



Diane Nichols Tradd
Assistant City Manager/DPD Director

Craig Thomas
Deputy Director

MEMORANDUM

TO: Eileen M. Donoghue, City Manager *EMD*

FROM: Diane N. Tradd, Assistant City Manager/DPD Director

DATE: January 24, 2019

SUBJECT: PETITION RESPONSE OF 12/18/18 BY BRIAN MEADE JR. AND NITIN PATEL
MOTION FROM TRANSPORTATION SUBCOMMITTEE 1/7/19 TO
CONTACT MASSDOT REGARDING REVISING THE DESIGN AT THIS
INTERSECTION

The Route 38 Improvements Project is a Highway Safety Improvement Project (HSIP) because all four intersections are high-crash locations in the State. The intersection of Rogers/Boylston/Fairmount/Laurel Streets ranked 43rd on NMCOG's Top 100 high crash intersections for the Middlesex Region. The safety evaluation at the Boylston Street/Fairmount Street/Laurel Street intersection during the preliminary design phase indicated two key facts: that the majority of the accidents were rear-end type accidents in the southbound direction; and that the overall crash rate for the intersection was higher than the State average. Therefore, as a safety improvement project, it was judged that the improvements needed to be more than just upgrading the traffic signal equipment. The proposed realignment creates less confusion because there are fewer decisions to make within the intersection area and the proposed changes reduce the number of vehicular conflict points. Additionally, the following data is noted:

- The safety concerns that directed the chosen design which eliminated the through movement up Laurel were:
 - to eliminate conflict points between vehicles turning left off Rogers Street onto Laurel Street with vehicles turning right off Rogers Street onto Laurel (angled collisions)
 - to eliminate conflict points between vehicles turning left off Rogers onto Laurel with vehicles turning right off Rogers South onto Fairmount Street (angled and rear end collisions)
 - to eliminate confusion for vehicles behind the left turning vehicles regarding whether they were going up Fairmount or Laurel (rear-end collisions).
- Overall traffic volume on Route 38 is 1,400 vehicles per hour in the morning and 2,000 VPH in the evening (these #s include both directions)
- # of Vehicles perform the left turning movement off Rogers Street onto Laurel Street during the evening peak hour = +/- 15 vehicles
- # of Vehicles perform the straight/right turning movement from Boylston onto Laurel Street during the evening peak hour = +/- 84 vehicles
- Total vehicles accessing Laurel from Rogers and Boylston in the morning peak hour = 2 vehicles
- The selected option provides the best Level of Service (LOS) and the shortest delays for both AM and PM peak traffic.
- Pedestrian Safety is also a factor at this intersection. The project will replace damaged/non-working pedestrian buttons, repaint the crosswalks and provide an exclusive pedestrian phase for crossing.

The public participation process for this project followed standard MassDOT protocol with a Design Public Hearing held on 7/28/16 at the Pollard Memorial Library where the project was presented to the public with a plan view. The color plan view that was presented is attached. The Hearing was advertised in the Lowell Sun and the Boston Globe on July 14 and 21, 2016. There is a Public Hearing Transcript and list of attendees available. Per transcript, MassDOT representative clearly states the change to the island would prevent the through movement. No written comments for this intersection were sent to MassDOT. Most of the comments received at the Design Public Hearing were geared to the Kittredge Park area and the trees/plantings. Several other meetings were held with the MassDOT District 4 Office, the City and residents concerning the project.

The Transportation Engineer contacted MassDOT, per the request from the Transportation Subcommittee. The current status of the project is that the design was 100% complete in spring 2018. ROW acquisition was handled by the City's Engineering department and concluded with a City Council vote on August 28, 2018 to accept by donation or settlement the required easements. The bid opening date is scheduled for January 29, 2019. The documents have been released to the prospective contractors for their review. All of the redesigned intersections are included in the project, which has been bid as a single project.

The ramifications of holding this intersection, or removing it from the project would be as follows:

- MassDOT would delay bid opening by 6-8 weeks in order for the Design Consultant to pull the plan sheets and revise the specifications. Cost associated with that effort may be the responsibility of the City.
- Design Consultant and MassDOT would revise the cost estimate. Mass DOT and the City would request an amendment to the TIP to reflect the reduction in funding for removing the intersection. TIP funding for this project is currently \$4.5M.
- Re-advertise the project without the intersection in question.
- Re-release the bid packages and proceed with award process.
- TIP funding does not roll over from year to year. The deadline to begin construction and lock in the TIP funding is September 30, 2019. If the project misses that deadline, the funding is lost and we would need to re-compete for it on the next year's TIP. There is no guarantee that the project would retain that funding amount.
- City would be responsible for funding for the redesign of the intersection. MassDOT's estimate for the redesign is \$50,000. Redesign would include re-evaluating the intersection to determine what changes would be required to make the through movement to Laurel safe, updating traffic counts as needed, updating the Synchro modeling, revising the plan and detail sheets, updating the specifications and advertising the intersection project as a City project.
- City would need to locate construction funding of approximately \$750,000-\$1,000,000.
- MassDOT, NMCOG and the City have a responsibility to appropriately allocate TIP funding. Receiving funding for this project was the result of consensus-building among the parties over a number of years. These TIP funds could have been allocated for other projects.

MassDOT is not in support of removing the intersection and proceeding with the project without its inclusion, because this is a corridor project. The project is an HSIP corridor project and was designed for a significant safety improvement along the entire corridor. Removing one of the intersections would sabotage the intent of the corridor project and would leave a substandard intersection in the middle of the project, which could affect LOS and congestion. Give the aforementioned impacts, the Transportation Engineer does not recommend revising this project at this late date in the process.

NV/ns

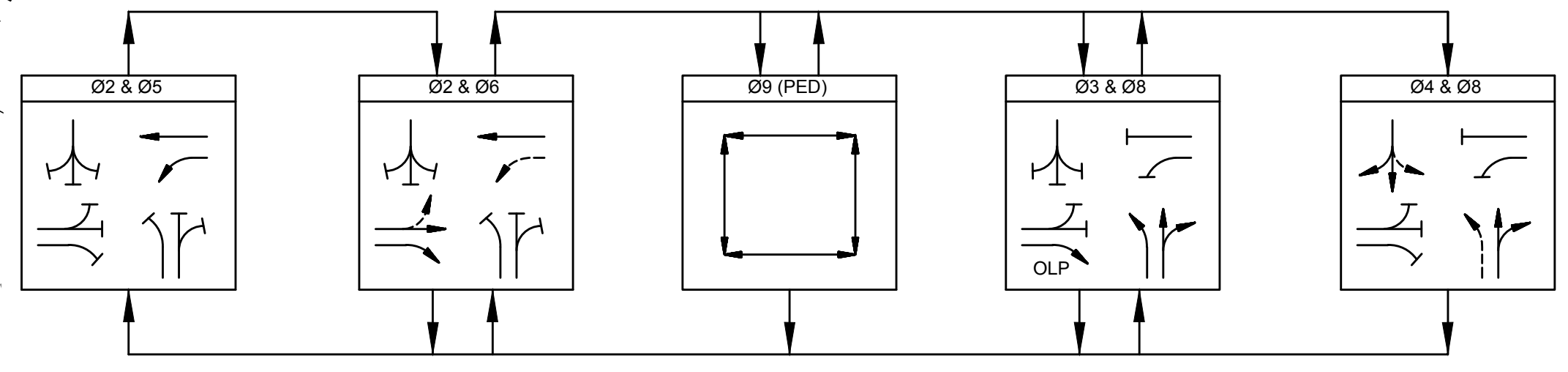
Attachment

cc: Natasha Vance, Transportation Engineer

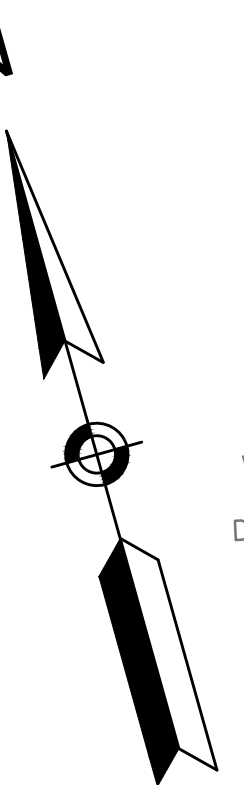
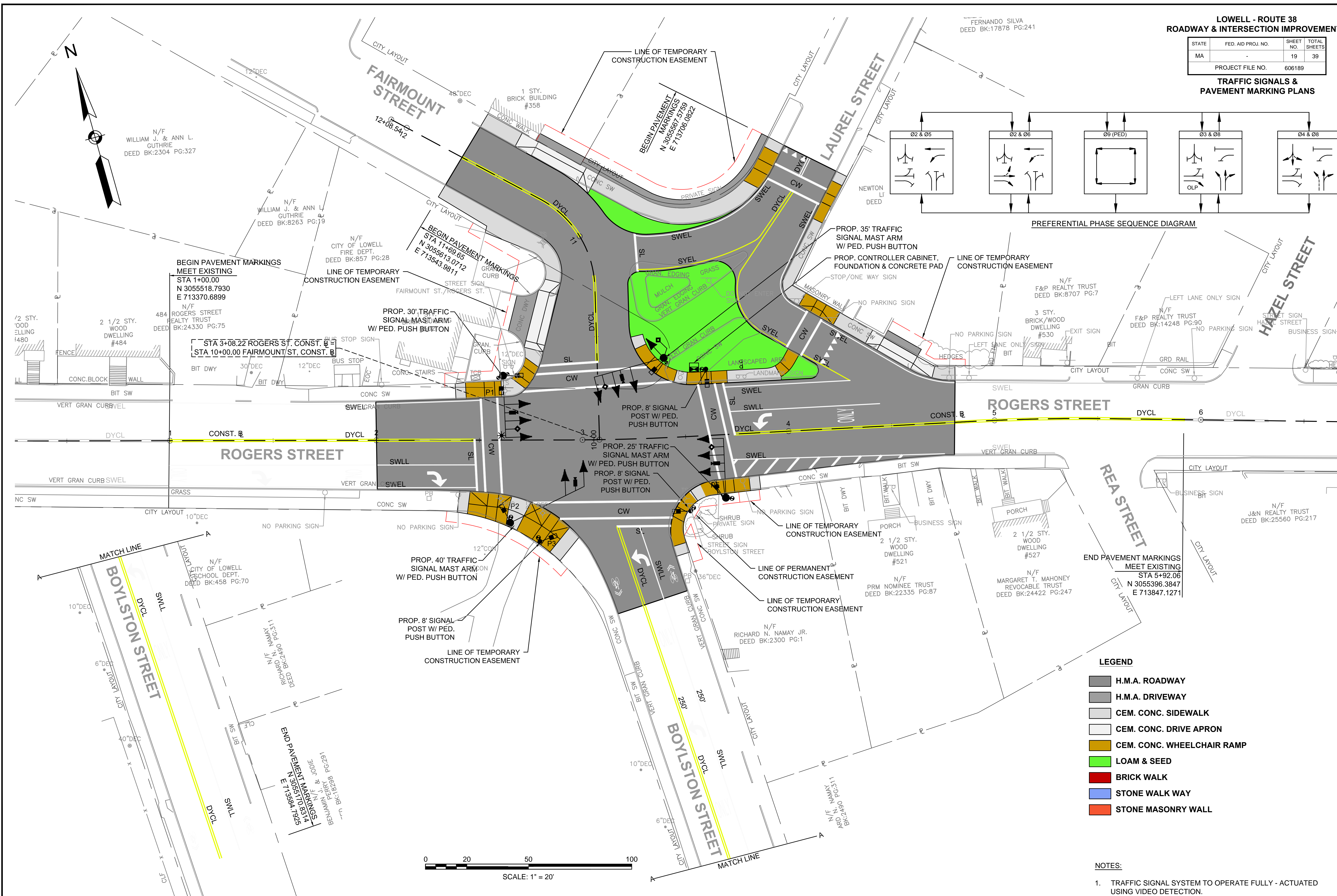
**LOWELL - ROUTE 38
ROADWAY & INTERSECTION IMPROVEMENTS**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	19	39
PROJECT FILE NO.		606189	

TRAFFIC SIGNALS & PAVEMENT MARKING PLANS



PREFERENTIAL PHASE SEQUENCE DIAGRAM



N/F WILLIAM J. & ANN L. GUTHRIE DEED BK:2304 PG:327

N/F WILLIAM J. & ANN L. GUTHRIE DEED BK:8263 PG:79

N/F CITY OF LOWELL FIRE DEPT. DEED BK:857 PG:28

BEGIN PAVEMENT MARKINGS MEET EXISTING STA 1+00.00 N 3055518.7930 E 713370.6899

BEGIN PAVEMENT MARKINGS MEET EXISTING STA 1+00.00 N 3055518.7930 E 713370.6899

STA 3+08.22 ROGERS ST. CONST. B
STA 10+00.00 FAIRMOUNT ST. CONST. B

N/F F&P REALTY TRUST DEED BK:8707 PG:7

N/F F&P REALTY TRUST DEED BK:14248 PG:90

N/F J&N REALTY TRUST DEED BK:25560 PG:217

END PAVEMENT MARKINGS MEET EXISTING STA 5+92.06 N 3055396.3847 E 713847.1271

N/F CITY OF LOWELL SCHOOL DEPT. DEED BK:458 PG:70

N/F NANNY, ANNE DEED BK:115133 PG:106

N/F RICHARD N. NAMAY JR. DEED BK:2300 PG:1

N/F PRM NOMINEE TRUST DEED BK:22335 PG:87

N/F MARGARET T. MAHONEY REVOCABLE TRUST DEED BK:24422 PG:247

LEGEND

- H.M.A. ROADWAY
- H.M.A. DRIVEWAY
- CEM. CONC. SIDEWALK
- CEM. CONC. DRIVE APRON
- CEM. CONC. WHEELCHAIR RAMP
- LOAM & SEED
- BRICK WALK
- STONE WALK WAY
- STONE MASONRY WALL

NOTES:

1. TRAFFIC SIGNAL SYSTEM TO OPERATE FULLY - ACTUATED USING VIDEO DETECTION.

