

COMMONWEALTH OF MASSACHUSETTS

CITY OF LOWELL

In City Council

VOTE

Authorizing the City Manager, acting through the Department of Planning and Development, to accept and expend Fiscal Year 2014 earmarked funds totaling \$15,000,000.00 from the Commonwealth of Massachusetts Department of Transportation (MassDOT).

The City of Lowell desires to accept and expend the earmarked funds for the design and construction of the Lord Overpass reconfiguration; and

The earmarked funding has been used to construct the Jackson Street extension and to complete the Lord Overpass design and engineering.

NOW, THEREFORE, BE IT VOTED BY THE CITY COUNCIL OF THE CITY OF LOWELL:

That the City Manager, acting through the Department of Planning and Development, is hereby authorized in the name of the City of Lowell to accept and expend Fiscal Year 2014 earmarked funds totaling \$15,000,000.00 from the Commonwealth of Massachusetts Department of Transportation (MassDOT) for the design and construction of the Lord Overpass reconfiguration.

BE IT FURTHER VOTED:

That the City Manager, on behalf of the City of Lowell, is hereby authorized to execute any and all documents necessary in connection with said grant from the Commonwealth of Massachusetts Department of Transportation (MassDOT).



Deval L. Patrick, Governor
Richard A. Davey, Secretary & CEO
Frank DePaola, Administrator



April 30, 2014

Honorable Eileen M. Donoghue
Massachusetts State Senate
State House, Room 112
Boston MA 02133-1053

Dear Senator Donoghue:

Thank you for your recent letter regarding the Lord Overpass in Lowell. I am pleased to inform you that the Massachusetts Department of Transportation (MassDOT) will fund the design and construction of this important project. This funding will be provided to the City of Lowell (City) through two reimbursable agreements that will be executed between MassDOT's Highway Division and the City.

On April 18, 2014, Governor Patrick signed the Transportation Bond Bill. This action provides MassDOT the funding it needs to execute these agreements. In the near future, Highway Division staff will begin coordinating this effort with the City. The first step will be to execute an agreement for the design of the project. As indicated in your letter, this phase of the work is estimated to cost approximately \$1,800,000. When the design of the project is nearing completion, a second agreement will be executed for the construction of the project which is estimated to be approximately \$13,200,000.

I hope this information addresses your concerns. MassDOT looks forward to working with your office and the City of Lowell on the advancement on this project.

Sincerely,

Richard A. Davey
Secretary & CEO

cc: Frank DePaola, P.E., Highway Administrator
Patricia Leavenworth, P.E., Chief Engineer
Richard Power, Legislative Director
David Anderson, P.E., Deputy Chief Engineer/Design
Richard Power, Legislative Director
Paul Stedman, Acting District 4 Highway Director

Ten Park Plaza, Suite 4160, Boston, MA 02116
Tel: 857-368-4636, TTY: 857-368-0655
www.mass.gov/massdot

MassachusettsDOT / Highway Division

**Frank DePaola, P.E.
Administrator**

**From the Administrator's Office
through Christine Kondis, (857) 368-8785**

Date: March 27, 2014

Due Date: April 4, 2014

Log No.: 03/27/2014-1

To: Paul Stedman, Acting District 4 Highway Director

Action: Please prepare a response for Secretary Davey's signature.

Copy to: Patricia Leavenworth, P.E., Chief Engineer
Richard Power, Legislative Director
Michael Karas, District 4 Operations Engineer
Mark Kratman, District 4 Operations

Comments: Lowell – Lord Overpass

Letter from Senator Eileen Donoghue requesting MassDOT enter into a Design & Construction Agreement for \$15,000 for transportation improvements at the Lord Overpass area of Lowell. .

| | |
|--|-------|
| Date Received back to Administrator's Office: | _____ |
|--|-------|

Massachusetts Department of Transportation
Richard A. Davey
Secretary And CEO

From the Secretary and CEO's Office

Date: Mar-24-2014

Due Date: **Apr-04-2014**

Log #: 03/24/2014 - 2

To: Frank DePaola Administrator, Highway

Action: Prepare a response for my signature

Comments:

Copy to: R. Power

Date Received back to Secretary and CEO's Office: _____

Author of Response: _____

Date sent to EOTC: _____ 1st Revision: _____ 2nd Revision: _____

Comments: _____

Signature of Author

Signature of Department Head

Telephone #: _____ Telephone #: _____

Beeper #: _____ Beeper #: _____



The Commonwealth of Massachusetts
MASSACHUSETTS SENATE

Frank D to draft
for Sec

cc: R. Power

SENATOR EILEEN M. DONOGHUE
First Middlesex District

STATE HOUSE, ROOM 112
BOSTON, MA 02133-1053
TEL. (617) 722-1630
FAX (617) 722-1001

EILEEN.DONOGHUE@MASENATE.GOV
WWW.MASENATE.GOV

Chair
JOINT COMMITTEE ON COMMUNITY
DEVELOPMENT AND SMALL BUSINESS
Vice Chair
JOINT COMMITTEE ON HIGHER EDUCATION
ECONOMIC DEVELOPMENT AND
EMERGING TECHNOLOGIES
TELECOMMUNICATIONS,
UTILITIES AND ENERGY
WAYS AND MEANS
POST AUDIT AND OVERSIGHT

March 3, 2014

Secretary Richard A. Davey
Massachusetts Department of Transportation
10 Park Plaza
Boston, MA 02116

Ref: Lord Overpass Improvements
Request for Design and Construction Funding

Dear Secretary Davey:

This letter has been drafted to respectfully request that the Massachusetts Department of Transportation enter into a Design and Construction Agreement for \$15,000,000 for transportation improvements at the Lord Overpass Area of the City. This request will be used to complete the design and construction of traffic signal improvements on Thorndike Street, reconstruct the Middlesex Street and Appleton Street bridges over Thorndike Street, extend Jackson Street from Canal Street to Thorndike Street, and reconfigure the intersection of Thorndike Street, Dutton Street, Jackson Street and Fletcher Street. The funding for the design and construction of this project has been included in the 2014- 2018 Transportation Capital Investment Plan, and is on the Northern Middlesex Council of Government's Long Term Transportation Plan.

Improvements along Thorndike Street are needed to alleviate existing and projected future congestion and safety concerns at the four study area intersections:

- Thorndike Street/Dutton Street at Fletcher Street/Jackson Street Extension
- Thorndike Street at Gallagher Terminal
- Thorndike Street at Highland Street
- Thorndike Street at YMCA Drive

The proposed Jackson Street Extension will address long standing circulation and access issues for Hamilton Canal District and the Fletcher Street neighborhoods and would allow both pedestrians and vehicles approaching the district from the Acre and Lower Highlands neighborhoods to have a direct connection to the Hamilton Canal District. The proposed Jackson Street Extension will also reduce project related traffic impacts at the Broadway and Dutton Street intersection and the Lord Overpass by allowing traffic to bypass these intersections to gain direct access to Thorndike Street upon exiting the

03/24/2014-2

HCD. The proposed Jackson Street Extension will also provide enhanced access to the new Jackson Appleton Middlesex (JAM) public parking garage and the Division of Capital Asset Management (DCAM)'s proposed Lowell Trial Court site, both of which are located on Jackson Street. The project also provides a key link in the Lowell National Historical Park's network of canal side recreational pathways.

The Lord Overpass is a grade separated interchange located between the project site and the Charles A. Gallagher Transportation Center. The Lord Overpass is formed by the Thorndike Street northbound and southbound on/off-ramps, Middlesex Street and Appleton Street/Chelmsford Street. The Lord Overpass is comprised of four closely spaced, signalized intersections connected by the Middlesex Street Bridge and the Appleton Street/Chelmsford Street Bridge over Thorndike Street. A one-way counter clockwise circulation pattern is established around the square, which prior to the installation of the four existing traffic signals, used to function like a rotary. Sidewalks are provided on both sides of the roadways forming the square, with raised traffic islands provided at two of the four intersections.

The Lord Overpass was originally constructed in 1959 and is now City owned. The overpass consists of two bridges. Bridge No. L-15-063 carries Middlesex Street over Thorndike Street, and Bridge L-15-064 carries Appleton/Chelmsford Street over Thorndike Street. According to the most recent MassDOT Bridge List, the Lord Overpass bridge L-15-064 has an American Association of State Highway and Transportation Officials (AASHTO) Bridge Sufficiency Rating of 23.6, and the bridge No L-15-063 rating is 52.6. The AASHTO Bridge Sufficiency Rating is a measure of the structural adequacy and safety essential for public use, serviceability and functional obsolescence. The AASHTO sufficiency rating ranges from 0 to 100, with 100 representing the best condition that is "Fully Sufficient" and 0 representing the worst condition "Fully Insufficient". The Lord Overpass bridge L-15-064 was not found to be structurally unsafe, but was determined to be functionally obsolete and would therefore be eligible for Federal Aid.

The existing bridges are over 50 years old and do not meet current state and federal standards. The current condition is fair to satisfactory and the bridges are currently posted with load restrictions. The proposed bridge improvements include:

- Upgrade the existing bridge capacity for the current HL-93 vehicle loading in accordance with current standards.
- Replace existing bridge deck and superstructures to repair current deficiencies and upgrade the existing bridges to current MassDOT bridge design standards.
- Replace existing bridge railings on the bridges and adjacent retaining walls to current crash loading standards.
- Replace existing bridge bearings with new elastomeric bearings.
- Evaluate and modify existing substructures as required to accommodate superstructure replacement.
- Improve roadway clearance over Thorndike Street.

The existing three-way intersection of Thorndike Street, Dutton Street, and Fletcher Street currently experiences long delays and vehicle queues for northbound left-turn movements from Thorndike Street to Fletcher Street. The intersection does not currently allow vehicles to turn left from Fletcher Street onto Dutton Street and does not accommodate pedestrian crossings of Thorndike and Dutton streets. Improvements to this intersection will include:

- Construct the new Jackson Street Extension to form the fourth leg (westbound approach) of the intersection, including a dedicated left-turn lane and a shared through/right-turn lane;

- Widen and realign the northbound approach of Thorndike Street to provide two left-turn lanes and a through travel lane;
- Reconstruct the northbound approach of the Thorndike Street Northbound Down-Ramp to provide a through lane and a channelized right-turn lane to the new Jackson Street Extension, and construct a new sidewalk along the eastern side of the ramp where none presently exists;
- Reconstruct the southbound approach of Thorndike Street to provide a wider pedestrian refuge island;
- Reconstruct and realign the Fletcher Street eastbound approach to align with the new Jackson Street Extension and provide a right-turn lane and a shared through/left-turn lane.

The design and construction cost estimates for this project have been estimated at \$14,946,502.35, and a copy of the estimate has been attached for your review. Thank you for your consideration in funding this very important project for the City. We look forward to your approval of this request.

Very truly yours,



Senator Eileen Donoghue
First Middlesex District

Enc.

cc: Bernard F. Lynch, City Manager
Diane Tradd, Acting DPD Director
Eric Eby, Transportation Engineer
Criag Thomas, Urban Renewal Project Manager
VHB



Vanasse Hangen Brustlin, Inc.

**Transportation
Land Development
Environmental
Services**

101 Walnut Street
Post Office Box 9151
Watertown
Massachusetts 02471
617 924 1770

**LOWELL - THORNDIKE STREET & LORD OVERPASS FULL BUILD
PRELIMINARY DESIGN COST ESTIMATE
SUMMARY**

| <u>Description</u> | <u>Unit Price</u> | <u>Quantity</u> | <u>Total Cost</u> |
|--|--------------------|-----------------|------------------------|
| Cold Plane and Overlay - Bridge Decks | \$20.00 /SY | 1825 SY | \$36,500.00 |
| Full Depth Pavement Construction | \$82.00 /SY | 23325 SY | \$1,912,650.00 |
| Cement Concrete Sidewalk | \$80.00 /SY | 4200 SY | \$336,000.00 |
| Loam and Seed | \$7.00 /SY | 1360 SY | \$9,520.00 |
| Vertical Granite Curb Removed & Reset | \$20.00 /FT | 4075 FT | \$81,500.00 |
| Vertical Granite Curb | \$35.00 /FT | 4075 FT | \$142,625.00 |
| Jackson Street Extension | \$640,000.00 /LS | 1 LS | \$640,000.00 |
| Retaining Wall Thorndike/Fletcher/Jackson/Dutt | \$150,000.00 /LS | 1 LS | \$150,000.00 |
| Traffic Signal Thorndike/ Fletcher/Jackson/Dutt | \$250,000.00 /LS | 1 LS | \$250,000.00 |
| Traffic Signal Lord Overpass (2) | \$400,000.00 /LS | 1 LS | \$400,000.00 |
| Traffic Signal - Gallagher | \$35,000.00 /LS | 1 LS | \$35,000.00 |
| Traffic Signal - Highland | \$26,000.00 /LS | 1 LS | \$26,000.00 |
| Traffic Signal - Hale | \$26,000.00 /LS | 1 LS | \$26,000.00 |
| Structural Modifications Thorndike/Fletcher/Jack | \$1,050,000.00 /LS | 1 LS | \$1,050,000.00 |
| Middlesex St Bridge - Modifications | \$1,700,000.00 /LS | 1 LS | \$1,700,000.00 |
| Appleton St Bridge - Modifications | \$1,700,000.00 /LS | 1 LS | \$1,700,000.00 |
| Drainage Modifications | \$200,000.00 /LS | 1 LS | \$200,000.00 |
| Utility Modifications | \$150,000.00 /LS | 1 LS | \$150,000.00 |
| Lord Overpass Utilities | \$500,000.00 /LS | 1 LS | \$500,000.00 |
| Pedestrian Lighting | \$500,000.00 /LS | 1 LS | \$500,000.00 |
| Street Trees/Landscaping | \$100,000.00 /LS | 1 LS | \$100,000.00 |
| Tree Removal | \$500.00 /EA | 12 EA | \$6,000.00 |
| SUBTOTAL: | | | \$9,915,295.00 |
| Construction Staking (3%) | | | \$297,458.85 |
| Police Detail (3%) | | | \$297,458.85 |
| Mobilization (3%) | | | \$297,458.85 |
| Construction Traffic Management (7%) | | | \$694,070.65 |
| Contingencies (17%) | | | \$1,685,600.15 |
| TOTAL: | | | \$13,187,342.35 |
| Design Services | | | \$1,139,160.00 |
| full time CPS | | | \$620,000.00 |
| TOTAL REQUEST | | | \$14,946,502.35 |



Eileen M. Donoghue
City Manager

Kara Keefe Mullin
Assistant City Manager

April 30, 2019

Mayor William Samaras
and
Members of the City Council

SUBJECT: Request for Approval to Accept and Expend Fiscal Year 2014 Earmarked State Funds for Lord Overpass design and construction

Dear Mayor Samaras and Members of the City Council:

I respectfully request that the City Council Vote to approve and accept Fiscal Year 2014 earmarked funds in the amount of \$15,000,000, from the Commonwealth of Massachusetts Department of Transportation (MassDOT) for the design and construction of the Lord Overpass reconfiguration. The City's Department of Planning and Development will manage these funds.

These funds were secured by the City in FY 2014; however, at that time no Vote was required for approval and acceptance. The funding has been used thus far to construct the Jackson Street Extension and to complete the Lord Overpass design and engineering. The project is scheduled to advertise for bids on 5/8/2019 and construction will begin this summer. The project will take approximately three years to complete. Thank you for your consideration.

Sincerely,

Eileen M. Donoghue
City Manager

EMD/ns

Attachment

cc: Christine P. O'Connor, City Solicitor
Diane N. Tradd, Assistant City Manager/DPD Director
Claire V. Ricker, Chief Design Planner