enclosure

PETITION FOR JOINT OR IDENTICAL POLE LOCATIONS

September 29, 2011

To the Board of Selectmen

in MIDDLEBORO, Massachusetts

VERIZON NEW ENGLAND INC. and MIDDLEBORO GAS & ELECTRIC COMPANY request permission to locate poles, wires, cables and fixtures including the necessary anchors, guys and other such sustaining and protecting fixtures to be owned and used in common by your petitioners, along and across the following public way or ways:

One (1) New Pole

This petition proposes to place new - Pole 50S on Vernon Street.

This petition is necessary in order to provide support to the existing pole line by removing a pole to tree guy.

Wherefore they pray that after due notice and hearing as provided by law, they be granted joint or identical locations for and permission to erect and maintain poles, wires and cables, together with anchors, guys and other such sustaining and protecting fixtures as they may find necessary, said poles to be erected substantially in accordance with the plan filed herewith marked-VZ N.E. Inc. No. **2011B-19** Dated **09/27/11**.

Also for permission to lay and maintain underground laterals, cables and wires in the above or intersecting public ways for the purpose of making connections with such poles and buildings as each of said petitioners may desire for distributing purposes.

Your petitioners agree that space shall be reserved and maintained for the limited purpose of attaching one-way low voltage fire and police signaling wires owned by the municipality or governmental entity for public safety purposes only.

VERIZON NEW ENGLAND INC.

By David Crossman
Manager - Rights of Way

Dated this 29 day of SEPTEMBER, 2011.

MIDDLEBORO GAS & ELECTRIC COMPANY

By William E. Taylor
Supervisor of Project Engineering

Dated this 19th day of OCTOBER, 2011.

VZ N.E. INC. No. 2011B-19 MUNICIPALITY MIDDLEBORO

DATED 09/27/11

NOT TO SCALE

LEGEND:

- - - - P/L - - - - PROPERTY LINE
- EOR — EDGE OF ROAD
- ⊗ EXISTING POLE
- △ EXISTING ANCHOR
- PROPOSED POLE
- ▲ PROPOSED ANCHOR

PLAN FOR PLACEMENT OF NEW POLE 50S VERNON STREET

TO ACCOMPANY PETITION OF VERIZON NEW ENGLAND INC. AND MIDDLEBORO GAS & ELECTRIC COMPANY

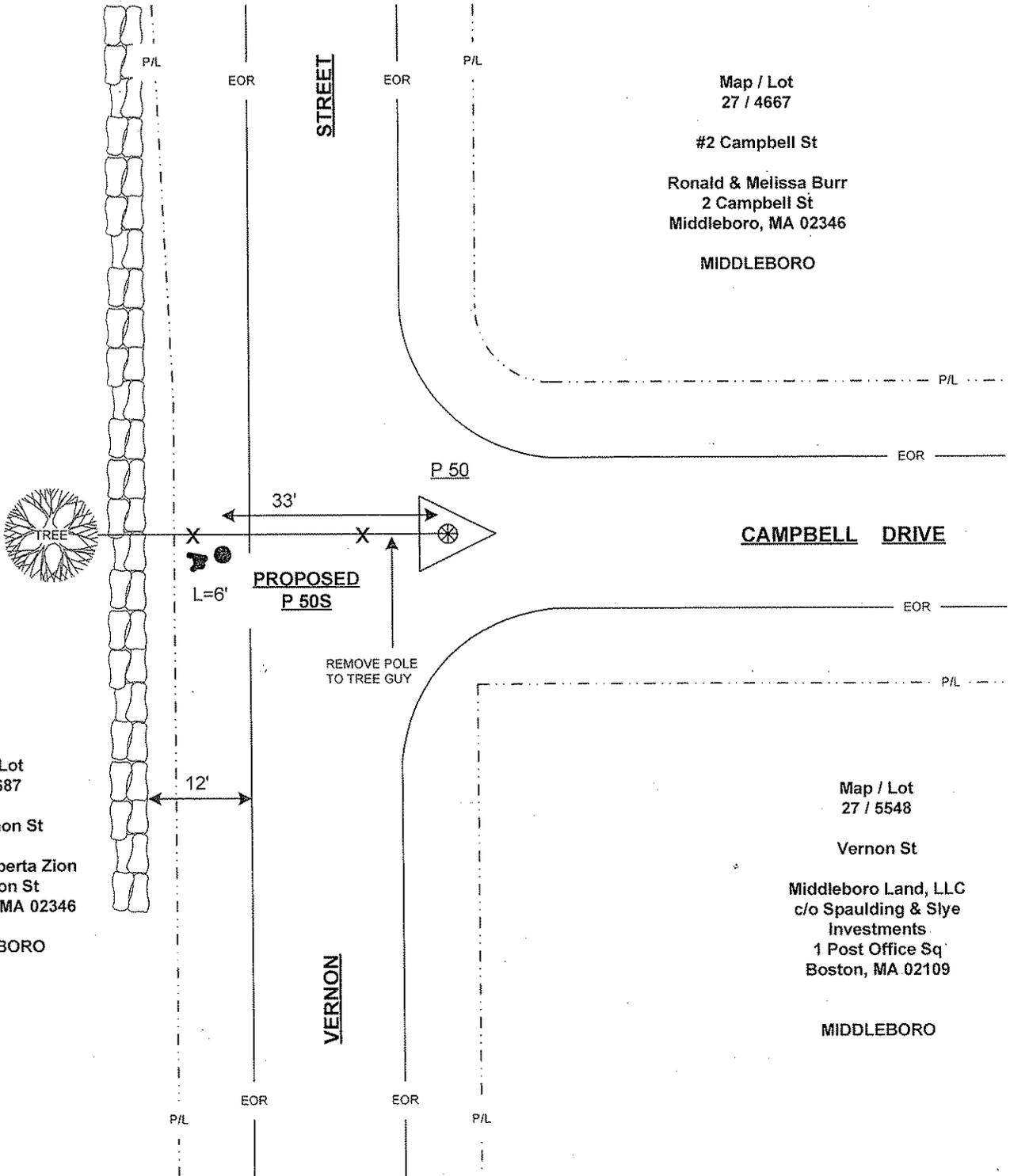


Map / Lot 27 / 4667

#2 Campbell St

Ronald & Melissa Burr
2 Campbell St
Middleboro, MA 02346

MIDDLEBORO



Map / Lot 27 / 4687

#48 Vernon St

Robert & Roberta Zion
48 Vernon St
Middleboro, MA 02346

MIDDLEBORO

Map / Lot 27 / 5548

Vernon St

Middleboro Land, LLC
c/o Spaulding & Slye
Investments
1 Post Office Sq
Boston, MA 02109

MIDDLEBORO

ABUTTERS LIST

**Map / Lot
27 / 4687**

#48 Vernon St

**Robert & Roberta Zion
48 Vernon St
Middleboro, MA 02346**

MIDDLEBORO

**Map / Lot
27 / 4667**

#2 Campbell St

**Ronald & Melissa Burr
2 Campbell St
Middleboro, MA 02346**

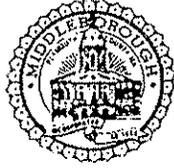
MIDDLEBORO

**Map / Lot
27 / 5548**

Vernon St

**Middleboro Land, LLC
c/o Spaulding & Snye
Investments
1 Post Office Sq
Boston, MA 02109**

MIDDLEBORO



A hearing will be held in the Selectmen's Meeting Room at the Town Hall, 10 Nickerson Avenue, Middleborough, MA on Monday, November 21, 2011 at 7:40 PM, for the purpose of discussing a petition filed by Middleborough Gas & Electric Department and Verizon New England, Inc. to place two new poles (50 & 51) on Purchase Street to provide service to a new subdivision. Anyone desiring to be heard on this matter should appear at the time and place designated.

Alfred P. Rullo, Jr.
Stephen J. McKinnon
Steven P. Spataro
Allin Frawley
Ben Quelle
BOARD OF SELECTMEN



1043 Pearl Street , Floor 2
Brockton , MA 02301

September 29, 2011

Town of Middleboro
Attn: Board of Selectmen
Town Hall
10 Nickerson Avenue
Middleboro, MA 02346

Dear Selectmen,

Enclosed you will find petition # 2011B-13 from Verizon New England Inc. and Middleboro Gas and Electric Company proposing to place poles – 50 and 51 on Purchase Street. Please present at your next Board meeting for usual course of action relative to granting.

This petition does require a hearing and notice to the abutters.

Sincerely,

A handwritten signature in cursive script that reads "Daryl Crossman".

Daryl Crossman
Manager Rights of Way
(508) 580-8268 – Office
(508) 580-8292 – Fax
daryl.crossman@verizon.com - Email

DC
Enclosure

PETITION FOR JOINT OR IDENTICAL POLE LOCATIONS

September 29, 2011

To the Board of Selectmen

in MIDDLEBORO, Massachusetts

VERIZON NEW ENGLAND INC. and MIDDLEBORO GAS & ELECTRIC COMPANY request permission to locate poles, wires, cables and fixtures including the necessary anchors, guys and other such sustaining and protecting fixtures to be owned and used in common by your petitioners, along and across the following public way or ways:

Two (2) New Poles

This petition proposes to place new - Pole 50 and Pole 51 on Purchade Street.

This petition is necessary in order to provide service to a new sub-division.

Wherefore they pray that after due notice and hearing as provided by law, they be granted joint or identical locations for and permission to erect and maintain poles, wires and cables, together with anchors, guys and other such sustaining and protecting fixtures as they may find necessary, said poles to be erected substantially in accordance with the plan filed herewith marked-VZ N.E. Inc. No. **2011B-13** Dated **09/29/11**.

Also for permission to lay and maintain underground laterals, cables and wires in the above or intersecting public ways for the purpose of making connections with such poles and buildings as each of said petitioners may desire for distributing purposes.

Your petitioners agree that space shall be reserved and maintained for the limited purpose of attaching one-way low voltage fire and police signaling wires owned by the municipality or governmental entity for public safety purposes only.

VERIZON NEW ENGLAND INC.

By David Crossman
Manager - Rights of Way

Dated this 29 day of SEPTEMBER, 2011.

MIDDLEBORO GAS & ELECTRIC COMPANY

By William E. Taylor
Supervisor of Project Engineering

Dated this 19th day of October, 2011.

VZ N.E. INC. No. 2011B-13 MUNICIPALITY MIDDLEBORO

LEGEND:

DATED

09/29/11

NOT TO SCALE

--- P/L --- PROPERTY LINE
— EOR — EDGE OF ROAD

PLAN FOR PLACEMENT OF NEW POLES 50 & 51 PURCHASE STREET

⊗ EXISTING POLE

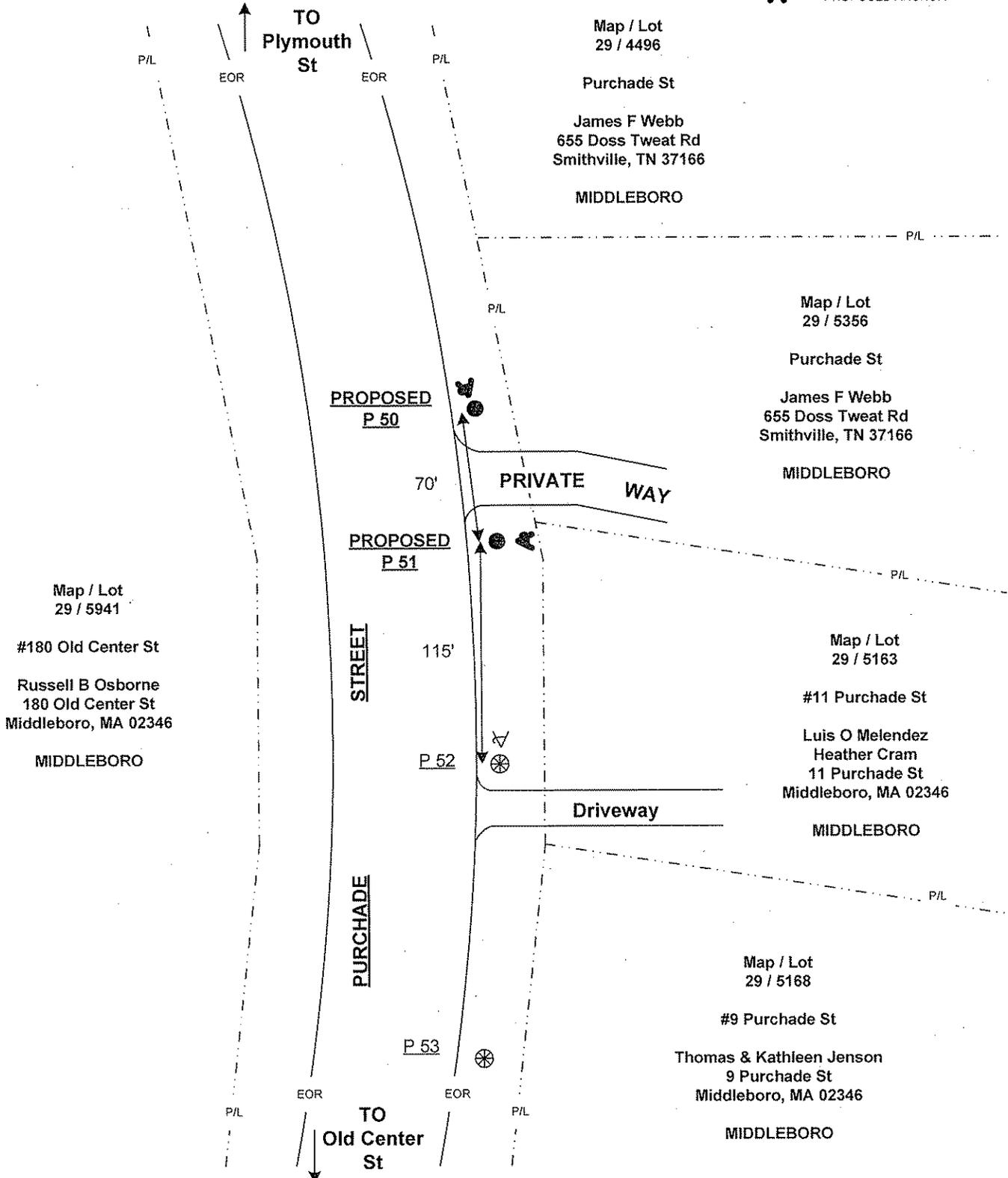
△ EXISTING ANCHOR

● PROPOSED POLE

▲ PROPOSED ANCHOR



TO ACCOMPANY PETITION OF
VERIZON NEW ENGLAND INC. AND
MIDDLEBORO GAS & ELECTRIC COMPANY



ABUTTERS LIST

Map / Lot
29 / 5941

#180 Old Center St

Russell B Osborne
180 Old Center St
Middleboro, MA 02346

MIDDLEBORO

Map / Lot
29 / 5168

#9 Purchase St

Thomas & Kathleen Jenson
9 Purchase St
Middleboro, MA 02346

MIDDLEBORO

Map / Lot
29 / 5163

#11 Purchase St

Luis O Melendez
Heather Cram
11 Purchase St
Middleboro, MA 02346

MIDDLEBORO

Map / Lot
29 / 5356

Purchase St

James F Webb
655 Doss Twear Rd
Smithville, TN 37166

MIDDLEBORO

Map / Lot
29 / 4496

Purchase St

James F Webb
655 Doss Twear Rd
Smithville, TN 37166

MIDDLEBORO

MIDDLEBOROUGH POLICE DEPARTMENT

99 NORTH MAIN STREET
MIDDLEBOROUGH, MA 02346

(508) 947-1212

Fax (508) 947-1009



Bruce D. Gates
Chief of Police

November 9, 2011

Board of Selectmen
Town Hall
Middleborough MA 02346

Subject: SECOND HAND LICENSES

Honorable Board,

Due to criminal activity related to housebreaks and larcenies and the quick and easy disposal of jewelry, precious metals and electronic items it is important that the Police Department have an improved method of tracing stolen items. I would propose the Board, as licensing authority, make the following additional rules and regulations for Second Hand Licenses as described under Article 15 of the Town By-Laws.

1. All materials taken in will be held for a minimum of 30 days before resale, trade, melting changing of the appearance or other means of disposal occur.
2. Audit sheets shall be submitted to the Chief of Police on a weekly basis with record of all transactions, including date of sale, amount, seller's name and address, date of birth, driver's license and state of issue, itemized list and description of article. Each licensee shall also take a color photograph of each item purchased and a color photograph of each person selling items. All audit sheets are to be legible and written in English. The required reports and photographs may be stored and transmitted electronically if the format is approved by the Chief of Police.

Under M.G.L. CHAPTER 140 Section 54 the Selectmen can impose these additional rules and regulations. They would become effective May 1, 2012. These regulations would need to be printed on the actual license.

If the Board votes to implement these rules I will be proposing a SECOND HAND LICENSE by-law change for the annual spring town meeting. This will

eliminate the need for an annual vote to approve these rules and also so the rules do not have to actually be printed on the license.

Respectfully Submitted,

A handwritten signature in cursive script, appearing to read "Bruce Gates", written over a horizontal line.

Bruce Gates,
Chief of Police

C/c
Charles Cristello
Town Manager

DRAFT

DRAFT

November 14, 2011

Luis Rodriguez, P.E. Chief,
Engineering Management Branch
Federal Insurance and Mitigation Administration
Federal Emergency Management Agency
Washington, D.C. 20472

In Reply Refer to: 101/155
Community: Town of Middleborough, Plymouth County, Massachusetts
Community No.: 250275

Re: Town of Middleborough's Appeal of FEMA's Proposed Base Flood Elevations (BFE's)

Dear Mr. Rodriguez,

On behalf of Alfred P. Rullo, Chairperson for the Middleborough Board of Selectmen and the Town of Middleborough, the Middleborough Planning Department hereby Appeals the Base (1-percent-annual-chance) Flood Elevation (BFE) otherwise known as the "100 Yr Flood Elevation" proposed on the Plymouth County Digital Flood Insurance Rate Maps (DFIRMs) and Flood Insurance Study (FIS) report for this community date: June 28, 2010 (Revised Preliminary).

The Middleborough Planning Department is in receipt of your August 18, 2011 letter addressed to Alfred P. Rullo, regarding revisions to the (BFE) on the Plymouth County (DFIRMs) and (FIS) report. It is this office's understanding, that for the Town of Middleborough, the August 18, 2011 FEMA letter indicated that the appeals period began on September 1, 2011 following the second publication of the Notice of this proposed BFE determination in The Middleborough Gazette and ends 90 days thereafter on November 30, 2011. In accordance with these requirements, this office hereby presents data to support the BFE appeal by the Town of Middleborough as follows.

The Middleborough Planning Department has compiled information on flooding that has occurred within the Town of Middleborough. During the April 1, 2010 Flood Event, this office recorded the Peak Flood Elevations at several bridge, culvert and field locations and compared these results to FEMA's BFEs indicated on the FIRM (Revised Preliminary June 28, 2010). In many instances the Peak Flood Elevations did not coincide with FEMA's predicted BFE's. This office compared the Peak Flood Elevations along the Nemasket River, Taunton River, Bartlett Brook and the Poquoy

Brook throughout the Town of Middleborough. More specifically this office performed analysis at the Murdock, Plymouth and Vaughan Street Bridges; Poquoy Brook's confluence with the Taunton River at the Vernon Street Culvert and areas along the east side of Thompson Street (Route 105) between the Plain and River Street intersections along Bartlett Brook on the Cumberland Farm property and compared the Peak Flood Elevations to the BFE's at those locations. To establish a statistical correlation between the April 1, 2010 Flood Event and the BFE (1-percent-annual-chance) indicated on FEMA's FIRM, this office utilized the data from the Taunton River electronic stream gage located on the up-gradient side of Titicut Street Bridge identified as "Streamflow Measurements for the Nation 'USGS 01108000 Taunton River Near Bridgewater, MA'".

TAUNTON RIVER: At the Titicut Street Bridge - BFE Correlation to the March & April 2010 Flood Events

For the purpose of monitoring the stream flow of the Taunton River, NOAA established an electronic stream gage on the up-gradient side of Titicut Street Bridge and provided Real Time Data on their National Weather Service: Advanced Hydrologic Prediction Service Website, see attached. The Middleborough Planning Department utilized the data available on this website to determine the Peak Flood Event Elevation for the storm events that occurred on March 17, 2010 and April 1, 2010 and compared these storm events to the 10, 50 and 100 year (BFE) events.

The website indicated that the Historic Crest Elevations (HCE) of the Taunton River as recorded by the Titicut Street Bridge stream gage were 14.51 ft and 14.97 ft on March 17, 2010 and April 1, 2010, respectively. The Peak Flood Event at these locations can be determined by converting the Historic Crest Elevation to the National Geodetic Vertical Datum of 1929 (N.G.V.D.). The website indicates that the Titicut Street Bridge stream gage "Gage 0" Datum equals 9.61 N.G.V.D., which can be used to determine the Peak Flood Elevation for March 17, 2010 and April 1, 2010 as follows:

<u>Storm Event:</u>	<u>Stream Gage:</u>	<u>HCE:</u>	<u>Peak Flood Elev.:</u>
3/17/10:	9.61 N.G.V.D. + 14.51 ft. =		<u>24.12 N.G.V.D.</u>
4/1/10:	9.61 N.G.V.D. + 14.97 ft. =		<u>24.58 N.G.V.D.</u>

This office does not have sufficient data to convert the datum from N.G.V.D. 29 to the National American Vertical Datum (NAVD 88) in accordance with the Appeals requirements. The Peak Flood Elevations for both storm events were compared to the predicted BFE for the Taunton River at the Titicut Street Bridge. The April 1, 2010 Flood Event was determined to be more similar to the BFE of 24.7 indicated on the FEMA: Flood Insurance Study dated February 1, 1983 Plate #05P for that location. The Flood Event of April 1, 2010 is nearly equivalent to the BFE (100 Yr Flood Elevation) and therefore can be used to compare the predicted BFE of the rivers in the Town of Middleborough to that of the actual Peak Flood Elevation recorded by the Middleborough Planning Department during the April 1, 2010 Flood Event. If the correlation is determined to be close at the study areas then the predicted BFE at these locations is correct and no further evaluation is required, however if the BFE's diverges from the April 1, 2010 analysis then a re-evaluation of the flood plain in that area is necessary.

The Middleborough Planning Department hereby provides evidence to support the Appeal of the BFE by utilizing data acquired during the April 1, 2010 Flood Event as follows:

NEMASKET RIVER: At Murdock and Plymouth Street Bridges (April 2010 Flood Event)

On April 1st, 2010, the Middleborough Planning Department documented the limit of flooding at the Murdock and Plain Street Bridges. Then on April 14, 2010 the Middleborough Planning Department performed an accurate field survey of Murdock and Plymouth Street Bridges to compare the elevation of the April 1, 2010 flood event to FEMA's predicted BFE for each location.

The following data was used to analyze the BFE:

- FIRM: Flood Insurance Rate Map for the Town of Middleborough, MA
Community – Panel Number: 250275 0015 C & 0025 C, Maps Revised: August 1, 1983
- Flood Insurance Study for the Town of Middleborough, MA, Community Number – 250275,
Dated February 1, 1983, Flood Profiles: 11P & 17P

Murdock Street Bridge:

The Peak Flood Elevation of the Nemasket River at the Murdock Street Bridge was determined at locations along the south (up gradient) and north (down gradient) sides of the bridge. The Peak Flood Elevation on the up gradient side was determined to be 26.2± NGVD and was greater than FEMA's BFE of 25.2± NGVD for that location. The BFE (up gradient side) was exceeded by 1.0 ft at this location which indicates that the BFE should be re-evaluated. The Peak Flood Elevation on the down gradient side was estimated from review of photographs taken at peak flood to be 25.0± NGVD which coincides with the FEMA's BFE for that location. **It appears that the configuration of the Murdock Street Bridge was hydraulically more restrictive than accounted for in the calculations for the BFE. The calculations for the BFE at this location may be Technically Incorrect.**

The Benchmark was acquired from the following plan:

As-Built Street & Utility Plan for River's Edge Estates Part II – Middleborough, MA

Prepared By: S & R Land Surveying, Inc., Dated: February 24, 1997

Location/Elevation: Top of a Granite Bound installed at the east PC point of River's Edge Drive along the south side of Murdock Street (Elevation = 27.26 NGVD).

Plymouth Street Bridge:

The Peak Flood Elevation of the Nemasket River at the Plymouth Street Bridge was determined at locations along the south (up gradient) and north (down gradient) sides of the bridge. The Peak Flood Elevation on the up gradient side was determined to be 27.0± NGVD, and was greater than FEMA's BFE of 26.5± NGVD for that location. The Peak Flood Elevation on the down gradient side was determined to be 26.2± NGVD, and was greater than the FEMA's BFE of 25.2± NGVD for that location. Please note that the field measurements at Murdock Street Bridge (up gradient side) and Plymouth Street Bridge (down gradient side) correlated within 0.05'. The BFE (up and down gradient sides) were exceeded by 0.5 and 1.0 ft respectively, which indicate that the BFE should be re-evaluated at these locations. **It appears that the configuration of the Plymouth Street Bridge**

was hydraulically more restrictive then accounted for in the calculations and therefore BFE at this location may be Technically Incorrect.

The Benchmark was acquired from the following plan:

Roadway Layout Plan of River's Edge Drive and Edge Water Lane – Middleborough, MA
Prepared By: Atlantic Design Engineers, LLC, Dated: October 15, 2007
Location/Elevation: Top of a Granite Bound installed at the east PT point of River's Edge Drive along the north side of Plymouth Street (Elevation = 31.73 NGVD).

NEMASKET RIVER: At The Vaughan Street Bridge (April 2010 Flood Event)

Vaughan Street Bridge:

The peak flood elevation of the Nemasket River at Vaughan Street Bridge located at a point on the southwest side of the bridge (down gradient side of the Nemasket River) was determined to be **56.0± (NGVD assumed)** and was greater than the BFE of 55.2± NGVD for that location. **The BFE was exceeded by 0.8 ft at this location which indicates that the BFE should be re-evaluated.** Please note that the southwest (down gradient) side was not evaluated.

It appears that on the Revised Preliminary FEMA's FIRM No. 25023C 0431C (Preliminary May 28, 2008), the BFE was reduced to elevation 54. Should this be the case the difference between the Peak Flood Elevation on April 1, 2010 will be 2.0 ft greater than the new BFE proposed on the FEMA Maps. It appears that the original BFE of 55 for the Nemasket River better represents what actually occurred in the field on April 1, 2010 but was still 1.0 ft lower than observed. **The preliminary BFE was exceeded by 2.0 ft which indicates that the BFE should be re-evaluated at this location.**

The peak flood elevation was determined from a series of accurate river gage reading taken between March 7, 2010 and April 5, 2010 by Charles Kennedy of the New Bedford Water Department and converted by the Middleborough Planning Department to the assumed NGVD. Note that the peak flood event occurred on April 2, 2010 as indicated on the attached information.

The Benchmark was acquired from the following plans:

The Commonwealth of Massachusetts Highway Department Plan and Profile of Bridge Replacement on Vaughan Street: Bridge No. L-1-3 = M-18-21 in the Town of Lakeville and Middleborough – Plymouth County, Date: No date available, Federal Project No. BRZ – 0005 (425), Project File No. 135850

Location/Elevation: Temporary R.R. Spike* 32" diameter Pine Tree @ Station 122+05, 22.00' RT of Roadway Baseline (Elevation = 63.86 NGVD Assumed**)

- * A Rail Road Spike was not found on the 32" diameter White Pine Tree; however a 12p nail with orange flagging was uncovered at the same location and used. The elevation of the 12p nail was checked against the proposed roadway centerline elevation of Vaughan Street Bridge and was within 0.14' of the Vaughan Bridge design plan. The accuracy of this benchmark will need to be verified by a Professional Land Surveyor (P.L.S.).

** The plan for Vaughan Street Bridge did not specify a datum. A level run by a PLS will need to be performed to verify the datum.

POQUOY BROOK: At Vernon Street Culvert (April 2010 Flood Event)

Engineering/Survey Inconsistencies:

There appears to be an inconsistency between the Poquoy Brook Watershed Study prepared in 1990 and the recent engineering work performed by G.A.F. Engineering, Inc. in regards to the roadway pavement elevation of Vernon Street at the Poquoy Brook culvert. The Poquoy Brook Watershed Study used 18.3 N.G.V.D. as the roadway pavement height of Vernon Street, however subsequent survey work performed by the Planning Department based on G.A.F. Engineering, Inc. survey, indicates that the elevation is 19.03 NGVD, a difference of 0.73 ft. This discrepancy will need to be investigated prior to performing further analysis. **Additional field survey will need to be performed to verify the configuration of the culvert and the roadway crossing in this area.**

Vernon Street Peak Flood Elevation Analysis:

The Peak Flood Elevations at Vernon Street culvert were determined along the up-gradient (easterly) and down-gradient (westerly) sides of Poquoy Brook by the Planning Department during the March/April 2010 flood event.

Vernon Street (Up-Gradient Side):

The Peak Flood Elevation along the easterly side of Vernon Street (up-gradient side of Poquoy Brook) was determined to be **19.7 N.G.V.D. on March 31, 2010** which is 0.8 ft higher than the Poquoy Brook Watershed Study's BFE determination of 18.87. Please refer to the attached excerpts from the Poquoy Brook Watershed Study. Due to the discrepancies in elevations encountered in the field and the differences between the Peak Flood Elevation recorded on March 31, 2010 and the Poquoy Brook Watershed Study, the BFE should be re-evaluated.

This office indirectly determined the Peak Flood Elevation that occurred along the east side of Vernon Street by photographically recording the peak flood elevation at the first post of the northeast steel guardrail and comparing the elevation to the rim elevation of Monitoring Well #4 identified on G.A.F. Engineering, Inc. "Ground Water Contour Plan" for Assessor's Lot 4669, Map 37. Please refer to the attached documents.

Vernon Street (Down-Gradient Side):

The Peak Flood Elevation that occurred along the west side of Vernon Street (down-gradient side of Poquoy Brook) was determined to be **19.4 N.G.V.D. on April 1, 2010** and was 0.4 ft higher than FEMA's BFE of 19 for the Taunton River. It should be noted that the Taunton River peaked 1 day after Poquoy Brook at which time the Poquoy Brook began to experience reversed flows. It appears that the BFE has been recently reduced to 18 as indicated in the FEMA: FIRM Map Number 25023C0311C (Preliminary May 28, 2008). Should this be the case the difference between the Peak Flood Elevation on April 1, 2010 will be 1.4 ft greater than the new BFE presented on the FEMA Maps. It appears that the original BFE of 19 for the Taunton River better represents what actually occurred in the field on April 1, 2010. The original and preliminary BFE was exceeded by 0.4 and 1.4 ft respectively, at this location which indicates that the BFE should be re-evaluated.

In this office opinion the BFE is Technically Incorrect because of insufficient or poor quality data.

The Peak Flood Elevation along the west side of Vernon Street was determined by this office by taking direct measurements between the rim elevation of Monitoring Well #4 (as described above) and the standing water elevation at the well during the peak flood event. Please refer to the attached "Ground Water Contour Plan" for the elevation calculations.

The following plans/ data were used to analyze the BFE:

- FIRM: Flood Insurance Rate Map for the Plymouth County, MA
Community – Panel Number: 25023C 0313C, Preliminary: May 28, 2008
- FIRM: Flood Insurance Rate Map for the Plymouth County, MA
Community – Panel Number: 25023C 0311C, Preliminary: May 28, 2008
- Excerpts from Poquoy Brook Watershed Study
Volume I: Report Narrative and Summary Analysis
Prepared for: Southpointe Corporate Center, Middleborough, MA
Prepared By: Sasaki Associates, Inc., September 1990

The Survey Data and Benchmark was acquired from the following plans:

- Sewage Disposal System Design Located at Vernon Street – Middleborough, MA
Prepared For Michael Sands, Prepared By: G.A.F. Engineering, Inc.
Dated: March 5, 2008
- Groundwater Contour Plan
Prepared For: Michael Sands, Prepared By: G.A.F. Engineering, Inc.
Dated: March 12, 2008

BARTLETT BROOK: Flooding Along Thompson Street (Rte 105) (April 2010 Flood Event)

The Peak Flood Elevations that occurred along the east side of Thompson Street resulting from Bartlett Brook overtopping its banks was determined by the Planning Department during the April 2010 Flood Event.

The Peak Flood Elevation occurred on April 2, 2010 and was determined to be **27.0± N.G.V.D.** and is consistent with the BFE determined for Winnetuxet River at the confluence of Bartlett Brook located in Halifax, MA just beyond the Middleborough Town Line. The Peak Flood Elevation was then placed on the Town of Middleborough's Topographic Maps No. 3 & 6 to show the extent of inundation. The inundation that occurred extended well beyond the FEMA Zone "A" determination for Bartlett Brook. Since the limit of the Flood Designation Zone "A" was exceeded at this location; the Flood Designation Zone "A" should be re-evaluated. **In this office opinion, the BFE is Technically Incorrect due to insufficient data.**

During the morning of April 2, 2010, the Peak Flood Elevation was determined by the Middleborough Planning Department by marking the standing water elevation with flagging on a wire fence situated parallel to and at the toe of the slope of Thompson Street, 707 ft north of the hydrant located at the intersection of Plain Street.

The Planning Department, on April 16, 2010 determined the Peak Flood Elevation located along the easterly side of Thompson Street by taking direct measurements between the west invert elevation (up-gradient side) of Culvert No. 1 and the Peak Flood Elevation previously flagged on April 2, 2010. Culvert No. 1 is identified on a plan entitled Adult Leisure Community White Oak Island Existing Watershed Areas prepared by Land Graphics dated February 19, 1991.

The Survey Data and Benchmark was acquired from the following plans:

- FIRM: Flood Insurance Rate Map for the Plymouth County, MA Community – Panel Number: 250275 0015 C, Map Revised: August 1, 1983
- FIRM: Flood Insurance Rate Map for the Plymouth County, MA Community – Panel Number: 25023C 0309C, Preliminary: May 28, 2008
- Adult Leisure Community White Oak Island Existing Watershed Areas prepared by Land Graphics dated February 19, 1991.
- Town of Middleborough Topographic Maps No. 3 and 6

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Paul A. Fellini
Construction Administrator

Cc.: Tim Hillier: 50 Hampshire Street – Cambridge, MA 02139
David Mendelsohn: 99 High Street, 6th Floor - Boston, MA 02110
Email: david.mendelsohn@dhs.gov

Enc.:

Titicut Street Bridge Steam Gage Data
Nemasket River at Murdock & Plymouth Street Bridge Plans
Nemasket River at Vaughan Street Bridge Plans
Paquoy Brook at Vernon Street Culvert Plans
Bartlett Brook Flooding Along Thompson Street (Rte 105) Plans