



City of Gardner, Massachusetts

Office of the City Council

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### CALENDAR FOR THE MEETING

of

MONDAY, SEPTEMBER 19, 2016

COUNCIL CHAMBER

7:30 P.M.

### ORDER OF BUSINESS

#### I. CALL TO ORDER

#### II. CALL OF THE ROLL OF MEMBERS

#### III. OPENING PRAYER

#### IV. PLEDGE OF ALLEGIANCE

#### V. ANNOUNCEMENT OF OPEN MEETING RECORDINGS

Any person may make a video or audio recording of an open session of a meeting, or may transmit the meeting through any medium, subject to reasonable requirements of the chair as to the number, placement and operation of equipment used so as not to interfere with the conduct of the meeting. Any person intending to make such recording shall notify the Chair forthwith. All documents and exhibits used or referenced at the meeting must be submitted in duplicate to the City Clerk, as they become part of the Meeting Minutes.

#### VI. READING OF MINUTES OF PRIOR MEETING(S)

Reading and Approval of the September 6, 2016 Regular Meeting Minutes.

#### VII. PUBLIC HEARINGS

#### VIII. COMMUNICATIONS FROM THE MAYOR

##### APPOINTMENT

**9690** – A Measure Confirming the Mayor’s Appointment of Irene Dubzinski to the position of Member, Housing Authority, for term expiring May 5, 2017  
(*Finance Committee*).

##### ORDINANCE

**9691** – An Ordinance to Amend the Code of the City of Gardner, Chapter 600, Thereof, Entitled “Vehicles and Traffic,” Article V. Parking Meters (*Public Safety Committee*).

#### IX. PETITIONS, APPLICATIONS, ETC.

**9692** –A Measure Authorizing Traffic Restrictions for the 2016 Fabulous Fall Festival and Chair Luge (*Public Safety Committee*).

#### X. REPORTS OF STANDING COMMITTEES

##### PUBLIC SAFETY COMMITTEE

**9629** – An Ordinance to Amend the Code of the City of Gardner, Chapter 600, Thereof, Entitled “Vehicles and Traffic,” Various Sections (*In City Council and Referred to Public Safety 5/16/2016*).

**PUBLIC SAFETY COMMITTEE (Continued)**

**9688** – An Application by Paul L. Roy for an Amended License to Store 200,000 Gallons of Petroleum Products in Aboveground Storage Tanks at 211 Colony Lane, Gardner (*In City Council, Referred to Public Safety, and Public Hearing Ordered 9/6/2016; Public Hearing Scheduled for 10/3/2016 at 7:30 p.m.*).

**9689** – Notice of Cancellation of Motor Vehicle Class 2 Dealer Surety Bond Relative to Marco’s Motorsports, 412 Main Street (*In City Council and Referred to Public Safety 9/6/2016*).

**COMMITTEE OF THE WHOLE**

**9234** – Law Department Charter Review (*Referred to the City Solicitor 10/20/2014; Charter Review Received and Referred to the Committee of the Whole 3/3/2015*).

**9686** – A Resolution Endorsing the DPW Plan to Upgrade the Dewatering Equipment and Pursuit of a New/Expanded Sludge Landfill (*In City Council and Referred to Committee of the Whole 9/6/2016*).

**XI. UNFINISHED BUSINESS AND MATTERS FOR RECONSIDERATION**

**XII. NEW BUSINESS**

**XIII. CLOSING PRAYER**

**XIV. ADJOURNMENT**

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Items listed on the Council Calendar are those reasonably anticipated by the Council President to be discussed at the meeting. Not all items listed may in fact be discussed and other items not listed may also be brought up for discussion to the extent permitted by law.

**REGULAR MEETING OF SEPTEMBER 6, 2016**

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+Regular Meeting of the City Council was held in the City Council Chamber, 2<sup>nd</sup> Floor, City Hall, on Tuesday evening, September 6, 2016.

**CALL TO ORDER**

President James Walsh called the meeting to order at 7:30 o'clock p.m.

**CALL OF THE ROLL**

City Clerk Alan Agnelli called the Roll of Members. Eleven (11) Councillors were present including President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance.

**OPENING PRAYER**

President Walsh led the Council in reciting the Opening Prayer.

**PLEDGE OF ALLEGIANCE**

President Walsh led the Council in reciting the "Pledge of Allegiance".

**OPEN MEETING RECORDING & PUBLIC RECORDS ANNOUNCEMENT**

President Walsh announced to the assembly that the Open Meeting Recording and Public Records Announcement is posted at the entrance to the Chamber, and that any person planning to record the meeting by any means should identify themselves.

**READING & ACCEPTANCE OF MINUTES**

On a motion by Councillor Ronald Cormier and seconded by Councillor Paul Tassone, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to waive reading and to accept the Minutes of the August 1, 2016 Regular Meeting, as printed.

**COMMUNICATIONS FROM THE MAYOR****APPOINTMENTS**

**#9680**

On a motion by Councillor Ronald Cormier and seconded by Councillor Marc Morgan, on recommendation of the Finance Committee, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier,

REGULAR MEETING OF SEPTEMBER 6, 2016

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Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to confirm the following Appointment received from the Mayor:

**PHILIP MORRISSEY** to the position of Member, Airport Commission, for term expiring July 25, 2019.

**#9681**

On a motion by Councillor Ronald Cormier and seconded by Councillor Marc Morgan, on recommendation of the Finance Committee, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to confirm the following Appointment received from the Mayor:

**KRISTIN EDSON-SHOUSE** to the position of Member, Youth Commission, for term expiring August 10, 2019.

**#9682**

On a motion by Councillor Ronald Cormier and seconded by Councillor Marc Morgan, on recommendation of the Finance Committee, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to confirm the following Appointment received from the Mayor:

**MICHAEL McGRATH** to the position of Member, Youth Commission, for term expiring August 10, 2019.

**Worcester, ss.**

**September 13, 2016**

Then personally appeared **MICHAEL McGRATH** and made oath that he would faithfully and impartially perform the duties of Member, Youth Commission, according to law and the best of his abilities.

Before me,

/s/ Titi Siriphan, Assistant City Clerk

**#9683**

On a motion by Councillor Ronald Cormier and seconded by Councillor Scott Graves, on recommendation of the Finance Committee, it was voted viva voce, eight (8) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, James Johnson, and Marc Morgan; three (3) nays, Councillors Karen Hardern, Paul Tassone, and Matthew Vance, to confirm the following Appointment received from the Mayor:

REGULAR MEETING OF SEPTEMBER 6, 2016

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**EDWARD GRAVEL** to the position of Member, Youth Commission, for term expiring August 10, 2019.

**Worcester, ss.**

**September 12, 2016**

Then personally appeared **EDWARD GRAVEL** and made oath that he would faithfully and impartially perform the duties of Member, Youth Commission, according to law and the best of his abilities.

Before me,  
/s/ Alan L. Agnelli, City Clerk

**#9684**

On a motion by Councillor Ronald Cormier and seconded by Councillor Marc Morgan, on recommendation of the Finance Committee, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to confirm the following Appointment received from the Mayor:

**DARLENE MORRILLY** to the position of Member, Board of Registrars of Voters, for term expiring April 1, 2018.

**Worcester, ss.**

**September 8, 2016**

Then personally appeared **DARLENE MORRILLY** and made oath that she would faithfully and impartially perform the duties of Member, Board of Registrars of Voters, according to law and the best of her abilities.

Before me,  
/s/ Alan L. Agnelli, City Clerk

**#9685**

On a motion by Councillor Ronald Cormier and seconded by Councillor Marc Morgan, on recommendation of the Finance Committee, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to confirm the following Appointment received from the Mayor:

**LAURIE DRAKE** to the position of Election Officer for term expiring September 1, 2017.

**PETITIONS, APPLICATIONS, ETC.**

**#9686**

On a motion by Councillor Marc Morgan and seconded by Councillor Scott Graves, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to refer the following Resolution to the Council as Committee of the Whole for study and report:

REGULAR MEETING OF SEPTEMBER 6, 2016

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RESOLUTION ENDORSING THE DEPARTMENT OF PUBLIC WORKS  
PLAN TO UPGRADE THE DEWATERING EQUIPMENT  
AND PURSUIT OF A NEW/EXPANDED SLUDGE LANDFILL

*VOTE:* The City Council of Gardner wishes to endorse the Department of Public Works Plan to upgrade the dewatering equipment and pursue a new/expanded sludge landfill.

The plan will include improving the technology, replacing the pumps, repairing the 30 year old facility, and pursuing a new/expanded sludge landfill. The City has performed a comprehensive study looking at several alternatives for the disposal of the City's sludge. These options included composting, anaerobic digestion, off-site disposal by a private hauler, and upgrading and continuing our current operations.

Based on the evaluations, the most cost effective long term solution was deemed to be upgrading the present dewatering equipment and disposing of the sludge at a City owned sludge landfill.

President James Walsh informed the Council that an Informal Meeting would be scheduled prior to the next Regular Meeting to hear a presentation on the proposal.

**#9687**

On a motion by Councillor Ronald Cormier and seconded by Councillor Marc Morgan, on recommendation of the Finance Committee, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to adopt the following Measure:

ACCEPTANCE OF M.G.L. CHAPTER 54, SECTION 16A  
ABSENT ELECTION OFFICER APPOINTMENTS

*VOTE:* To accept the provisions of Section 16A of Chapter 54 of the General Laws, empowering the City Clerk to appoint a warden, clerk or inspector, or the deputy of any such officer, if any is not present at the opening of the polls.

Presented to Mayor for Approval – September 7, 2016

Approved – September 7, 2016

MARK P. HAWKE, Mayor



## REGULAR MEETING OF SEPTEMBER 6, 2016

**#9688**

On a motion by Councillor Paul Tassone and seconded by Councillor Karen Hardern, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to Order to Public Hearing and to refer to the Public Safety Committee for study and report the *Application by Paul L. Roy, 55 Corey Hill Road, Ashburnham, for an Amended License to Store 200,000 Gallons of Petroleum Products in Aboveground Storage Tanks at 211 Colony Lane, Gardner.*

**#9689**

On a motion by Councillor Paul Tassone and seconded by Councillor Karen Hardern, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to refer to the Public Safety Committee for study and report the *Notice of Cancellation of the Motor Vehicle Class 2 Dealer Surety Bond Relative to Marco's Motorsports, 412 Main Street.*

**REPORTS OF STANDING COMMITTEES****PUBLIC SAFETY COMMITTEE****#9629**

There being no objections, the Public Safety Committee was granted more time to study and to report on the following Ordinance, as it awaits feedback from the Traffic Commission:

AN ORDINANCE TO AMEND THE CODE OF THE CITY OF GARDNER, CHAPTER 600 THEREOF, ENTITLED "VEHICLES AND TRAFFIC."

Be it ordained by the City Council of the City of Gardner as follows:

Section 1. Section 600-28 of Chapter 600, Vehicles and Traffic, Parking Time Limited in Designated Spaces, of the Code of the City of Gardner, is amended by adding the following:

D. Two Hour Parking. No person shall park a vehicle for a period of time longer than two hours on the following described streets or parts thereof between the hours of 9:00 a.m. and 6:00 p.m., except on Sundays and holidays:

City Hall Avenue

North

Beginning 33 feet from the corner of  
Connors Street easterly for a distance  
of 115 feet (10 spaces).

Section 2. The Code of the City of Gardner is hereby amended by deleting and repealing § 600-29 (B), Police Vehicle Parking Only.

Section 3. Section 600-32 of Chapter 600, Vehicles and Traffic, Angle Parking, of the Code of the City of Gardner, is hereby amended by deleting and repealing the following:



## REGULAR MEETING OF SEPTEMBER 6, 2016

| Name of Street   | Side  | Location                                                                                                                                                                                   |
|------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City Hall Avenue | North | Beginning 33 feet from the corner of Connors Street easterly for a distance of 115 feet (10 parking spaces), in front of the police station for police cruiser and official business only. |
| City Hall Avenue | South | 151.5 feet from Pleasant Street a distance of 42 feet (4 angle spaces) (police business only).                                                                                             |

Section 4. Section 600-32 of Chapter 600, Vehicles and Traffic, Angle Parking, of the Code of the City of Gardner, is amended by adding thereto the following:

|                  |       |                                                                                                                               |
|------------------|-------|-------------------------------------------------------------------------------------------------------------------------------|
| City Hall Avenue | South | 130 feet from Pleasant Street, a distance of 63 feet (6 spaces).<br>Vehicles shall not remain in spaces longer than 12 hours. |
|------------------|-------|-------------------------------------------------------------------------------------------------------------------------------|

Section 5. This Ordinance shall take effect upon passage and publication as required by law.

**COMMITTEE OF THE WHOLE**

**#9234**

President Walsh informed the Council that the City Solicitor submitted his report in response to the Council's request for language addressing the creation and filling of vacancies, and added that he requested that the City Clerk prepare draft legislation based upon various revisions agreed to by the Council. He said that when the draft is completed, he would then schedule a meeting of the Committee of the Whole to review the legislation, perhaps at the Council's second meeting in October. There being no objections, the Committee of the Whole was granted more time.

**#9661**

On a motion by Councillor Marc Morgan and seconded by Councillor James Johnson, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to grant the Mayor's request for Leave to Withdraw the following Order:

AN ORDER APPROPRIATING FROM SEWER SURPLUS TO SEWER DESIGN OF THE DEWATERING.

ORDER: That there be and is hereby appropriated the sum of Fifteen Thousand Dollars and No Cents (\$15,000.00) from Sewer Surplus to Sewer Design of the Dewatering.

REGULAR MEETING OF SEPTEMBER 6, 2016

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**NEW BUSINESS**

On a motion by Councillor Nathan Boudreau and seconded by Councillor Scott Graves, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to consider New Business.

**ANNOUNCEMENTS**

Councillor Paul Tassone informed the Council that local businesses were represented at a recent weekend event that he attended at the Red Apple Farm in Phillipston.

Councillor Craig Cormier wished students and teachers a happy new school year.

Councillor Nathan Boudreau noted successful local events that were held in August, citing the Sidewalk Sale, Salvadore's Festival, and Movies and Concerts in the Park.

Councillor James Boone noted the impressive uniform worn by a City Councillor (Boudreau) during the recent Experience Gardner Summer Festival and Sidewalk Sale.

**CLOSING PRAYER**

President Walsh led the Council in the Closing Prayer.

**ADJOURNMENT**

On a motion by Councillor Scott Graves and seconded by Councillor James Johnson, it was voted viva voce, eleven (11) yeas, President James Walsh and Councillors James Boone, Nathan Boudreau, Craig Cormier, Ronald Cormier, Scott Graves, Karen Hardern, James Johnson, Marc Morgan, Paul Tassone, and Matthew Vance, to adjourn at 7:45 o'clock p.m.

**Accepted by the City Council:**

9690

September 8, 2016

RECEIVED

2016 SEP 9 PM 2

# Commonwealth of Massachusetts

Worcester County

City of Gardner

## CERTIFICATE OF APPOINTMENT

I appoint Irene Dubzinski to the position of Member, Housing Authority, and I certify

83 Temple Street, Gardner, MA

that in my opinion he/she is a person specially fitted by education, training, or experience to perform the duties of said office, and that I make the appointment solely in the interests of the City.



Mark P. Hawke

Confirmed by City Council \_\_\_\_\_

\_\_\_\_\_  
City Clerk

Alan L. Agnelli

Expires: May 5, 2017

Worcester, ss., \_\_\_\_\_

Then personally appeared the above named Irene Dubzinski and made oath that he/she would faithfully and impartially perform the duties of the office of Member, Housing Authority according to law and the best of his/her abilities.

Before me,  
\_\_\_\_\_  
City Clerk

Chapter 303 Acts of 1975  
and  
Chapter 409 Acts of 1983

Received \_\_\_\_\_

9690

# City of Gardner, *Executive Department*



Mark Hawke, Mayor

RECEIVED

September 8, 2016

2016 SEP 9 AM 2:53

CITY CLERK  
GARDNER

James M. Walsh, President  
And City Councilors  
95 Pleasant Street  
Gardner, MA 01440

RE: Appointment of Housing Authority Member

Dear President Walsh and Councilors,

Chapter 218 of the Acts of 2016 allows the Mayor, with confirmation of the Council, to appoint state appointees to Housing and Redevelopment Authorities if the vacancy has not been filled within 120 days of its expiration.

Therefore, please find attached an appointment for Irene Dubzinski to the Gardner Housing Authority. Mrs. Dubzinski has served on Authority for many years and is currently the Authorities Treasurer.

Respectfully,

Mark Hawke  
Mayor, City of Gardner



THE 189<sup>TH</sup> GENERAL COURT OF  
THE COMMONWEALTH OF MASSACHUSETTS

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|                     |                                                          |                                           |
|---------------------|----------------------------------------------------------|-------------------------------------------|
| <b>PART I</b>       | <b>ADMINISTRATION OF THE GOVERNMENT</b>                  | <a href="#">NEXT</a>                      |
| <b>TITLE XVII</b>   | <b>PUBLIC WELFARE</b>                                    | <a href="#">PREV</a> <a href="#">NEXT</a> |
| <b>CHAPTER 121B</b> | <b>HOUSING AND URBAN RENEWAL</b>                         | <a href="#">PREV</a> <a href="#">NEXT</a> |
| <b>Section 5</b>    | <b>Membership; appointment; election; term of office</b> | <a href="#">PREV</a> <a href="#">NEXT</a> |

Section 5. Every housing and redevelopment authority shall be managed, controlled and governed by five members, appointed or elected as provided in this section, of whom three shall constitute a quorum. Every member of a housing or redevelopment authority shall be a fiduciary of the housing or redevelopment authority.

In a city, four members of a housing or redevelopment authority shall be appointed by the mayor subject to confirmation by the city council; provided, that, the members shall be appointed to serve for initial terms of one, two, four and five years, respectively.

In a town, 3 members shall be elected by the town; provided, that of the members originally elected at an annual town meeting, the one receiving the highest number of votes shall serve for five years, the one receiving the next highest number of votes, for four years and the one receiving the next highest number of votes, for two years; provided, that upon the initial organization of a housing or redevelopment authority, if a town so votes at an annual or special town meeting called for the purpose, four members of such an authority shall be appointed forthwith by the selectmen to serve only until the qualification of their successors, who shall be elected at the next annual town meeting as provided above.

In a city or town, one member of a housing or redevelopment authority shall be appointed by the department for an initial term of three years.

Thereafter, as the term of a member of any housing or redevelopment authority expires, his successor shall be appointed or elected, in the same manner and by the same body, for a term of five years from such expiration. Membership in a housing or redevelopment authority shall be restricted to residents of the city or town.

In a city, one of the four members of a housing authority appointed by the mayor shall be a resident of that city and shall be a representative of organized labor who shall be appointed by the mayor from a list of not less than two nor more than five names, representing different unions submitted by the Central Labor Council, AFL-CIO and the International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America of the city or of the district within which the city is included. If no such list of names is submitted within sixty days after a vacancy occurs, the mayor may appoint any representative of organized labor of his own choosing to the authority. In a city, one of the four members of a housing authority appointed by the mayor shall be a tenant in a building owned and operated by or on behalf of the local housing authority who shall be appointed by the mayor from lists of names submitted by each

duly recognized city-wide and project-wide tenants' organization in the city. A tenants' organization may submit a list which contains not less than two nor more than five names to the mayor who shall make his selection from among the names so submitted; provided that, where no public housing units are owned and operated by the local housing authority and no such units are owned and operated on behalf of the local housing authority, the mayor shall appoint any tenant of the housing authority from lists submitted in accordance with this section. If no list of names is submitted within sixty days after a vacancy occurs, the mayor shall appoint any tenant of his choosing to the authority. The mayor shall notify in writing tenant organizations as specified herein not less than ninety days prior to the expiration of the term of a tenant member. Whenever a vacancy occurs in the term of a tenant member for any reason other than the expiration of a term, the mayor shall notify in writing the tenant organizations specified herein within ten working days after the vacancy occurs. The mayor shall make an appointment within a reasonable time after the expiration of sixty days after said notice.

Vacancies, other than by reason of expiration of terms, shall be filled for the balance of the unexpired term, in the same manner and by the same body, except elected members in towns whose terms shall be filled in accordance with the provisions of section eleven of chapter forty-one. Every member, unless sooner removed, shall serve until the qualification of his successor.

As soon as possible after the qualification of the members of a housing or redevelopment authority the city or town clerk, as the case may be, shall file a certificate of such appointment, or of such appointment and election, as the case may be, with the department, and a duplicate thereof, in either case, in the office of the state secretary. If the state secretary finds that the housing or redevelopment authority has been organized and the members thereof elected or appointed according to law, he shall issue to it a certificate of organization and such certificate shall be conclusive evidence of the lawful organization of the authority and of the election or appointment of the members thereof.

Whenever the membership of an authority is changed by appointment, election, resignation or removal, a certificate and duplicate certificate to that effect shall be promptly so filed. A certificate so filed shall be conclusive evidence of the change in membership of the authority referred to therein.

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SECTION 216. The fourth paragraph of section 5 of chapter 121B of the General Laws, as so appearing, is hereby amended by adding the following 2 sentences:- If the department does not fill a vacancy in the position of that member within 120 days from the date that the vacancy is created, the board of selectmen shall appoint, in writing, a person by a majority vote to fill such vacancy for the unexpired term. In a city, the mayor shall appoint a person subject to confirmation by the city council for the unexpired term

9691

# City of Gardner, *Executive Department*



Mark Hawke, Mayor

September 12, 2016

RECEIVED

2016 SEP 13 AM 10 57

CITY CLERK  
GARDNER

James M. Walsh, President  
And City Councilors  
95 Pleasant Street  
Gardner, MA 01410

RE: Parking Meter District

Dear President Walsh and Councilors,

The Mayor's Ad-hoc Parking Meter Advisory Committee (MAPMAC) has been meeting for several months. They have been tasked with researching and recommending replacement parking meters and reviewing our current parking metered area.

MAPMAC has made the following recommendations:

- Remove parking meters on City Hall Avenue, west of Connors Street.
- Add parking meters on the east and west of Connors Street except for the spaces behind Perry Auditorium and adjacent to the Fire Station (see map).
- Replace all broken/missing meters.
- Add meters in the newly created parking spaces within the existing metered area.
- Align the parking meter ordinance with current practice.

The attached ordinance amendment will delete section 600-19. This section only allowed for 30 minute parking along City Hall Avenue. This was not enforced as the parking meters were the same as the 2 hour parking metered area and allowed for 2 hours of parking. We are also looking to remove the meters from half of City Hall Avenue.

The attached ordinance will insert another portion of Connors Street to the parking metered area.

The attached ordinance will also delete a sentence extending the 2 hour parking limit to 9:00pm on Thursdays.

Respectfully,

Mark Hawke  
Mayor, City of Gardner

AN ORDINANCE TO AMEND THE CODE OF THE CITY OF GARDNER, CODE 600-18-A TWO HOUR PARKING METERS AND CODE 600-19 THIRTY-MINUTE PARKING METERS.

Be it ordained by the City Council of the City of Gardner as follows:

**Delete Code §600-19-A & B – Thirty minute parking meters.**

A. No person shall park a vehicle for a period of time longer than 30 minutes between the hours of 9:00 a.m. and 6:00 p.m. at any metered location on the streets or portions thereof listed below. This restriction shall not apply on Sundays or during the hours of legal holidays during which business establishments are required by law to remain closed.

| <b>Name of Street</b> | <b>Location</b>                                                      |
|-----------------------|----------------------------------------------------------------------|
| City Hall Avenue      | Between Pleasant Street and Nichols Street, unless otherwise posted. |

B. The actual location of meters to be placed within the above locations shall be designated and may from time to time be changed by vote of the City Council Public Safety Committee.

**AND**

**Amend Code §600-18 – Two-hour parking meters.**

No person shall park a vehicle for a period of time longer than two hours between the hours of 9:00 a.m. and 6:00 p.m. at any metered location on the streets or portions thereof listed below. This restriction shall not apply on Sundays or during the hours of legal holidays during which business establishments are required by law to remain closed.

**Insert:**

| <b>Name of Street</b> | <b>Side</b> | <b>Location</b>                      |
|-----------------------|-------------|--------------------------------------|
| Connors Street        | Easterly    | From Knowlton Street 260 feet North. |
| Connors Street        | Westerly    | From Knowlton Street 400 feet North. |

**Delete:**

On Thursdays, the limited parking time shall be from 9:00 a.m. to 9:00 p.m.

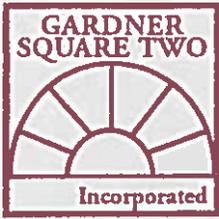
This ordinance shall become effective upon passage and publication as required by law.

AUTHORIZING TRAFFIC RESTRICTIONS  
2016 FABULOUS FALL FESTIVAL & CHAIR LUGE

*ORDER:* To restrict traffic on Saturday, September 24, 2016 from 9:00 a.m. until 6:00 p.m. for the 3<sup>rd</sup> Annual Fabulous Fall Festival and Chair Luge. During these hours, vehicle traffic shall be prohibited in the following areas:

- Main Street beginning at 46 Main Street (Paramount Café) to 4 Main Street (Priscilla Candy Shop).
- Pleasant Street beginning at 39 Pleasant Street (Suzette’s Breakfast & Lunch Shop) to 2 Parker Street.
- West Lynde Street from 4 Main Street (Priscilla Candy Shop) to the West Lynde Street South parking lot entrance.
- Central Street from 320 Central (The Yoga Tree) to 280 Central Street (Cruisers Malt Shoppe).
- Parker Street from 29 Parker Street (Bank of America) to 104 Parker Street (The Buffer Zone/Pampering Parlor) at Lafayette Square.
- West Street Parking Lot and West Street to Oak Street.

9692



**GARDNER SQUARE TWO, INC.**  
***Gardner's Downtown Association***

RECEIVED  
2016 SEP 8 AM 9 36  
CITY CLERK'S OFFICE  
GARDNER, MA

**September 7, 2016**

**Council President James M. Walsh, Esq.**  
**C/O Alan Agnelli, City Clerk**  
**City Hall, Room 121**  
**95 Pleasant Street**  
**Gardner, MA 01440**

**Dear Council President Walsh:**

**This letter is to request your approval for our upcoming 3<sup>rd</sup> Annual Fabulous Fall Festival sponsored by Gardner Square Two. This event is scheduled to take place on Saturday September 24, 2016, 9 am - 5 pm. It is on the same day as The Gardner Chair Luge and Gardner Ale House's Oktoberfest in the street.**

**In order to have this event, we need to close off the center of town from 8am - 6 pm. The closings would be the same as those from last month's Experience Gardner Festival & Sidewalk Sale.**

- Main Street from the Paramount Café to Priscilla Candy Shop.**
- Pleasant Street from Suzette's to the corner of Parker Street.**
- West Lynde Street from Priscilla Candy to Parking Lot entrance.**
- Central Street from The Yoga Tree to Cruisers on that side of the street.**
- Parker Street from Bank of America Parking lot through to Gardner Ale House and beyond. You should receive a separate request from Gardner Ale House/Rick Walton regarding their use of the West Street lot and street closing requests.**

**If you have any questions, comments, or concerns about The Fabulous Fall Festival, please feel free to contact me. Thank you for your support! It's going to be another fabulous Square Two event.**

**Sincerely,**  
*Patti Bergstrom*  
**Patti Bergstrom, President**  
**Gardner Square Two, Inc.**

# ORDINANCE

1 AN ORDINANCE TO AMEND THE CODE OF THE CITY OF GARDNER, CHAPTER 600  
2 THEREOF, ENTITLED "VEHICLES AND TRAFFIC."

3

4 Be it ordained by the City Council of the City of Gardner as follows:

5

6 Section 1. Section 600-28 of Chapter 600, Vehicles and Traffic, Parking Time Limited in  
7 Designated Spaces, of the Code of the City of Gardner, is amended by adding the following:

8

9 D. Two Hour Parking. No person shall park a vehicle for a period of time longer than  
10 two hours on the following described streets or parts thereof between the hours of 9:00  
11 a.m. and 6:00 p.m., except on Sundays and holidays:

12

|    |                  |       |                                        |
|----|------------------|-------|----------------------------------------|
| 13 | City Hall Avenue | North | Beginning 33 feet from the corner of   |
| 14 |                  |       | Connors Street easterly for a distance |
| 15 |                  |       | of 115 feet (10 spaces).               |

16

17 Section 2. The Code of the City of Gardner is hereby amended by deleting and repealing § 600-  
18 29 (B), Police Vehicle Parking Only.

19

20 Section 3. Section 600-32 of Chapter 600, Vehicles and Traffic, Angle Parking, of the Code of  
21 the City of Gardner, is hereby amended by deleting and repealing the following:

| 22 | Name of Street   | Side  | Location                               |
|----|------------------|-------|----------------------------------------|
| 23 | City Hall Avenue | North | Beginning 33 feet from the corner of   |
| 24 |                  |       | Connors Street easterly for a distance |
| 25 |                  |       | of 115 feet (10 parking spaces), in    |
| 26 |                  |       | front of the police station for police |
| 27 |                  |       | cruiser and official business only.    |
| 28 |                  |       |                                        |
| 29 | City Hall Avenue | South | 151.5 feet from Pleasant Street a      |

# ORDINANCE

---

30 distance of 42 feet (4 angle spaces)  
31 (police business only).

32

33 Section 4. Section 600-32 of Chapter 600, Vehicles and Traffic, Angle Parking, of the Code of  
34 the City of Gardner, is amended by adding thereto the following:

35

|    |                  |       |                                     |
|----|------------------|-------|-------------------------------------|
| 36 | City Hall Avenue | South | 130 feet from Pleasant Street, a    |
| 37 |                  |       | distance of 63 feet (6 spaces).     |
| 38 |                  |       | Vehicles shall not remain in spaces |
| 39 |                  |       | longer than 12 hours.               |

40

41 Section 5. This Ordinance shall take effect upon passage and publication as required by law.

9629

## Alan Agnelli

---

**From:** Mayor  
**Sent:** Tuesday, May 10, 2016 3:45 PM  
**To:** Alan Agnelli; 'Paul Tassone (ptassoneward2gcc@comcast.net)'  
**Subject:** FW: Amendment to Ordinance 600-32  
**Attachments:** TC Meeting March 29, 2016.pdf; Amendment to Ordinance 600-32.docx

Paul and Alan,

Would you please place this on the City Council agenda and/or the Public Safety Committee agenda. There is a new business in the old police station and the Post Office employees are parking in the free spots all day, every day. I've contacted the Postmaster and informed her of the impending change.

Mark

---

**From:** Rachel Stephano (Mayor's Office)  
**Sent:** Tuesday, May 10, 2016 9:09 AM  
**To:** Mayor  
**Subject:** Amendment to Ordinance 600-32

Mayor,

Please review and make any corrections you see fit.

Rach

*Rachel J. Stephano*  
*Executive Assistant to the Mayor*

City Hall  
95 Pleasant Street, Room 125  
Gardner, MA 01440  
Tel: 978-630-1490  
Fax: 978-630-3778  
[rstephano@gardner-ma.gov](mailto:rstephano@gardner-ma.gov)  
Website: [www.gardner-ma.gov](http://www.gardner-ma.gov)

*When responding, please remember the Secretary of State considers e-mail a public record.*

**Confidentiality Notice:** This email message, including any attachments, is for the use of the intended recipient(s) only and may contain information that is privileged, confidential, and prohibited from unauthorized disclosure under applicable law. If you are not the intended recipient of this message, any dissemination, distribution, or copying of this message is strictly prohibited. If you received this message in error, please notify the sender by reply email and destroy all copies of the original message and attachments. Please be advised that the Massachusetts Secretary of State considers e-mail to be a public record, and therefore subject to public access under the Massachusetts Public Records Law, M.G.L. c. 66 section 10.

AN ORDINANCE TO AMEND THE CODE OF THE CITY OF GARDNER, CODE 600-29-B POLICE VEHICLE PARKING ONLY AND CODE 600-32 IN REFERENCE TO ANGLE PARKING.

Be it ordained by the City Council of the City of Gardner as follows:

**Delete Code §600-29-B. Police vehicle parking only.**

**AND**

**Delete Code §600-32 in reference to Angle Parking on City Hall Avenue:**

**NORTH SIDE** which reads (Beginning 33 feet from the corner of Connors Street easterly for a distance of 115 feet (10 spaces), in front of the police station for police cruiser and official business only, and **insert;** (Beginning 33 feet from the corner of Connors Street easterly for a distance of 115 feet (10 spaces) and these spaces shall be designated “non-metered 2 hour parking”).

**AND**

**Amend Code §600-32 (City Hall Avenue)**

**SOUTH SIDE:** Delete 151.5 feet from Pleasant Street, a distance of 42 feet (4 angle spaces) (Police Business only), And **insert,** 130 feet from Pleasant Street, a distance of 63 feet (6 spaces). Vehicles shall not remain in spaces longer than 12 hours.

This ordinance shall become effective upon passage and publication as required by law.



## CITY OF GARDNER TRAFFIC COMMISSION

crossing sign to aid in warning motorist approaching this area of Central. Dane Arnold will also have the safety hash marks painted on each side of the crosswalk to deter vehicles from encroaching from the marked spaces. Commission will revisit other options if these improvements do not provide relief.



6. **PARKING-City Hall Avenue.** The angle space on the north side of City Hall Ave, previously designated for police vehicles has currently no restrictions. Angle spaces on the south side are also by code designated for police official business only. Motion by Dane Arnold, 2<sup>nd</sup> by Trevor Beauregard to recommend to the Public Safety Committee/Council to; **Delete Code 600-29-B (Police Vehicle Parking Only)** And **Delete ;Code 600-32 in reference to Angle Parking on City Hall Avenue :NORTH SIDE** which reads (Beginning 33 feet from the corner of Connors Street easterly for a distance of 115 feet (10 spaces), in front of the police station for police cruiser and official business only, and **insert;** (Beginning 33 feet from the corner of Connors Street easterly for a distance of 115 feet (10 spaces) and these spaces shall be designated "non-metered 2 hour parking."

Code 600-32 (City Hall Avenue) **SOUTH SIDE:** Delete; 151.5 feet from Pleasant Street, a distance of 42 feet (4 angle spaces) (Police Business only). And **Insert;** 130 feet from Pleasant Street, a distance of 63 feet (6 spaces). Vehicles shall not remain in spaces longer than 12 hours.

7. **METERS UPDATE:** Mary Delaney reported that the Mayor's Meter Ad Hoc Committee on parking meters and is scheduled meet in the upcoming months and discuss further planning to address the aging meters in the downtown district.
8. Motion to adjourn: Motion by Dane, 2<sup>nd</sup> by Trevor to adjourn at; 2:15Pm.

Respectfully submitted:

John A. Bernard  
Deputy Chief



## CITY OF GARDNER TRAFFIC COMMISSION

### MINUTES OF MEETING, MARCH 29, 2016

**Members Present:** Deputy Chief John Bernard, Trevor Beauregard, Chris Coughlin, Dane Arnold, Robert Hankinson, Mary Delaney. (In attendance: Jeffrey Cooke).

**Members Absent:** Councillor Matt Vance.

The meeting was called to order by Deputy Chief Bernard at 1:06 pm.

1. (For courtesy-moved to #6 on agenda): **Protective Barrier** at the Colonial Cooperative Bank. Mr. Joseph Guercio, representative of the bank in attendance. The Deputy Chief informed that a beat officer had noticed walking by bank that motorists came close to the edge of the parking berm recently, and realized the bank has little protection for cars hopping over berm and possibly crashing into the Main Street where cars are parked and people could be on the sidewalk. In efforts to prevent a possible accident, the commission is advising the bank to consider a barrier system such as concrete berms (called "wheel stops") or another device such as a protective guardrail system for safety. Mr. Guercio stated he would research the best option for the bank for this concern.
2. **CROSSWALK-Pearl and Betty Spring**-Several requests were sent to commission for the crosswalk that extends from Pearl St. into Betty Spring be repainted. Motion by Dane Arnold, 2<sup>nd</sup> by Bob Hankinson to discontinue the crosswalk. The crossing was placed when busing was suspended for middle schools students in the early 2000 period, and the school children were walking up from Betty Spring Rd. The crosswalk does not include a wheelchair ramp on the Pearl St. side, and carries pedestrians into the travel lane on Betty Spring, and stops by the edge of the roadway with no sidewalk to carry pedestrians. This is a safety hazard for pedestrians and motorists.
3. **DONATION BOXES**-Several clothing and items boxes are placed around the city in locations that are either unsafe for drop-offs, or are an eyesore with all the items that collect outside the boxes. The commission was made aware of one box, located on the Nouria (Shell Station) property on Timpany Blvd. The box is placed in such a location that drop-offs are done from the travel lane on West Broadway, a very unsafe location, leaving a high risk of a motor vehicle accident. Jeff Cooke (building inspector) has researched this box, which had no contact information located on box, and learned that the shell had no idea how the box landed on their property. This box will be removed by Shell management. This leaves the additional boxes placed around the city still as a concern for the regulations, and rules for placing, contact information, and the eyesore it causes. Further research is needed by the city to regulate such drop off boxes.
4. **STOP SIGN**-Jay and Grant St. A new sign has been replaced by DPW following a complaint it was missing.
5. **CROSSWALK**- Central and Pine St. Several complaints made regarding the site view for pedestrians while crossing at this location. Pedestrian's site is obstructed by cars coming from upper Central St into downtown. Motion by Trevor Beauregard, 2<sup>nd</sup> by Bob Hankinson to install better "Pedestrian Crossing Signs" on both sides of Central and Pine St. Dane Arnold will research funds for a Solar-powered Pedestrian

7688



FP-002A  
(Rev. 1.1.2015)

The Commonwealth of Massachusetts

City/Town of GARONER

### Application For License

Massachusetts General Law, Chapter 148 §13

New License     Amended License

|                 |                |
|-----------------|----------------|
| GIS Coordinates |                |
| _____           | LAT.           |
| _____           | LONG.          |
| _____           | License Number |

Application is hereby made in accordance with the provisions of Chapter 148 of the General Laws of Massachusetts for a license to store flammables, combustibles or explosives on land in buildings or structures herein described.

Location of Land: 211 COLONY ROAD  
Number, Street and Assessor's Map and Parcel ID

Attach a plot plan of the property indicating the location of property lines and all buildings or structures.

Owner of Land: PAUL L. ROY

Address of Land Owner: 55 COREY HILL ROAD, ASHBURNHAM, MA 01430

Use and Occupancy of Buildings and Structures: \_\_\_\_\_

If this is an application for amendment of an existing license, indicate date of original license and any subsequent amendments  
12-21-2009  
Attach a copy of the current license

#### Flammable and Combustible Liquids, Flammable Gases and Solids

Complete this section for the storage of flammable and combustible liquids, solids, and gases; see 527 CMR 1.00 Table 1.12.8.50; Attach additional pages if needed. All tanks and containers are considered full for the purposes of licensing and permitting.

| PRODUCT NAME                    | CLASS | MAXIMUM QUANTITY | UNITS<br>gal., lbs,<br>Cubic feet | CONTAINER<br>UST, AST, IBC,<br>drums |
|---------------------------------|-------|------------------|-----------------------------------|--------------------------------------|
| <u>MOTOR OIL, HYDRAULIC OIL</u> |       | <u>200,000</u>   | <u>ABOVEGROUND</u>                |                                      |
|                                 |       |                  |                                   |                                      |
|                                 |       |                  |                                   |                                      |
|                                 |       |                  |                                   |                                      |
|                                 |       |                  |                                   |                                      |

Total quantity of all flammable liquids to be stored: \_\_\_\_\_

Total quantity of all combustible liquids to be stored: \_\_\_\_\_

Total quantity of all flammable gases to be stored: \_\_\_\_\_

Total quantity of all flammable solids to be stored: \_\_\_\_\_

CITY OF GARONER  
RECEIVED  
DEC 31 2009 11:11

**LP-gas** (Complete this section for the storage of LP-gas or propane)

Indicate the maximum quantity of LP-gas to be stored and the sizes and capacities of all storage containers. (See 527 CMR 1.00 Table 1.12.8.50)

❖ Maximum quantity (in gallons) of LP-gas to be stored in aboveground containers: \_\_\_\_\_

List sizes and capacities of all aboveground containers used for storage: \_\_\_\_\_

❖ Maximum quantity (in gallons) of LP-gas to be stored in underground containers: \_\_\_\_\_

List sizes and capacities of all underground containers used for storage: \_\_\_\_\_

Total aggregate quantity of all LP-gas to be stored: \_\_\_\_\_

**Fireworks** (Complete this section for the storage of fireworks)

Indicate classes of fireworks to be stored and maximum quantity of each class. (See 527 CMR 1.00 Table 1.12.8.50)

❖ Maximum amount (in pounds) of Class 1.3G: \_\_\_\_\_ Type/class of magazine used for storage: \_\_\_\_\_

❖ Maximum amount (in pounds) of Class 1.4G: \_\_\_\_\_ Type/class of magazine used for storage: \_\_\_\_\_

❖ Maximum amount (in pounds) of Class 1.4: \_\_\_\_\_ Type/class of magazine used for storage: \_\_\_\_\_

Total aggregate quantity of all classes of fireworks to be stored: \_\_\_\_\_

**Explosives** (Complete this section for the storage of explosives)

Indicate classes of explosive to be stored and maximum quantity of each class. (See 527 CMR 1.00 Table 1.12.8.50)

❖ Maximum amount (in pounds) of Class 1.1: \_\_\_\_\_ Number of magazines used for storage: \_\_\_\_\_

❖ Maximum amount (in pounds) of Class 1.2: \_\_\_\_\_ Number of magazines used for storage: \_\_\_\_\_

❖ Maximum amount (in pounds) of Class 1.3: \_\_\_\_\_ Number of magazines used for storage: \_\_\_\_\_

❖ Maximum amount (in pounds) of Class 1.4: \_\_\_\_\_ Number of magazines used for storage: \_\_\_\_\_

❖ Maximum amount (in pounds) of Class 1.5: \_\_\_\_\_ Number of magazines used for storage: \_\_\_\_\_

❖ Maximum amount (in pounds) of Class 1.6: \_\_\_\_\_ Number of magazines used for storage: \_\_\_\_\_

I, PAUL L. ROY, hereby attest that I am authorized to make this application. I acknowledge that the information contained herein is accurate and complete to the best of my knowledge and belief. I acknowledge that all materials stored pursuant to any license granted hereunder must be stored or kept in accordance with all applicable laws, codes, rules and regulations, including but not limited to Massachusetts Chapter 148, and the Massachusetts Fire Code (527 CMR 1.00). I further acknowledge that the storage of any material specified in any license granted hereunder may not exceed the maximum quantity specified by the license.

Signature  Date 8/26/16 Name PAUL L ROY

**Fire Department Use Only**

I, \_\_\_\_\_, Head of the \_\_\_\_\_ Fire Department endorse this application with my

Approval  Disapproval

Signature of Head of the Fire Department

Date

Recommendations: \_\_\_\_\_

Ref: 9688



The Commonwealth of Massachusetts

City/Town of GARDNER

License

Massachusetts General Law, Chapter 148 §13

FP-2 (Rev. 12-2008)

New License Amended License

After notice and hearing, and in accordance with Chapter 148 of the Mass. General Laws, a license is hereby granted to use the land herein described for the purposes described.

Location of Land: 211 Colony Road Street, Number and Assessor's Map and Parcel ID

Owner of Land: Paul L. Roy

Address of Land Owner: 55 Corey Hill Road, Ashburnham, MA 01430

Fireworks (Complete this section for the storage of fireworks)

- Maximum amount (in pounds) of Class 1.3G:
Maximum amount (in pounds) of Class 1.4G:
Maximum amount (in pounds) of Class 1.4:

Total aggregate quantity of all classes of fireworks to be stored:

LP-gas (Complete this section for the storage of LP-gas or propane)

- Maximum quantity (in gallons) of LP-gas to be stored in aboveground containers:
List sizes and capacities of all aboveground containers used for storage

- Maximum quantity (in gallons) of LP-gas to be stored in underground containers:
List sizes and capacities of all underground containers used for storage

Total aggregate quantity of all LP-gas to be stored:

Explosives (Complete this section for the storage of explosives)

- Maximum amount (in pounds) of Class 1.1: Number of magazines used for storage:
Maximum amount (in pounds) of Class 1.2: Number of magazines used for storage:
Maximum amount (in pounds) of Class 1.3: Number of magazines used for storage:
Maximum amount (in pounds) of Class 1.4: Number of magazines used for storage:
Maximum amount (in pounds) of Class 1.5: Number of magazines used for storage:
Maximum amount (in pounds) of Class 1.6: Number of magazines used for storage:

THIS LICENSE OR A CERTIFIED COPY THEREOF MUST BE CONSPICUOUSLY POSTED ON THE LAND FOR WHICH IT IS GRANTED.

**Flammable and Combustible Liquids, Flammable Gases and Solids**

Complete this section for the storage of flammable and combustible liquids solids and gases. All tanks and containers are considered full for the purposes of licensing and permitting.

| PRODUCT NAME             | CLASS | MAXIMUM QUANTITY       | UNITS gal., lbs, cubic feet | CONTAINER UST, AST, IBC, drums |
|--------------------------|-------|------------------------|-----------------------------|--------------------------------|
| Motor Oil, Hydraulic Oil |       | 100,000<br>aboveground |                             |                                |
|                          |       |                        |                             |                                |
|                          |       |                        |                             |                                |
|                          |       |                        |                             |                                |
|                          |       |                        |                             |                                |

**Licensing Authority Use:**

This license is granted upon the condition that the licensed activity will comply with all applicable laws, codes, rules and regulations, including but not limited to Massachusetts General Law, Chapter 148, and the Massachusetts Fire Code (527 CMR) as amended. The license holder may not store materials in an amount exceeding the capacities herein specified unless and until any amended license has been granted.

**ADDITIONAL RESTRICTIONS:**

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Alan Agnell                      CITY CLERK                      12-21-2009  
Signature of Licensing Authority                      Title                      Date

**THIS LICENSE OR A CERTIFIED COPY THEREOF MUST BE CONSPICUOUSLY POSTED ON THE LAND FOR WHICH IT IS GRANTED.**

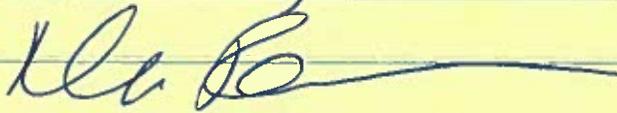
9-9-16 9689

TO: CITY COUNCIL, GARDNER

RE: CLASS II LICENSE

I MARK RUSSELL, D/B/A MARCO'S MOTORSPORTS,  
WOULD LIKE TO RESPECTFULLY TURN IN  
MY CLASS II SALES LICENSE AT  
412 MAIN ST GARDNER.

THANK YOU,



MARK RUSSELL

RECEIVED  
AUG 9 9 12 AM '12  
CITY OF GARDNER

Commonwealth of Massachusetts  
City of Gardner



**USED CAR DEALER'S LICENSE -- CLASS 2**

In accordance with the provisions of Massachusetts General Law, Chapter 140 with amendments thereto,

**Mark J. Russell**  
d/b/a

**Marco's Motorsports**

is hereby licensed to buy and sell second hand motor vehicles at

**412 Main Street**

Premises described as 10,000 s.f. building with repair facility located on the site. Not more than 48 vehicles may be situated on the lot for sale at any one time, as detailed on filed parking plan.

By order of the City Council

CITY CLERK

SEAL

THIS LICENSE EXPIRES DECEMBER 31, 2016

*~THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE UPON THE PREMISES ~*

copy

9689



**CITY OF GARDNER  
MASSACHUSETTS 01440**

OFFICE OF THE  
CITY CLERK

ALAN L. AGNELLI, City Clerk  
TITI SIRIPHAN, Asst. City Clerk  
Room 121, City Hall  
Tel (978) 630-4058  
Fax (978) 630-2589

CERTIFIED MAIL – 7009 2250 0003 2865 0427

August 19, 2016

Marco's Motorsports  
Attn: Mark Russell  
412 Main Street  
Gardner, MA 01440

Re: Motor Vehicle Dealer License, Class 2  
Notice of Cancellation of Surety Bond

Dear Mr. Russell:

I am writing in follow-up to my e-mail to you on July 27, 2016 concerning the enclosed letter from Hudson Insurance Company stating that your Second Hand Motor Vehicle Dealer Surety Bond would be cancelled effective August 19, 2016. Please notify my office immediately if the Bond has been reinstated and, if not, the City Council will consider revoking your Class II Motor Vehicle Dealer License.

Thank you very much for your prompt attention in this matter.

Sincerely,

ALAN L. AGNELLI  
City Clerk

Enclosure

9689

Hudson Insurance Company  
100 William Street, 5th Floor  
New York, NY 10038

RECEIVED

2016 JUL 18 A 9:50

CITY CLERKS OFFICE  
GARDNER, MA

### Cancellation Notice

City of Gardner, Massachusetts  
City Hall – Room 121 – 95 Pleasant Street  
Gardner, MA 01440-2630

7015 1730 0000 7156 6148  
Certified Mail

In accordance with the terms of the Bond or Statute, you are hereby given written notice of cancellation of the following bond:

Bond Number 10029273  
issued to MARCO'S MOTORSPORTS  
in favor of City of Gardner, Massachusetts  
described as Motor Vehicle Dealer

Cancellation shall be effective on August 19, 2016

In witness whereof, Hudson Insurance Company has caused its corporate seal to be hereunto affixed this 12th day of July 2016.

By: Amanda Raghunanan  
Amanda Raghunanan, Attorney-in-Fact

Distribution Copy to: 10029273

MARCO'S MOTORSPORTS  
412 MAIN STREET  
Gardner, MA 01440

Surety 1  
3225 Monier Circle, Suite 100  
Rancho Cordova, CA 95742  
916-294-0044

9234

# CITY OF GARDNER LAW DEPARTMENT

John M. Flick  
City Solicitor

Jill A. Romer  
Assistant City Solicitor



144 Central Street, Suite 201  
Gardner, MA 01440

Telephone (978) 632-7948  
Fax (978) 630-3703

Writer's Email:

RECEIVED  
2016 SEP 1 09 31  
CITY OF GARDNER

August 26, 2016

**VIA FIRST CLASS MAIL**

James Walsh, President  
Gardner City Council  
City of Gardner  
95 Pleasant Street  
Gardner, MA 01440

Re: Law Department Charter Review for the City of Gardner

Dear President Walsh:

As you know the Attorney General's Office has declined to provide any comment regarding the Council's proposed changes to Section 23 of the City Charter regarding absences of candidates elected to the position of City Councilor from the administration of the oath of office. It remains the Law Departments that any language which is contradictory to M.G.L. c. 43, § 59A and does not provide a recall procedure to allow the electorate to address other types of "vacancies" is contrary to the Massachusetts Declaration of Rights and the Constitution. Placing the power to negate the choice of the electorate into the hands of the City Council, a legislative body, provides much opportunity for arbitrary and capricious decisions to be made regarding extending time to take an oath of office, and other such mischief. The Law Department does recognize that the Attorney General's office has directed the City's attention to several approved charters which do provide some mechanism by which the municipality can enforce strict time limits on taking oaths of office of elected officials. In recognizing this fact, however, caution should still be exercised as research indicates that constitutionality of these charter provisions has not been tested in the courts.

Nevertheless, in the interest of bringing this matter to a close, the Law Department recommends the following changes to Sections 23 and 43 of the City Charter.

**SECTION 23**

**Current Language:**

SECTION 23. On the first Monday in January the mayor-elect and the councilors-elect shall meet and be sworn to the faithful discharge of their duties. The oath may be administered by the city clerk

or by any justice of the peace, and a certificate that the oath has been taken shall be entered on the journal of the city council. At any meeting thereafter the oath may be administered, in the presence of the city council, to the mayor, or to any councilor absent from the meeting on the first Monday in January.

**Recommended Change:**

SECTION 23. On the first Monday in January the mayor-elect and the councilors-elect shall meet and be sworn to the faithful discharge of their duties. The oath may be administered by the city clerk or by any justice of the peace, and a certificate that the oath has been taken shall be entered on the journal of the city council. At any meeting no more than sixty (60) days thereafter the oath may be administered, in the presence of the city council, to any councilor absent from the meeting on the first Monday in January. The Council may, upon a two thirds vote extend the period of time in which a councilor-elect has to take the oath of office up to ninety (90) additional days. If the mayor-elect fails to take the office as set forth herein, the office of Mayor shall be filled pursuant to Section 32. If the mayor-elect continues in his or her failure to take the oath of office for a period of six (6) months after the first Monday in January, the office shall be deemed vacant and thereafter filled in accordance with Section 32.

**SECTION 43**

**Current Language:**

SECTION 43. If a vacancy occurs in the school committee by failure to elect, or otherwise, the city council and the remaining members of the school committee shall meet in joint convention and elect a suitable person to fill the vacancy until the next regular city election. The mayor, if present, shall preside at the convention.

**Recommended Change:**

SECTION 43. On the first Monday in January the school committee members – elect shall appear before the city council and be sworn to the faithful discharge of their duties. The oath may be administered by the city clerk or by any justice of the peace. At any meeting no more than sixty (60) days thereafter the oath may be administered, in the presence of the city council and the school committee, to any school committee member-elect absent from the meeting on the first Monday in January. The school committee may, upon a two thirds vote extend the period of time in which a school committee member-elect has to take the oath of office up to ninety (90) additional days. If a vacancy occurs in the school committee by failure to elect, or otherwise, the city council and the remaining members of the school committee shall meet in joint convention and elect a suitable person to fill the vacancy until the next regular city election. The mayor, if present, shall preside at the convention.

NOTE: The Law Department recommends retaining the provision of the existing charter that requires a vacancy in the School Committee to be filled via a joint convention of the school committee and city council.

In regard to Councilor Graves question regarding the recommended changes to Section 46 of the Charter set forth below, this recommended change comes directly from M.G.L. c. 43, § 39.

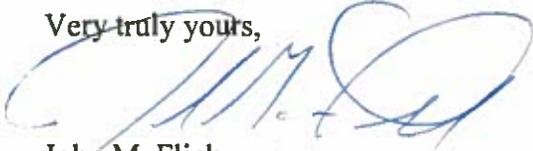
**Recommended Change:**

SECTION 46. If an initiative petition be signed by registered voters equal in number, except as otherwise provided in this act, to at least fifteen per cent of the whole number of registered voters, the city council or the school committee shall, within twenty days after the date of the certificate of the registrars of voters that the petition has been signed by the required percentage of registered voters, either –

1. Pass said measure without alteration, subject to the referendum vote provided by this act, or
2. the city clerk shall call a special election to be held on a Tuesday fixed by said clerk not less than thirty nor more than forty-five days after the date of qualification, and shall submit the proposed measure without alteration to a vote of the registered voters of the city at that election; provided, however, that if any city election is otherwise to occur within ninety days after the date of qualification, the city clerk may, at his discretion, omit calling the special election and submit the proposed measure to the voters at such approaching election.

Please let me know if the Council has any additional questions regarding this matter.

Very truly yours,



John M. Flick

Cc: Mark P. Hawke, Mayor

RESOLUTION  
ENDORISING THE DEPARTMENT OF PUBLIC WORKS PLAN  
TO UPGRADE THE DEWATERING EQUIPMENT  
AND PURSUIT OF A NEW/EXPANDED SLUDGE LANDFILL

The City Council of Gardner wishes to endorse the Department of Public Works Plan to upgrade the dewatering equipment and pursue a new/expanded sludge landfill.

The plan will include improving the technology, replacing the pumps, repairing the 30 year old facility, and pursuing a new/expanded sludge landfill. The City has performed a comprehensive study looking at several alternatives for the disposal of the City's sludge. These options included composting, anaerobic digestion, off-site disposal by a private hauler, and upgrading and continuing our current operations.

Based on the evaluations, the most cost effective long term solution was deemed to be upgrading the present dewatering equipment and disposing of the sludge at a City owned sludge landfill.

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**CITY OF GARDNER**

**Department of Public Works**

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Dane E. Arnold, Director  
 416 West Broadway  
 Gardner, MA 01440-2687  
 Telephone (978) 632-7661  
 Fax (978) 630-4029  
 darnold@gardner-ma.gov

Mayor and City Council  
 City Hall  
 95 Pleasant Street  
 Gardner, MA 01440

RE: Dewatering and Sludge Landfill

June 1, 2016

Dear Mayor and City Council:

I am writing you in regards to the on-going upgrade at the Wastewater Treatment Facility (WWTF). The upgrade not only includes improving the technology, replacing pumps, and repairing the 30 year old facility, but also includes determining the most cost effective method to dispose of our sludge for the next 25-30 years.

Over the past year we have completed a comprehensive study and looked into several alternatives for the disposal of the City's sludge. This evaluation was very in-depth and took into consideration future costs, fuel prices, electrical costs, trucking costs, odors, design costs, construction costs, and even contract negotiations with disposal sites, other municipalities, and trucking companies.

Options we considered for disposing of the City's Sludge:

1. Continue to dewater sludge at plant and haul to City Owned Sludge Landfill.
2. Composting Sludge at our Sludge Landfill
3. Anaerobic Digestion
  - a. Another Municipality
  - b. At our WWTF
4. Offsite Disposal by a Private Hauler
  - a. Haul liquid sludge to off-site Landfill
  - b. Haul sludge cake to off-site Landfill
  - c. Haul liquid sludge to an off-site Incinerator

Attached are detailed descriptions and cost analysis of each method.

**DEWATERING**

This study also included looking at many technologies to reduce the amount of moisture contained in the sludge. Again, many items were evaluated, such as design costs, construction costs, electrical costs, repair and replacement costs, and ease of operation.

After evaluating different technologies and visiting other facilities, it was determined that a centrifuge would be the best alternative for the dewatering the City's wastewater sludge. A pilot test of a centrifuge was conducted in August of 2015; which is basically a large cylinder that spins and uses centripetal force to dry the sludge and great results were achieved.

The importance for the correct dewatering technology is very important for several reasons. The dryer the sludge that can be achieved, the less amendment (sand) has to be added to aid in "working" the material at the landfill. Also, the dryer the sludge, the less odors are generated during the hauling and covering process at the landfill. For every cubic yard of sand we save, its money not spent. Over 25 years, this could add up to be millions of dollars. Also, for every cubic yard of amendment we don't use, is a cubic yard we can extend the capacity of the sludge landfill in the future. In other words if we can generate a sludge that uses 30% less additive, we will extend the life of our landfill by 30%.

We have determined that replacing the old Belt Filter Presses that exist at the WWTF with Centrifuges for the dewatering process and hauling the dewatered sludge cake to the City's Sludge Landfill is the most cost effective and best alternative for the disposal of the City's sludge.

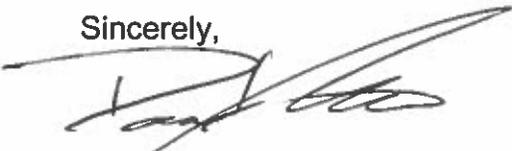
#### **LANDFILL**

**The decision to move forward with the design and construction of Centrifuges would ultimately mean the expansion of the Sludge Landfill located off West Street.** The cost of expanding the Sludge Landfill was factored into the cost analysis of our recommended alternative. Even with the nearly million dollar construction costs of the sludge landfill factored into the annual costs, we still found it almost half the cost compared to hauling the sludge out of town. Supporting documentation is enclosed.

Currently the Sludge Landfill has capacity and Suez (formally Earth Tech) is on the hook for sludge disposal until 2018 when their contract expires. The City needs to prepare and submit design plans for a Horizontal Expansion (outward). It is very important to note that DEP has acknowledged the site is already permitted for such expansion. Once we have all design documents approved by DEP, we would be looking to have the expansion of the Landfill completed when Suez's contract expires in 2018.

If you have any questions or would like to discuss this matter as a whole, I would be glad to have a meeting.

Sincerely,



Dane E. Arnold, Director  
Department of Public Works

PC: Bob Hankinson, City Engineering Department  
Matt LaPointe, Suez  
Jen Susan-Roy, Board of Health  
Rob Sims, Maguire  
Kevin Olsen, Wright Pierce



February 2, 2016

Mr. Dane E. Arnold  
Director  
Gardner DPW  
416 West Broadway  
Gardner, MA 01440

**Re: Gardner Wastewater Treatment Plant Upgrades  
Sludge Disposal Evaluation**

Dear Dane:

This letter provides a brief overview and summary of recent studies and evaluations that have been conducted to assess long term methods for disposing of the sludge from the City's Wastewater Treatment Plant (WWTP) on Plant Road in Templeton.

#### **EVALUATION BACKGROUND**

The City has conducted a Wastewater Facility Plan for upgrades to the WWTP. One facet of the facility plan evaluations was an assessment of the sludge processing and disposal alternatives for the WWTP.

The Facility Plan evaluated several technologies for dewatering sludge including Inclined Screw Press, Horizontal Screw Press, Rotary Press, Centrifuge and the current technology Belt Filter Press. Major factors considered in the alternative evaluation included capital cost, energy consumption, disposal costs, transportation, additives (sand), sampling and general operation and maintenance.

**Dewater and City Owned Landfill** – This alternative included upgrades to the dewatering process at the WWTP and disposal at the City owned landfill on West Street. Capital costs including dewatering equipment upgrades and expansion costs for the landfill are included.

**Dewater and Haul** – This alternative included modifications to the dewatering methods at the WWTP with private hauling of dewatered sludge for disposal. Although the use of the landfill is eliminated there are increased transportation and volatile disposal costs. Unknown variables exist for the alternative as the private hauler with likely have contract provisions for changes in regulations, fuel costs and the availability of their disposal site.

**Haul Liquid** – This alternative involved no modifications at the WWTP, but did include disposal costs. This alternative is the most volatile due to unknown contractual impacts for changes in regulation, fuel and available space at private disposal locations. Although not a responsibility of the City, because the volume of the sludge has not been reduced through dewatering, there will be an increase in truck traffic at the WWTP.

Based on the information gathered, the present worth cost for the 20-year planning period of the three alternatives is presented in the following table. To obtain the present worth value the annual operating & maintenance costs are amortized and added to the capital costs. For this evaluation we used a 20-year term and the City's current borrowing rate of 3.75%.

| Alternative                             | Dewater & City Owned<br>Landfill Disposal | Dewater & Private<br>Hauler | Haul Liquid              |
|-----------------------------------------|-------------------------------------------|-----------------------------|--------------------------|
| Capital Costs                           | \$4,183,200 <sup>(1)</sup>                | \$3,416,500 <sup>(2)</sup>  | \$0 <sup>(3)</sup>       |
| Annual Operation &<br>Maintenance Costs | \$221,200                                 | \$536,550 <sup>(4)</sup>    | \$897,300 <sup>(4)</sup> |
| Present Worth                           | \$7,435,000                               | \$12,789,000                | \$12,470,000             |

- (1) Includes \$3.4 million for dewatering upgrades and \$0.77 million for expansion costs at the current sludge landfill.
- (2) Includes \$3.4 million for dewatering upgrades
- (3) Does not include an amount for new sludge pumping equipment
- (4) Includes costs for additional sludge sampling

Based on the evaluations, it was determined that the most cost-effective long-term solution for the City's wastewater sludge processing is to upgrade the present dewatering equipment and continue to dispose of dewatered sludge at the City's sludge landfill by expanding the capacity of the landfill.

We are prepared to meet with you to discuss our recommendation. We look forward to continuing the progress on the upgrades.

Very truly yours,

CDR MAGUIRE INC.



Robert P. Sims, PE  
Project Manager

cc: Steve Landry (CDR Maguire)  
Bob Hankinson (Gardner)  
Matt LaPointe (United Water)  
Kevin Olson (Wright-Pierce)

References:

1. Wastewater Treatment Facility Plan for the City of Gardner by Wright-Pierce, November 2015
2. CDR Maguire Landfill Expansion Capacity memorandum, February 2016

## Memorandum

**Date:** May 20, 2015  
**To:** Dane Arnold  
**From:** Robert Sims  
**Subject:** Gardner Sludge Disposal - Alternatives Analysis

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### **BACKGROUND**

The City of Gardner currently treats wastewater at a treatment facility located off of Parker Street in the Town of Templeton. The facility discharges into the Otter River. The facility is governed by the USEPA through a NPDES permit (Permit # MA0100994). This permit allows for a design flow of 5.0 million gallons per day of treated effluent to enter the Otter River. The discharge must meet limits of concentration and total loading mandated in the Permit.

As part of this process, sludge is removed during the primary and secondary phases of the treatment process. Once the sludge is removed it is stored in tanks and thickened by gravity. The thickened sludge (approximately 3% solids) is mixed with a polymer which hastens the removal of additional water and the mixture passes through a pair of belt filter presses. This process squeezes the water between two parallel permeable sheets and water is extruded. The extruded water is drained off and returned to the headwater of the plant. The solids content of the sludge is increased to about 22% and it is now referred to as sludge cake.

The cake falls off of the press and is deposited into a dump truck and hauled to the sludge landfill where it is mixed with approximately 3:1 ratio of amendment (sand, dirt and gravel) to further increase the solids content and make the material workable for spreading at the landfill. Once spread, it is covered with a daily cover to reduce odors.

The pressing and hauling currently occurs 4 days a week and 8 trucks of sludge are deposited and worked at the landfill. The average monthly total (as reported in annual reports) is approximately 400 cubic yards per month.

This evaluation is to perform a comparison of three additional alternatives for processing of the sludge. The driving factor in the analysis will be cost, but other factors such as land use and needed infrastructure improvements will be part of the discussion. Although much harder to define, but equally important are the impact of environmental changes and reliance on stable and predictable costs from private waste haulers.

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## ALTERNATIVES

As part of the alternatives analysis we investigated the cost and non-cost impacts for utilizing each alternative. The costs included the cost of land, infrastructure improvements, equipment purchase and operation and maintenance. The non-cost impacts included traffic and odors.

- Continue dewatering and landfilling
- Composting
- Anaerobic Digestion
- Offsite disposal

For the new options we considered the pros and cons of performing the activity at the treatment plant and at the landfill site.

## OPTIONS

Option 1 - Continue dewatering and landfilling. This option is a continuation of the current method of sludge disposal and would require little change. Sludge is thickened and dewatered at the plant and transported to the sludge landfill. Due to size restraints of the existing landfill, the current landfill would have to be expanded. The City currently owns the property for the expansion. In addition, the site has been assessed and approved by the regulatory agencies. This was completed prior to the original construction in the late 1980's.

The costs for this option will include development of the plans for the expansion, replacement of the existing dewatering equipment, site work, installation of a liner, an extension of the existing leachate collection system and mixing material. It is anticipated that a portion (if not all) of the in-situ material can be used for daily cover and final cover material for the closing of the existing landfill.

As stated above, the land has already been set aside for development as a sludge landfill. This was completed as part of the original approval.

Option 2 – Composting. This option would involve gravity thickening and dewatering of the sludge prior to conversion to compost. To convert to compost, the dewatered sludge will be mixed with an amendment (typically wood chips) and stored for decomposition. To facilitate a consistent process and finished product, the mixed piles of sludge and amendment are placed over a pumped air distribution system. The mixture can also be simply turned with mechanical equipment, but utilizing the supplemental air controls the process and ensures complete conversion of the material.

For composting it is best to have the process be performed under cover. This does not have to be an enclosed setting, but protection from rain is key. Simple structures are available to perform this process, but the process needs a place for construction. Besides needing space for the cover, air blowers, piping and wood chips would have to be purchased and stored. It's anticipated that approximately 3 acres of space would be needed for this process. It's expected that this would either occur at the existing treatment plant or at the sludge landfill.

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Each site has its limitation and would require some site work. The existing sand filter beds at the treatment plant were constructed to allow treated water to soak into the ground. This condition is not preferred for composting and would have to be modified with some sort of impenetrable covering, most likely concrete. The landfill site is suitable yet is currently wooded. Some clearing and site development would have to occur. Each option would require that a site specific design be performed.

A key component of the composting option is being able to dispose of the finished product. Testing of the sludge is being performed to determine the quality. Massachusetts environmental regulations (310 CMR 32.00) dictate the limits of the end use of compost based on the concentration of certain components of the sludge.

1. Type I Sludge – Distributed without further DEP approval
2. Type II Sludge – Distributed only with prior DEP approval
3. Type III Sludge – Not for food chain crops and applications are recorded for the property at the Registry of Deeds

The Type of material created greatly dictates the ability to dispose of the finished product. Whereas a Type I sludge can be sold or given to homeowners for lawn and garden supplement without any further input from the regulatory agencies, a Type III compost would have a very limited distribution and it is feasible that a cost would be incurred for final disposal. The Town of Pepperell has a small composting facility that has is a Type I product and the Town is able to dispose of their product through uses by the DPW, homeowners and landscapers. Their sludge meets the DEP requirements.

Additionally, since composting occurs in an open air environment, the generation of odors and other vectors (birds and rats) are a distinct possibility.

Option 3 – Anaerobic Digestion. This process involves utilizing the gravity thickened (but not dewatered) sludge and introducing it into an anaerobic (no oxygen) environment that allows certain bacteria to grow that destroy the pathogens in the sludge. Food waste can also be added to enhance the process. Changes in food waste disposal regulations support the development of these kinds of operations. Depending on the characteristics of the sludge certain amounts of methane are produced that can be used for energy production (and cost recovery). One of the inherent downsides to this operation is that sludge is still produced requiring disposal. Disposal through the open market is possible, but quality limitations determine the approved end use.

The City of Fitchburg has recently begun an investigation to create an energy generation project by utilizing sludge from their in-City treatment plant, in-City paper mill waste, in-City food waste and wastewater sludge from surrounding communities. At a public hearing on March 31, 2015, the consulting engineer for the City held a public forum to present the idea and facilitate a discussion.

The Proposed Fitchburg proposal would generate 1.5 mega-watts of energy and require in addition to the six in-City truckloads of material, the delivery of 24 40-cubic yard dump trucks of wastewater sludge from surrounding communities. When asked why the proposal was for such a large complex and included the necessity for material from outside the community, the engineer stated that it needed to be that big to make the project viable by achieving the appropriate economy of scale. That being, that a smaller project would not be cost effective.

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Fitchburg is in a unique situation because many of the facilities necessary for the process are already built. Their West Treatment plant was recently decommissioned yet some of the existing structures could house some of the needed equipment. This significantly reduces the capital costs. The intent of the Fitchburg facility is to fund the construction and operation through tipping fees and energy credits. If Gardner was to proceed with participating in the Fitchburg process, the existing process of dewatering the thickened sludge could be discontinued. However, a new tanker vehicle would be needed to transport the liquid sludge to Fitchburg. Additional capital would be required for new vehicle and new personnel expenses would be encumbered for the transportation to Fitchburg. Based on current sludge production, it is anticipated that approximately 10 tanker trucks a week would be delivered to Fitchburg.

For new anaerobic digestion facilities in Gardner, new structures would be required including tanks for processing, mixing and storage. Siting the anaerobic digestion process is complicated. It would be most cost-effective to locate it at the treatment plant to reduce the hauling of the liquid to an off-site location (most likely the sludge landfill).

The anticipated mixing ratio of food waste to sludge is estimated to be 1:5. That is you need 1/5 of the amount of food waste for the process. The exact ratio would need to be verified before a detailed analysis could be completed. Based on a study by the Commonwealth, the City of Gardner has 17 viable sources of food waste. These are shown in Table X. As seen in Table X, the 17 establishments in the City generate an estimate 3.31 tons of food waste per day. Based on the estimated ratio and the average production of 13.3 tons per day of sludge, the new anaerobic digestion facility would require 2.9 tons of food waste per day. That amounts to 88% of the food waste generated in the City. This data was taken from the Massachusetts Department of Environmental Protection Website – Food Waste Generation.

Because of the multiple sources of food waste, the collection by the City will require additional staff. Another option is to require the delivery of the food waste. Either way, the City will need a person to either collect the material or oversee the disposal by the generator.

**TABLE 1  
SUMMARY OF FOOD WASTE GENERATORS IN GARDNER**

| Source                          | Location        | Amount (Tons/year)             |
|---------------------------------|-----------------|--------------------------------|
| Burger King                     | Crawford Street | 39.0                           |
| Legend Rehabilitation           | Eastwood        | 39.4                           |
| Dunkin Donuts                   | Main Street     | 30.0                           |
| D'Angelo's                      | Union Square    | 24.0                           |
| Friendly's                      | Pearson Blvd    | 90.0                           |
| Heywood Hospital                | Green Street    | 83.6                           |
| Heywood Transitional Care       | Green Street    | 6.2                            |
| McDonald's                      | Timpany Blvd    | 45.0                           |
| Mt. Wachusett Community College | Green Street    | 92.5                           |
| Papa Gino's                     | Timpany Blvd    | 21.0                           |
| Peter Ray's Pan                 | Ross Road       | 105.0                          |
| Stop-n-Shop                     | Timpany Blvd    | 165.0                          |
| Stop-n-Shop                     | Timpany Blvd    | 300.0                          |
| Taco Bell                       | Pearson Blvd    | 27.0                           |
| Wachusett Manor                 | Hospital Hill   | 31.5                           |
| Wendy's                         | Pearson Blvd    | 40.5                           |
| Williams Restaurant             | Pearson Blvd    | 67.5                           |
|                                 | <b>TOTAL</b>    | <b>1207.2 or 3.31 tons/day</b> |

There appears to be available space at the treatment plant for construction. The downside is that the plant is located in the Town of Templeton and the power grid is owned and operated by the Templeton Power Utility that does not have incentive programs for these kinds of arrangements. Not receiving an incentive would reduce the viability of this option.

Siting the anaerobic digestion at the landfill site is possible but would involve developing a portion of the available space, the construction of the infrastructure, and hauling of the liquid to the site. It would however allow for the return of the investment in energy recovery. It's expected that the anaerobic digestion process would return power to the grid as the sanitary landfill currently does.

A major impact to the anaerobic digestion process is the ability to receive consistent quality of material (food waste and sludge). A consistent material will assist in generating a consistent product (energy and waste sludge). To allow for the delivery of consistent amounts of material, it is anticipated that storage facilities will be required for both sludge and food waste.

As with the production of compost, the quality of the sludge will affect the ability to dispose of the treated sludge from the anaerobic digestion process. Testing of the sludge is being performed to determine the quality. Massachusetts environmental regulations (310 CMR 32.00) dictate the limits of the end use of compost based on the concentration of certain components of the sludge.

1. Type I Sludge – Distributed without further DEP approval
2. Type II Sludge – Distributed only with prior DEP approval

3. Type III Sludge – Not for food chain crops and applications are recorded for the property at the Registry of Deeds

The Type of material created greatly dictates the ability to dispose of the finished product. Whereas a Type I sludge can be sold or given to homeowners for lawn and garden supplement, a Type III compost would have a very limited distribution and it's feasible that a cost would be incurred for final disposal.

To date the sludge generated in Gardner has not been sufficiently tested and an expectation of the quality of the end product of the anaerobic digestion process is uncertain.

At this time, based on the contributing issues in Gardner and the downsides from the presentation by Fitchburg, we would not recommend the creation of an anaerobic digestion facility for sludge disposal. However, in light of the recommendation, we have included a cost estimate for this option.

In addition to our evaluation of anaerobic digestion, we have had conversation with solid waste regulator's at the MADEP in Worcester and their opinion is that the logistic of a consistent product, food waste and byproduct render, this not a viable option.

Option 4 – Offsite Disposal. This option involves no action by the City other than contracting with a sludge hauler. There are subcategories for this type of disposal including:

- Hauling of liquid sludge by a hauler to a offsite landfill
- Hauling of sludge cake by a hauler to offsite landfill
- Hauling and incineration of liquid sludge to an offsite incinerator

Each subcategory has inherent costs. Aside from the cost of hauling and disposal, the sludge cake option would require the replacement of the belt filter press while the hauling of liquid sludge would require a retrofit at the treatment plant to accommodate the disposal of liquid sludge which is not currently an option.

These options are all viable, and in some cases moderately cost competitive, there is the unknown impact of changes regulatory environment and unknown contract language impacts from a private hauler. Specific modifications to the planned cost are very difficult to include in the analysis, but pose a significant risk.

## COST

For the cost evaluation we converted the capital and operating costs to an annualized cost. The City of Gardner Sludge Alternative Cost Summary is included at the end of this memorandum as well as a simplified summary for each option. For this evaluation we made the assumptions listed below.

- The term of the borrowing for the evaluation would be 20 years.
  - The interest rate would be 4% (based on current borrowing).
  - We assumed that the plant will not expand and will produce sludge at a consistent rate for the life of the term.
  - We assumed that the gravity thickener produces sludge at a consistency of 3% solids.
  - The belt filter press generates sludge at a rate of 22% solids.
-

- The current landfill accepts approximately 400 cubic yards of material every month (@22% solids). This calculates to approximately 1,500 dry tons per year.
- We assumed that the engineering, permitting and construction oversight for each alternative is 25%.
- To be slightly conservative in our approach and to allow for certain variability, we have also included a 25% contingency.
- For an option involving sludge cake, we assumed that the belt filter press would be replaced
- Operation & Maintenance of equipment is equal to 4% of the capital cost.
- Costs for Hauling liquid sludge, sludge cake and incineration were prorated to increase over the term of the evaluation at 4%.
- Power from anaerobic digestion valued at \$0.15 per Kilo-watt

### TRAFFIC

Another intangible that was not included as part of the cost evaluation is traffic. Currently the landfill option generates about 8 trips per week.

Composting would also include 8 trips per week of sludge cake to the landfill. The increase in traffic for hauling amendment would offset the hauling of amendment for the landfill option. Composting will not increase traffic.

The anaerobic digestion process involves the hauling of a liquid sludge. Since the dewatering reduces the overall volume, the number of truck trip would increase to approximately 10 trips per week of a 9,000 gallon truck.

A private hauler of sludge cake would likely reduce traffic as they would likely use a larger truck to maintain efficiency. A truck twice the size of the one currently used by the city would reduce the truck trips by 50% to approximately 4 a week. However, for hauling liquid sludge (disposal or incineration) would result is the same increase as hauling liquid to Fitchburg (8 to 10).

### ODORS

Odors are a part of sludge handling. Of the options investigated, the landfilling and compost have the highest incident of odor complaints. For anaerobic digestion and private hauling, it is expected that the odors would be limited to the treatment plant. Anaerobic digestion at the landfill site might have some odors, but they would be expected to be less that landfilling or composting.

As part of the vertical expansion of the existing landfill, the operator (United Water) is investigating the odors and is developing a plan for reducing the odors associated with the landfill operations.

### OTHER COSTS

A private hauler will also require that the material meet certain contaminant levels and require additional testing. From our discussion with a private waste hauler, some parameters are annually and

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some are quarterly. The hauler's estimate of additional sampling would be an annual amount of \$15,000 to \$20,000.

**SUMMARY**

Given the cost comparison and the intrinsic risk of utilizing a private waste hauler, we recommend continuing with the process of dewatering and landfilling of the current sludge generated at the wastewater plant. Given the reasonably close cost analysis it may be beneficial to consider the hauling of sludge cake as a backup alternative.

Both options do require the replacement of the sludge dewatering equipment at the treatment plant and we feel confident that the City can continue with those plans.

**CITY OF GARDNER  
SLUDGE DISPOSAL ANALYSIS  
COSTING OF ALTERNATIVES**

| OPTION | DESCRIPTION                     | ANNUAL<br>COST | Delta      | % inc. | VOLUME<br>(dt/yr) | COST<br>(\$/dt) |
|--------|---------------------------------|----------------|------------|--------|-------------------|-----------------|
| 1      | Landfill                        | \$ 360,960     | \$ -       | 0%     | 1,500             | \$ 240.64       |
| 2      | Compost                         | \$ 626,400     | \$ 265,440 | 74%    | 1,500             | \$ 417.60       |
| 3A     | Anaerobic Digestion - Fitchburg | \$ 623,780     | \$ 262,820 | 73%    | 1,500             | \$ 415.85       |
| 3B     | Anaerobic Digestion - Gardner   | \$ 676,160     | \$ 315,200 | 50%    | 1,500             | \$ 450.77       |
| 4A     | Haul Liquid                     | \$ 937,700     | \$ 576,740 | 160%   | 1,500             | \$ 625.13       |
| 4B     | Haul Sludge                     | \$ 435,600     | \$ 74,640  | 21%    | 1,500             | \$ 290.40       |
| 5      | Haul & Burn                     | \$ 1,237,700   | \$ 876,740 | 243%   | 1,500             | \$ 825.13       |

CITY OF GARDNER SLUDGE ALTERNATIVES

| OPTION 1 - LANDFILL |                     | A/P, 20,4%   |      |          |             |             |
|---------------------|---------------------|--------------|------|----------|-------------|-------------|
|                     |                     | Item         | term | interest | Cost Factor | Annual Cost |
| Capital             | BFP                 | \$ 1,500,000 | 20   | 0.04     | 0.0736      | \$ 110,400  |
|                     | Land @ 150k/acre    | \$ 900,000   | 20   | 0.04     | 0.0736      | \$ 66,240   |
| Subtotal            |                     | \$ 2,400,000 | 20   | 0.04     | 0.0736      | \$ 176,640  |
| Engineering (25%)   |                     | \$ 600,000   | 20   | 0.04     | 0.0736      | \$ 44,160   |
| Contingency (25%)   |                     | \$ 600,000   | 20   | 0.04     | 0.0736      | \$ 44,160   |
|                     |                     | \$ 3,600,000 | 20   | 0.04     | 0.0736      | \$ 264,960  |
| O&M                 | O&M (4% of capital) | \$ 96,000    |      |          |             | \$ 96,000   |
| Annualized cost     |                     |              |      |          |             | \$ 360,960  |

| OPTION 2-COMPOST  |                     | A/P, 20,4%   |      |          |             |             |
|-------------------|---------------------|--------------|------|----------|-------------|-------------|
|                   |                     | Item         | term | interest | Cost Factor | Annual Cost |
| Capital           | BFP                 | \$ 1,500,000 | 20   | 0.04     | 0.0736      | \$ 110,400  |
|                   | Composting Equip    | \$ 500,000   | 20   | 0.04     | 0.0736      | \$ 36,800   |
|                   | Land Development    | \$ 1,500,000 | 20   | 0.04     | 0.0736      | \$ 110,400  |
| Subtotal          |                     | \$ 3,500,000 | 20   | 0.04     | 0.0736      | \$ 257,600  |
| Engineering (25%) |                     | \$ 875,000   | 20   | 0.04     | 0.0736      | \$ 64,400   |
| Contingency (25%) |                     | \$ 875,000   | 20   | 0.04     | 0.0736      | \$ 64,400   |
|                   |                     | \$ 5,250,000 | 20   | 0.04     | 0.0736      | \$ 386,400  |
| O&M               | O&M (4% of capital) | \$ 140,000   |      |          |             | \$ 140,000  |
|                   | Manpower            | \$ 100,000   |      |          |             | \$ 100,000  |
| Annualized cost   |                     |              |      |          |             | \$ 626,400  |

| OPTION 3A ANAEROBIC DIGESTION - FITCHBURG |                     | A/P, 20,4%   |      |          |             |             |
|-------------------------------------------|---------------------|--------------|------|----------|-------------|-------------|
|                                           |                     | Item         | term | interest | Cost Factor | Annual Cost |
| Capital                                   | Tanker              | \$ 200,000   | 20   | 0.04     | 0.0736      | \$ 14,720   |
|                                           | Minor Improvements  | \$ 500,000   | 20   | 0.04     | 0.0736      | \$ 36,800   |
| Subtotal                                  |                     | \$ 700,000   | 20   | 0.04     | 0.0736      | \$ 51,520   |
| Engineering (25%)                         |                     | \$ 175,000   | 20   | 0.04     | 0.0736      | \$ 12,880   |
| Contingency (25%)                         |                     | \$ 175,000   | 20   | 0.04     | 0.0736      | \$ 12,880   |
|                                           |                     | \$ 1,050,000 | 20   | 0.04     | 0.0736      | \$ 77,280   |
| O&M                                       | O&M (4% of capital) | \$ 28,000    |      |          |             | \$ 28,000   |
|                                           | Personnel           | \$ 100,000   |      |          |             | \$ 100,000  |
|                                           | Tipping Fee         | \$ 279       | 1500 |          |             | \$ 418,500  |
| Annualized cost                           |                     |              |      |          |             | \$ 623,780  |

CITY OF GARDNER SLUDGE ALTERNATIVES

| OPTION 3B ANAEROBIC DIGESTION - GARDNER |                                |              |      |          |             | A/P, 20,4%      |            |
|-----------------------------------------|--------------------------------|--------------|------|----------|-------------|-----------------|------------|
|                                         |                                | Item         | term | interest | Cost Factor | Annual Cost     |            |
| Capital                                 | Tanker                         | \$ 200,000   | 20   | 0.04     | 0.0736      | \$ 14,720       |            |
|                                         | Site Improvement               | \$ 1,875,000 | 20   | 0.04     | 0.0736      | \$ 138,000      |            |
|                                         | Land Development               | \$ 450,000   | 20   | 0.04     | 0.0736      | \$ 33,120       |            |
|                                         | Subtotal                       | \$ 2,525,000 | 20   | 0.04     | 0.0736      | \$ 185,840      |            |
|                                         | Engineering (25%)              | \$ 631,250   | 20   | 0.04     | 0.0736      | \$ 46,460       |            |
|                                         | Contingency (25%)              | \$ 631,250   | 20   | 0.04     | 0.0736      | \$ 46,460       |            |
|                                         |                                | \$ 3,787,500 | 20   | 0.04     | 0.0736      | \$ 278,760      |            |
| O&M                                     | O&M (4% of capital)            | \$ 101,000   |      |          |             | \$ 101,000      |            |
|                                         | Personnel                      | \$ 100,000   | 3    |          |             | \$ 300,000      |            |
|                                         | Annual Energy Return (23.5 MW) | \$ (3,600)   |      |          |             | \$ (3,600)      |            |
|                                         |                                |              |      |          |             | Annualized cost | \$ 676,160 |

| OPTION 4A-HAUL LIQUID |                     |            |            |          |             | A/P, 20,4%      |            |
|-----------------------|---------------------|------------|------------|----------|-------------|-----------------|------------|
|                       |                     | Item       | term       | interest | Cost Factor | Annual Cost     |            |
| Capital               | Retrofit at Plant   | \$ 500,000 | 20         | 0.04     | 0.0736      | \$ 36,800       |            |
|                       | Subtotal            | \$ 500,000 | 20         | 0.04     | 0.0736      | \$ 36,800       |            |
|                       | Engineering (25%)   | \$ 125,000 | 20         | 0.04     | 0.0736      | \$ 9,200        |            |
|                       | Contingency (25%)   | \$ 125,000 | 20         | 0.04     | 0.0736      | \$ 9,200        |            |
|                       |                     |            | \$ 750,000 | 20       | 0.04        | 0.0736          | \$ 55,200  |
| O&M                   | Hauling             | \$ 575     | 1500       |          |             | \$ 862,500      |            |
|                       | O&M (4% of capital) | \$ 20,000  |            |          |             | \$ 20,000       |            |
|                       |                     |            |            |          |             | Annualized cost | \$ 937,700 |

| OPTION 4B-HAUL CAKE |                     |              |              |          |             | A/P, 20,4%      |            |
|---------------------|---------------------|--------------|--------------|----------|-------------|-----------------|------------|
|                     |                     | Item         | term         | interest | Cost Factor | Annual Cost     |            |
| Capital             | BFP                 | \$ 1,500,000 | 20           | 0.04     | 0.0736      | \$ 110,400      |            |
|                     | Subtotal            | \$ 1,500,000 | 20           | 0.04     | 0.0736      | \$ 110,400      |            |
|                     | Engineering (25%)   | \$ 375,000   | 20           | 0.04     | 0.0736      | \$ 27,600       |            |
|                     | Contingency (25%)   | \$ 375,000   | 20           | 0.04     | 0.0736      | \$ 27,600       |            |
|                     |                     |              | \$ 2,250,000 | 20       | 0.04        | 0.0736          | \$ 165,600 |
| O&M                 | Hauling             | \$ 140       | 1500         |          |             | \$ 210,000      |            |
|                     | O&M (4% of capital) | \$ 60,000    |              |          |             | \$ 60,000       |            |
|                     |                     |              |              |          |             | Annualized cost | \$ 435,600 |

CITY OF GARDNER SLUDGE ALTERNATIVES

| OPTION 5-INCINERATE |                   |            |      |          |             |                 | A/P, 20,4%   |  |
|---------------------|-------------------|------------|------|----------|-------------|-----------------|--------------|--|
|                     |                   | Item       | term | interest | Cost Factor | Annual Cost     |              |  |
| Capital             | Retrofit at Plant | \$ 500,000 | 20   | 0.04     | 0.0736      | \$ 36,800       |              |  |
|                     | Tank Hauler       | \$ -       | 20   | 0.04     | 0.0736      | \$ -            |              |  |
|                     | Land Development  | \$ -       | 20   | 0.04     | 0.0736      | \$ -            |              |  |
| Subtotal            |                   | \$ 500,000 | 20   | 0.04     | 0.0736      | \$ 36,800       |              |  |
| Engineering (25%)   |                   | \$ 125,000 | 20   | 0.04     | 0.0736      | \$ 9,200        |              |  |
| Contingency (25%)   |                   | \$ 125,000 | 20   | 0.04     | 0.0736      | \$ 9,200        |              |  |
|                     |                   | \$ 750,000 | 20   | 0.04     | 0.0736      | \$ 55,200       |              |  |
| O&M                 | O&M (4% Capital)  | \$ 20,000  | 1    |          |             | \$ 20,000       |              |  |
|                     | Haul & Burn       | \$ 775     | 1500 |          |             | \$ 1,162,500    |              |  |
|                     |                   |            |      |          |             | Annualized cost | \$ 1,237,700 |  |



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# Memorandum

**Date:** February 2, 2016

**To:** Dane Arnold, Director (Gardner Water/Sewer Department)

**From:**  Robert Sims (CDR Maguire), Robin Dyer (CDR Maguire)

**Subject:** Landfill Expansion Capacity  
CDR/Maguire, Inc. Project No. 19474.01

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## SLUDGE DISPOSAL BACKGROUND

Since the mid 1980's the City of Gardner has been utilizing the sludge only landfill on West Street for disposal of sludge generated from the wastewater treatment plant (WWTP). The site was permitted to encompass the entire 37 acre parcel taken from multiple parties in 1919. The current landfill footprint only incorporates 11 acres. In addition to the landfill itself, this area includes the existing variable width (14' to 20' wide) perimeter access road and an existing building that houses equipment. Outside of the existing perimeter fence are drainage control including two retention ponds.

The site abuts the former municipal landfill. The former municipal landfill has a gas extraction and energy recovery component. It also has two small buildings, one for equipment and one that houses the sludge landfill leachate pumping station. The former municipal landfill does not have a leachate collection system while the sludge landfill does.

Approximately 400 cy of sludge are generated each month at the WWTP. The sludge is trucked to the site from the WWTP, mixed with amendment, spread and covered daily. The existing sludge landfill is approaching the capacity allowed by its current permit. A new application (WP 44) for vertical expansion of the landfill has been submitted to the Massachusetts Department of Environmental Protection (DEP) and is under review. For more information on the vertical expansion see "Vertical Expansion" below.

The current sludge is historically dewatered to an average solids content of 22%. This information was used to determine an approximate unit weight of the amended sludge to allow for the conversion to tonnage from volume. The sludge is dewatered at the WWTP with the use of two belt filter presses. The current amendment ratio is three (3) parts amendment to one (1) part sludge and yields the design unit weight is 75 pounds per cubic foot.

In addition to the expansion to the landfill, the City of Gardner has enlisted the services of an engineering firm to perform upgrades at the existing WWTP. The first design component is a new headworks facility. In addition to the upgrade of the headworks, the City is also evaluating an upgrade of the sludge processing equipment. The upgrades to the sludge processing equipment will allow for the reduction in the amendment ratio due to attaining a higher solids content in the sludge. The amendment is added to increase the workability; the drier the sludge, the less amendment that is

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required. Currently an amendment (sand) is mixed with the sludge at a 3:1 ratio. Through pilot testing, the new processing equipment is expected to produce a drier sludge (30% solids) and lower the ratio to 2:1. This change will result in significant savings and extend the life of the landfill.

#### **PREVIOUS WORK**

As part of the ongoing management of the landfill, we have reviewed the last few years of the Operations Reports generated by the contract operator (Suez North America) as well as performed a Sludge Recommendation study (2012) to analyze a horizontal expansion. An existing conditions survey was completed by DiPrete Engineering Associates, Inc. in 2012 to assist in the evaluation of the possible vertical expansion of the sludge landfill. CDR/Maguire, Inc. prepared a slope stability analysis in 2012 for the City of Gardner to confirm that the vertical expansion of the landfill was possible. Areas of concern included the area where washouts previously occurred. It was determined that a 3 ft horizontal to 1 ft vertical side slope was acceptable.

#### **VERTICAL EXPANSION**

In November of 2014, United Water submitted a plan for the vertical expansion of the landfill. This was to be a temporary solution until a horizontal expansion could be planned and executed. The vertical expansion would raise the top of the sludge landfill from its current cap elevation of 1020.0 to elevation 1046.0. This additional capacity would add 107,563 cubic yards (CY) which is equivalent to adding approximately six (6) years to the life of the existing landfill with the current 3:1 amendment ratio. The initial survey was completed in August 2012 for the site. The revised buildout elevation would be reached in the year 2018.

#### **WORK PERFORMED TO DATE**

Additional survey of the horizontal expansion area was completed by DiPrete Engineering Associates, Inc. in October and November, 2013. The boring program was completed in November, 2013. Seven 2-inch diameter groundwater monitoring wells were installed at the location of the seven borings. The monitoring wells include a 4-inch diameter steel sleeve and locking cap. The boring locations were staked in the field by DiPrete Engineering Associates, Inc. As drilled location were determined by tape and hand compass from the staked locations. In February, 2014 CDR/Maguire issued a report entitled, "Geotechnical Report Proposed Sludge Landfill Expansion Area Subsurface Characterization." This report covered the findings from the field and laboratory testing for the soils. Also, included were water table adjustments using the method described in "Probable High Ground-Water Levels in Massachusetts", issued by the U.S. Geological Survey in cooperation with the Commonwealth of Massachusetts Department of Environmental Quality Engineering, known as the "Frimpter Method".

#### **HORIZONTAL EXPANSION**

The current 3:1 amendment to sludge cake ratio and a potential 2:1 amendment to sludge ratio have been evaluated in the determination of the life expectancy for the expanded landfill. The decreased ratio is based on the new sludge dewatering process being more efficient than the current one. The current product averages 22% solids. The expectation of the new method is a final product of 30% solids (less water). The higher solids content allows for less amendment to make the product "workable" at the landfill.

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The volume of a proposed horizontal landfill expansion was estimated using the program AutoCAD Civil-3D. This was done utilizing the existing survey information collected by DiPrete Engineering Associates, Inc. and water table information gathered by our geotechnical engineer. This information was input into AutoCAD Civil 3D and representative surfaces were developed. A surface was created which represented the existing groundwater table with the input of water table data from the seven borings, supplemented with engineering assumptions about extrapolating beyond existing data points. Along the edge of the wetlands, a water table with a two foot depth was assumed. The existing site was then graded down to the elevation four feet above the ground water table, utilizing 3:1 side slopes. In areas which were already steeper than 3:1, the existing grading remained and the proposed grades were tied into those areas. No grading was to be done within one hundred feet of the wetlands or fifty (50) from the northeasterly property line. This resulted in the removal of 155,412 CY of existing material. A new surface was then developed with a merger of the existing grades, proposed vertical expansion and the new lowered grading. This was designated as the new existing condition to determine the volume of sludge which the site could accept. The site was then graded up to elevation 1060 and a new surface was developed to represent this condition. The proposed grading was also used to develop surfaces with cap elevations of 1020, 1030, 1040 and 1050. These surfaces were then compared to the new existing surface to determine storage capacities at the various elevations. The table below shows the additional volume as they relate to the elevations.

| Landfill Cap Elevation | Landfill Volume (CY) |
|------------------------|----------------------|
| 1030                   | 367,831              |
| 1030                   | 470,732              |
| 1040                   | 554,633              |
| 1046                   | 594,249              |
| 1050                   | 620,659              |
| 1060                   | 666,142              |

Horizontal expansion would increase the portion of the site utilized for the sludge land fill from 11 acres to approximately 19.5 acres of the 37 acres previously permitted. The proposed layout will maximize the available property. The remaining land is a buffer, wetland or functionally unusable.

#### LANDFILL LIFE

Using the geospatial data, an estimate of the volume of space available within the landfill property was calculated. This volume was divided by the annual volume of material generated annually. Based on this information, we determined the number of years the life of the landfill would be extended for each proposed elevation. This calculation was performed both the 2:1 and 3:1 amendment ratios. We have also included a conservative settlement factor of 30% for the sludge. The following table shows the results of these calculations, assuming the deposit of 400 CY of sludge within the landfill each month.

For the sake of the evaluation, we ran the calculations for a variety of cap elevations. Additional years of capacity can be attained by increasing the cap elevations. However, because of the pyramid shape, the extra elevation does not translate to significantly more volume. For example, the volume increases 15% when raising from 1030 to 1040, but only 7% when raising it from 1050 to 1060.

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For the recommended analysis, we assumed that the cap of the horizontal expansion would match the current planned cap of the vertical expansion (1046.0 feet). Therefore, the new landfill will have a cap elevation of 1046.0 and the life would be 45.8 years at a 2:1 sludge to amendment ratio and 33.4 years for a 3:1 ratio.

| Final Landfill Cap Elevation | Available Volume (cy) | Years at 3:1 (current conditions) | Years at 2:1 (dewater upgrades) |
|------------------------------|-----------------------|-----------------------------------|---------------------------------|
| 1020                         | 367,831               | 20.7 yrs                          | 28.4 yrs                        |
| 1030                         | 470,732               | 26.5 yrs                          | 36.3 yrs                        |
| 1040                         | 554,633               | 31.2 yrs                          | 42.8 yrs                        |
| 1046                         | 594,249               | 33.4 yrs                          | 45.8 yrs                        |
| 1050                         | 620,659               | 34.9 yrs                          | 47.8 yrs                        |
| 1060                         | 666,142               | 37.5 yrs                          | 51.3 yrs                        |

### COSTS

Based on the cost estimate of developing the landfill site at \$150,000 per acre, we estimate that preparing the site to receive sludge will cost \$1,275,000 (\$150,000 for 8.5 acres).

Because the landfill will last longer than the 20-year planning period, we developed an annual cost for the life of the landfill and then amortized the cost of a 20-year period. For example – the \$1.275 million dollars to develop the landfill for the cap elevation of 1046 feet for the proposed conditions would spread over 45.8 years. The amortized cost of the landfill would calculate to be \$55,200 per year.

Calculating the present worth for the 20-year design period would result in a capital cost of the 20-year landfill of \$770,000. For the current amendment conditions (3:1), the same procedure is utilized except the original \$1,275,000 is spread out over 33 years. The resulting 20-year present worth cost would be \$903,000.

### CONCLUSION

The conclusion is based on the horizontal expansion being capped at the same elevation as the current landfill after vertical expansion approval. At a sludge to amendment mix of 2:1, the expanded landfill will have an estimated life of 45.8 years and project an annual cost of \$55,200. If the sludge to amendment ratio remains at 3:1, the life shortens to 33.4 years and the annualized cost increases to \$65,000. The 20-year present worth of the two options is \$770,000 and \$903,000 respectively.

