



21

COMMUNITY
MITIGATION
FUND

APPENDIX D – TRANSPORTATION PLANNING GRANT APPLICATION

BD-21-1068-1068C-1068L-56499

Please complete entire the Application

1. PROJECT INFORMATION

a) NAME OF MUNICIPALITY/GOVERNMENT ENTITY/DISTRICT

West Springfield

b) PROJECT NAME (LIMIT 10 WORDS)

Elm Street Improvements (design alterations and connectivity expansion)

c) BRIEF PROJECT DESCRIPTION (LIMIT 50 WORDS)

Design alterations and connectivity expansion to the approved Elm Street project. A small expansion in the project area to accommodate connection to a school under construction and other designed bicycle infrastructure. Design changes in concert with MassDOT's Shared Streets and Spaces initiative that started in 2020.

d) CONTACT PERSON(S)/TITLE (Persons with responsibility for this grant)

Sharon Wilcox, Chief Financial Officer

e) PHONE # AND EMAIL ADDRESS OF CONTACT PERSON(S)

(413) 263-3025 swilcox@tows.org

f) MAILING ADDRESS OF CONTACT PERSON(S)

26 Central Street, Suite 1, West Springfield, MA 01089

2. IMPACT DESCRIPTION/CONNECTION TO GAMING FACILITY

a) Please describe in detail the transportation related impact that is attributed to the operation of a gaming facility.

The Town's 2017 Transportation Planning Grant application for the engineering design services for improvements to the Elm Street corridor demonstrated the impact of the MGM Springfield Casino to this transportation corridor. The Massachusetts Gaming Commission agreed with the Town's assessment and the project advanced to design.

This application proposes a small project expansion that will allow connections to the new Coburn School that started construction in December 2020 and bicycle lane infrastructure designed to be implemented with the Town's annual line painting program. A project area map depicting the expanded areas is presented in [Appendix A](#). Also included is the cost for purchasing traffic counting equipment. This will be used to measure traffic volume before and after construction as well as supporting look back study analysis.

The school project was proceeding through the Massachusetts School Building Authority (MSBA) program eligibility process at the same time the Elm Street proposal was being reviewed by the Commission. It was uncertain if the School would be considered for the program and there wasn't a site plan or schematic for a designer to tie into. Therefore, the original scope didn't include the connection. Southworth Street (which the school abuts) is used as a cut through to access Route 5 to avoid traffic signals at Elm Street/Union Street/Park Street/Park Avenue as well as Park Avenue at Main Street. Therefore, this small transition will assist in the future roadway work the Town advances separately, without having to disrupt infrastructure installed with the Elm Street project. The State program for the school confines the project to be within the limits of the site property. Therefore, connecting the school site to Elm Street (approximately 240 feet away) isn't eligible under MSBA program, prompting the need for this addition. Excerpts from one of the School's studies illustrating the close proximity of the school to the Elm Street and Park Street/Park Avenue projects is presented in [Appendix B](#).

A 315 foot expansion to the north will allow the project to connect to recently designed bike lanes as prepared by West Springfield staff. This is planned to be implemented with the Town's annual Line Painting program. The expanded area will also offer a transition from on-street bicycling to a new multi-use path that will be designed as part of the alterations to this project. An excerpt from the bike lane design is presented in [Appendix C](#).

The current Elm Street design has one-directional separated bikes lanes (1 northbound and 1 southbound) proposed in close proximity to the sidewalks and therefore resulted in the loss of on-street parking spaces. As a result of discussions and meetings with area business, loss of any on-street parking was not desirable. In addition to this, the tree belt area is deemed valuable for pedestrian circulation, outdoor dining and as waiting areas for people to enter some of the establishments.

This precipitated the need to re-examine the design to retain the same number of on-street parking spaces and provide a safe avenue for bicyclists (now including electric bicycles) outside of the tree belt. The Town re-examined if a different concept could satisfy the needs of the transportation users and small businesses by utilizing the Elm Street Common for bicycle and additional pedestrian travel. The current on-going health crisis reinforced the need to modify the design. Outdoor dining became essential for eating establishments to stay in business. This required utilization and repurpose of tree belts and parking areas to accommodate patrons and modified business practices. The Massachusetts Department of Transportation's Shared Streets and Spaces initiative started in 2020 to address this type of situation. However, the program primarily supports "quick build" "low cost" "without major reconstruction" improvements rather than design of long term permanent changes. **Appendix D** presents an area map of the businesses clustered in the project area.

Therefore, design adjustments are needed, so long lasting infrastructure changes that support public health, safe mobility and renewed commerce are maximized in the project.

b) Please provide documentation, specificity or evidence that gives support for the determination that the operation of the gaming facility caused or is causing the impact (i.e. surveys, data, reports)

This was previously demonstrated in the original 2017 Transportation Planning Grant application and follow up questions from the Gaming Commission. Furthermore, expansion of pedestrian and bicycle connections will help to mitigate traffic impacts resulting from the MGM facility and will promote non-vehicular travel to that facility. In addition, as documented in the look back study commissioned by MGM, West Springfield has seen a reduction in meals taxes (and on long-running restaurant in the Town has closed) subsequent to the opening of the MGM facility (and prior to the COVID-19 crisis). The streetscape modifications will help to mitigate these adverse impact for West Springfield restaurants.

c) How do you anticipate your proposed remedy will address the identified impact.

This was also demonstrated in the original 2017 Transportation Planning Grant application. This project adjustment utilizing a multi-use path on Elm Street will be consistent with the one that will be built on the Park Avenue and Park Street project and the Springfield Riverwalk and Bikeway on the east side of the Connecticut River. **Appendix E** presents the rendering of the Park Street / Park Avenue multi-use facility. It will provide an attractive and safe passage for pedestrians and bicyclists (including electric bicycles) through the downtown minimizing conflicts with on-street traffic through the Elm Street corridor.

3. PROPOSED USE OF TRANSPORTATION PLANNING FUNDS (Please attach additional sheets/supplemental materials if necessary.)**a) Please identify the amount of funding requested.**

\$147,600.00

b) Please identify the manner in which the funds are proposed to be used. Please provide a detailed scope, budget, and timetable for the use of funds

The Scope and Fee from one of the Town's On-Call Consultants is attached in [Appendix F](#). This depicts the overall scope, how the \$139,000.00 is budgeted by task and notes the timetable for completion (6-8 months). In order to help expedite this, the Town is finalizing the scope and fee to advance project development changes with \$31,500.00 of local funds budgeted. Therefore, the Town's designer will continue advancing the design while the grant review process is underway. If awarded this grant, the designer will be able to immediately advance the project towards final design.

In addition to the on-call contract noted above, the Town is requesting funding for the purchase of traffic counting equipment that can be used to measure vehicular traffic volumes along the Route 20 corridor in an effort to monitor traffic changes. [Appendix G](#) is a recent pricing quote for the equipment. The Pioneer Valley Planning Commission currently and historically uses products from this company. The Cost for two units and associated materials which are able to count a four lane roadway such as Route 20, will be \$8,600.00. The traffic counters will provide further documentation as to the volume of vehicular traffic through the Route 20 corridor, inclusive of Elm Street, which provides one of the primary access routes to the MGM gaming establishment.

Please note that as discussed last year, the Town decided to advance the Park Street/Park Avenue project before Elm Street since this will be a major alternate route for traffic while the Memorial Avenue corridor is under construction (estimated to be advertised in 2022).

c) Please provide documentation (e.g. - invoices, proposals, estimates, etc.) adequate for the Commission to ensure that the funds will be used for the cost of mitigating the impact.

The Scope and Fee from one of the Town's On-Call Consultants is attached in [Appendix F](#). An executed contract with the vendor will be provided if awarded the grant. Once fully executed (estimated February 2021), the Town can also provide a copy of the contract noted in Section 3 b) for the first phase of the design alterations.

2021 TRANSPORTATION PLANNING GRANT APPLICATION

BD-21-1068-1068C-1068L-56499

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d) Please describe how the mitigation request will address the impact indicated. Please attach additional sheets/supplemental materials if necessary.

This was demonstrated in the original 2017 Transportation Planning grant application and follow up questions from the Gaming Commission. The design modifications will enhance the project and make the use of alternative modes of transportation such as bicycling, walking and transit more attractive for the public. In addition, as described above, the design modifications will help to mitigate the documented adverse impacts of the gaming establishment on West Springfield businesses.

e) How will you provide the data for reporting? How will you measure the effectiveness of the proposed project in mitigation impacts?

As noted above, The Town has included in this application, a request to fund the purchase of traffic counting equipment that can be used to measure vehicular traffic volumes along Route 20 in an effort to monitor changes. Data collected with the counters can be shared with the PVPC and then incorporated into the MassDOT traffic count database. Please note the Town is working with the PVPC and MassDOT on advancing a safety study on Route 20 in the western portion of the community. In addition electric bicycle usage reporting and Pioneer Valley Transit Authority ridership will be reviewed to measure changes. The data from the traffic counting equipment can also be utilized to support traffic patterns for the MGM Five Year Look Back Study. The Town notes that MGM has not yet undertaken a look back study regarding traffic impacts of the gaming establishment. Though the Town's funding request for traffic counting equipment to obtain some data regarding such traffic impacts will not replace the need for such a look back study, it will provide important information for use in evaluating and developing strategies for the Town to address these impacts.

f) For joint grant requests, please state the amount requested for the joint request. Please also state the amount of any Regional Planning Incentive Award requested and provide separate detail on the use of these additional funds.

Not Applicable to this application.

4. CONSULTATION WITH MASSDOT/REGIONAL PLANNING AGENCY (RPA)/NEARBY COMMUNITIES

a) Please provide details about the Applicant's consultation with MassDOT to determine the potential for cooperative regional efforts regarding planning activities.

This project intersects where the Town's Route 20 Transportation Improvement Project was completed in 2012 (MassDOT Project ID #604737) and connects with the Park Street / Park Avenue project the Town previously consulted on with MassDOT. This completes the link between the projects. **Appendix H** contains excerpts from the Route 20 corridor study recommendations that are in conjunction with the PVPC and MassDOT (formally Mass Highway).

b) Please provide details about the Applicant's consultation with the Regional Planning Agency serving the community and nearby communities to determine the potential for cooperative regional efforts regarding planning activities.

The most recent study of the Westfield Street and Elm Street intersection was done by the PVPC and is presented in **Appendix I**. This was done as a first step to implement the Elm Street project consistent with the goals of the Route 20 Corridor study previously conducted for the Town of West Springfield and the City of Westfield.

5. MATCHING FUNDS FROM GOVERNMENTAL OR OTHER ENTITY

a) Please demonstrate that the governmental or other entity will provide significant funding to match or partially match the assistance required from the Community Mitigation Fund.

The Town of West Springfield has already committed \$49,996.00 of municipal funds to the project. If awarded the grant and unexpected costs arises during the final design requiring additional design funding beyond what is requested, the Town is committed to funding those extra costs. The Town intends to submit an application through the Community Mitigation fund in 2022 for construction funds to supplement the cost to build the project in calendar year 2022 if the grant opportunity is available. Please note the Town has bonded \$2,791,000.00 to supplement the \$1,000,000.00 awarded for the Park Street / Park Avenue project construction so it can be built this year. The Town is committed to bringing the Elm Street project through construction as well.

b) Please provide detail on what your community will contribute to the planning projects such as in-kind services or planning funds.

Town staff will continue to manage the project, assist the designer with additional data collection of existing infrastructure such as underground utilities and test pits as needed. The Town will cover costs of police details needed for any of these activities. In addition to this the Town currently has a consultant gathering field data to create a drainage model for the Town as part of another funded project. A portion of the data collected is within the Elm Street project area and will be used to supplement design.

6. RELEVANT EXCERPTS FROM HOST OR SURROUNDING COMMUNITY AGREEMENTS AND MASSACHUSETTS ENVIRONMENTAL POLICY ACT (MEPA) DECISION

a) Please describe and include excerpts regarding the transportation impact and potential mitigation from any relevant sections of any Host or Surrounding Community Agreement.

The surrounding community agreement did not include the Elm Street corridor. Only the Memorial Avenue corridor was part of the agreement. See [Appendix J](#).

b) Please provide a demonstration that such mitigation measure is not already required to be completed by the licensee pursuant to any regulatory requirements or pursuant to any agreements between such licensee and applicant.

The project area is one of the primary travel routes identified and studied as part of the MEPA process. However, no mitigation project at this location was funded resulting from the MEPA process. There are no transportation construction mitigation measures to the Elm Street corridor that are required to be completed by the licensee. The Off-Site infrastructure improvements are primarily within the City of Springfield with the exception of work on the Memorial Bridge which is not part of this project area.

c) Please also briefly summarize and/or provide page references to the most relevant language included in the most relevant MEPA certificate(s) or comment(s) submitted by the community to MEPA.

The MEPA Certificate dated December 31, 2014, for the final Environmental Impact Report did not include this project area that directly abuts one of the major study area intersections and is part of a primary travel route to/from the casino. The project area is a key connection for two area projects. The Westfield Street (Route 20) TIP project completed in 2012 and the Park Street / Park Avenue project to start construction this year, therefore enhancing one of the primary casino travel routes.

In addition to this, the Certificate indicated that a Transportation Demand Management (TDM) Program be developed with bicycle, pedestrian and transit measures. This project will help enhance bicycle accommodations in the study area and help make access to transit safer and more attractive. The project area is just under 2.5 miles from the casino site, therefore making it a primary bicycling route to/from the casino. Improvements under this project will support the TDM strategies for the casino and help lead people by bicycle safely to the new infrastructure surrounding the casino. The new bike share station at the southerly limit of the project will provide opportunity for a direct link to the station at the MGM resort. Appendix G presents sections from the MEPA certificate related to TDM strategies, bicycle infrastructure and way finding signage at and in the immediate area of the casino. Excerpts from the MEPA certificate are presented in Appendix K.

d) Please explain how this transportation impact was either anticipated or not anticipated in that Agreement or such MEPA decision.

As noted in the original 2017 Transportation Planning Grant approved application, the traffic impact study for the casino primarily focused on processing volumes of passenger vehicles through the study area but didn't focus in detail on unanticipated impacts to other modes of travel such as walking and bicycling. Therefore, we feel the additional traffic volumes, operational and multi-modal impacts to the study area resulting from additional casino traffic were not completely addressed in this area. The project area is just under 2.5 miles from the casino site, therefore making it a primary bicycling route to/from the casino. Improvements under this project will support the TDM strategies for the casino and help lead people by bicycle safely to the new infrastructure surrounding the casino.

e) If transportation planning funds are sought for mitigation not required under MEPA, please provide justification why funding should be utilized to plan for such mitigation.

The project area is just under 2.5 miles from the casino site, therefore making it a primary bicycling route to/from the casino. With the Valley Bike Electric Bicycle station at MGM casino resort and a new station at the southerly end of this project in West Springfield, casino patrons will have more travel options. Improvements under this project will support the TDM strategies for the casino and help lead people by bicycle safely to the new infrastructure surrounding the casino.

7. INTERNAL CONTROLS/ADMINISTRATION OF FUNDS

a) Please provide detail regarding the controls that will be used to ensure that funds will only be used to plan to address this transportation impact.

All funds received from this grant will be used exclusively on the contract between the Town and the consulting engineering based on the proposal included in Appendix F. Please note this engineering firm was selected for On-Call Engineering Services through a request for proposals by the Town. When awarded the grant, a copy of the final executed contract between the Town and the firm can be provided to the Gaming Commission as well as a copy of the purchase order documenting the use of the grant and Town funds used on the project. The funds will be retained in a grant account, pursuant to G.L. c.44, section 53A, and could only be expended for the purposes stated herein and in the grant.

b) Will any non-governmental entity receive funds? If so, please describe. If non-governmental entities will receive any funds, please describe what reporting will be required and how the applicant will remedy any misuse of funds.

No. All funds will be received by the Town of West Springfield. Expenditure of the funds will be by contract between the Town of West Springfield and the engineering consultant. Invoices will need to document expenditures on the project.

***No Community is eligible for more than one
Transportation Regional Planning Incentive Award.***

8. CERTIFICATION BY MUNICIPALITY/GOVERNMENTAL ENTITY

On behalf of the aforementioned municipality/governmental entity I hereby certify that the funds that are requested in this application will be used solely for the purposes articulated in this Application.



Date: 2/1/2021

**Signature of Responsible Municipal
Official/Governmental Entity**

William C. Reichelt

(print name)

Mayor

Title:

APPENDIX A

PROJECT AREA MAP



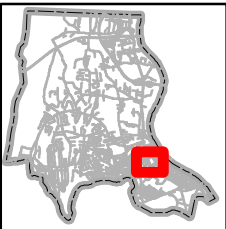
West Springfield

ELM STREET
PROJECT AREA
WITH PROPOSED
EXPANSION



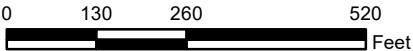
Legend

Streets Centerline	Buildings
— Paved	— Deck or Porch
— Unpaved	— Garage (Detached)
Major Roads	— Residential
— Local Roads	— Commercial
— State Highway	— Industrial
— Interstate Highway	— Demolished
— Easements	— Proposed
Right of Way	— Parcels
— Public	— New Lot Line
— Private	— Line Removed
— Railroad	— Pavement Edges
— Paper Street	— Pavement
— Old Lot Lines	— Wetland
— Swimming Pools	— Streams
	— Rivers



Planimetric & Topographic Features were derived from aerial photography taken on March 30th, 1998 and April 3, 2010. These features meet ASPRS Standards for 1" = 40' Class 1 map accuracy. All maps are projected to the Stateplane grid coordinate system, Zone 4151, Datum NAD83 & Units feet.

This data should not be used for legal description or conveyance purposes.



1 inch = 277.75 feet

Town of West Springfield, MA, GIS

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APPENDIX B

EXCERPTS FROM COBURN SCHOOL STUDY

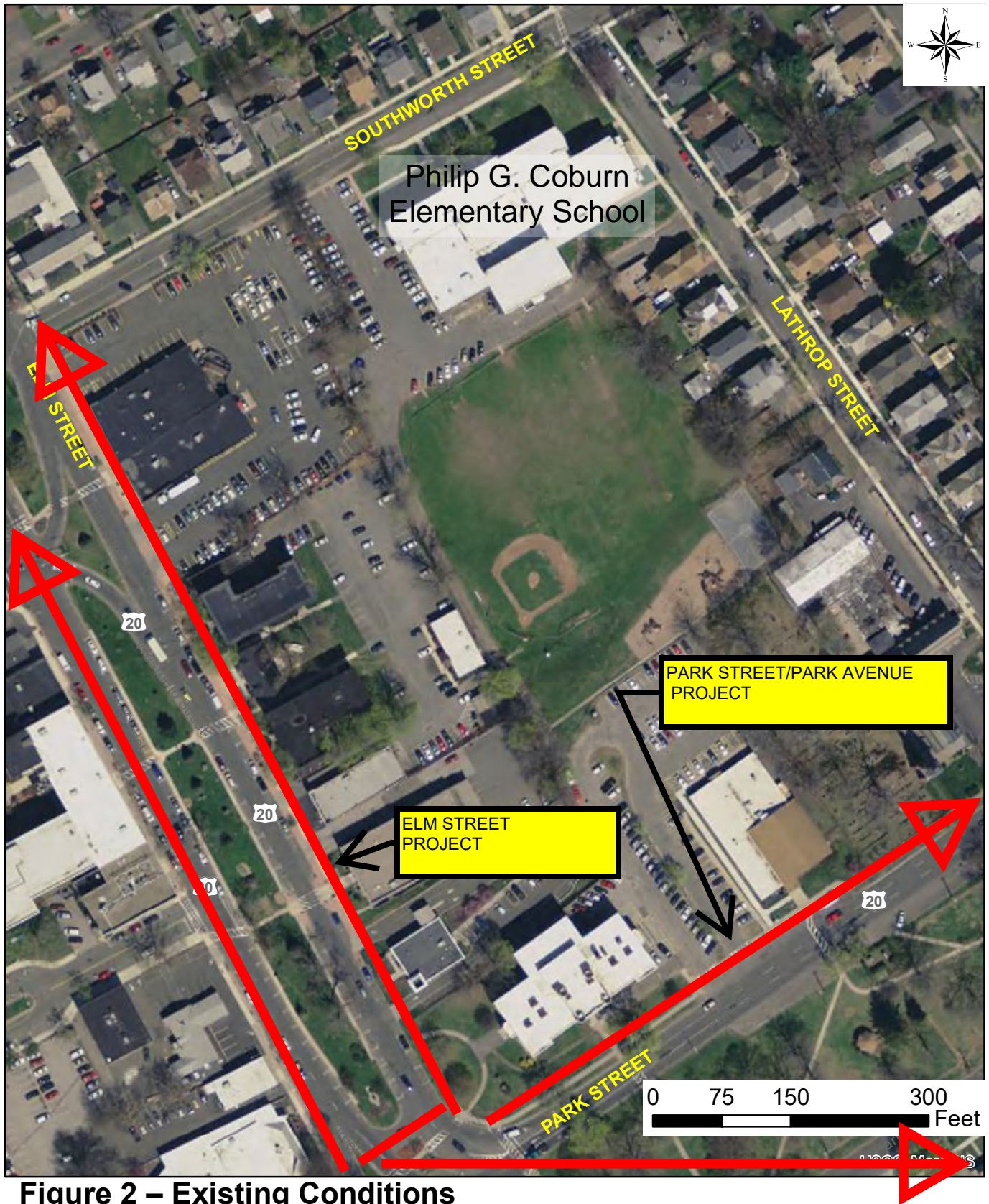


Figure 2 – Existing Conditions
Philip G. Coburn Elementary School
West Springfield, MA

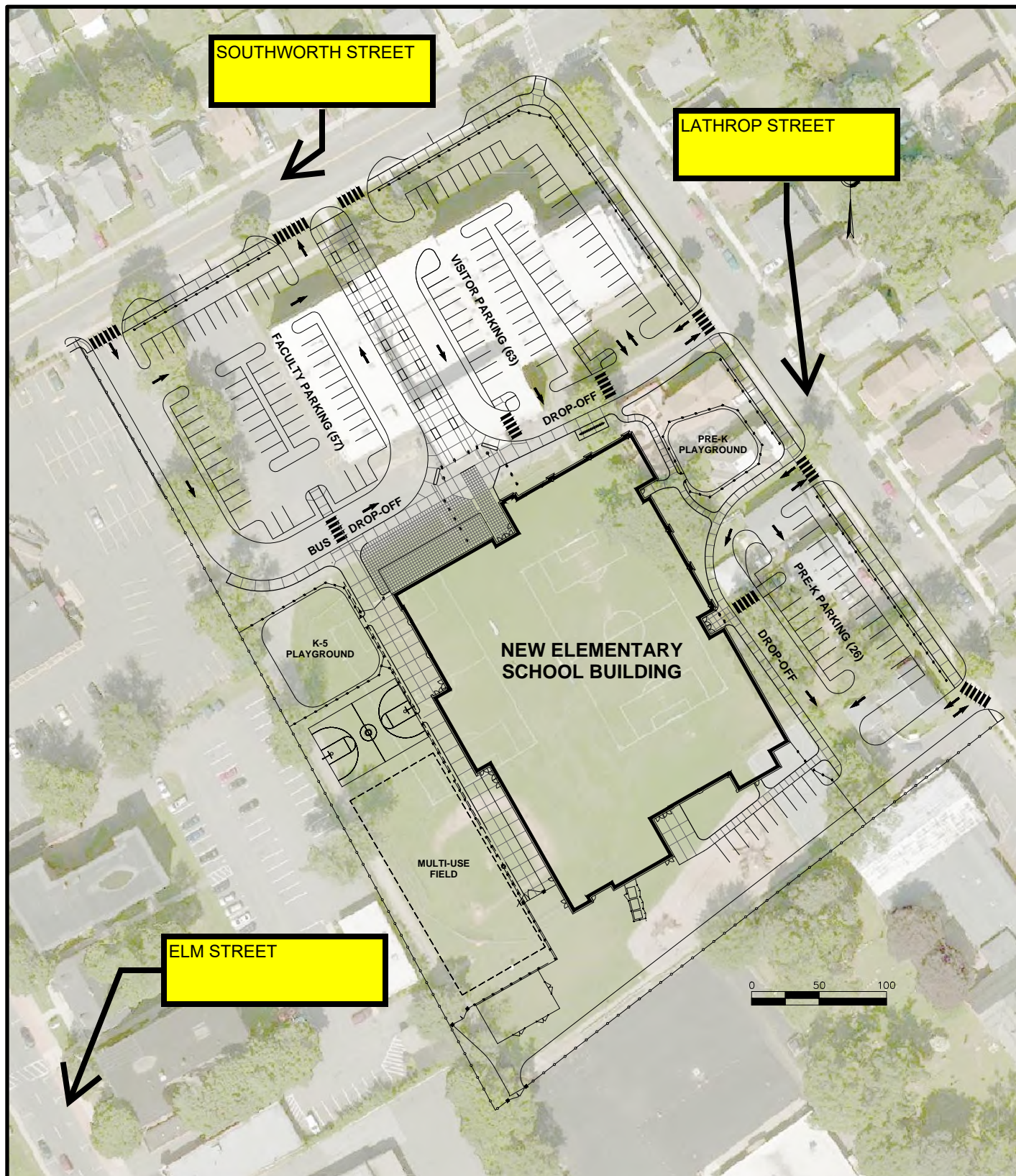
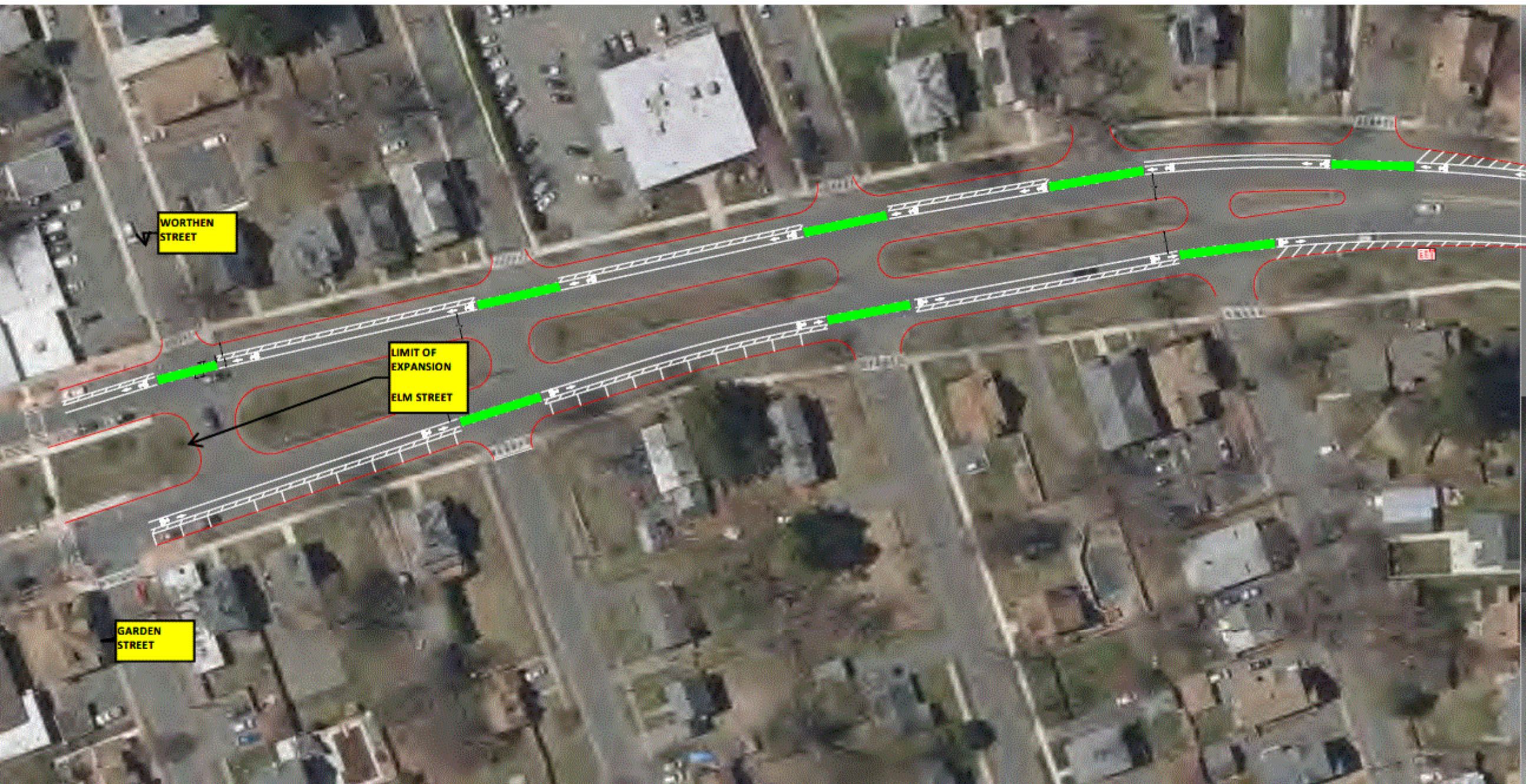


Figure 3 – Proposed Site Plan
Philip G. Coburn Elementary School
West Springfield, MA

APPENDIX C

PLAN EXCERPT FROM BIKE LANE DESIGN



WORTHEN STREET

LIMIT OF EXPANSION
ELM STREET

GARDEN STREET

STOP

APPENDIX D

BUSINESSES IN THE PROJECT AREA



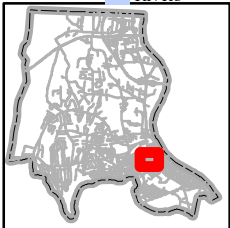
West Springfield

ELM STREET DOWNTOWN BUSINESSES



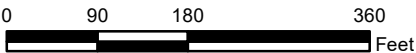
Legend

- | | |
|----------------------|---------------------|
| Streets Centerline | Buildings |
| — Paved | ■ Deck or Porch |
| - - Unpaved | ■ Garage (Detached) |
| Major Roads | ■ Residential |
| — Local Roads | ■ Commercial |
| — State Highway | ■ Industrial |
| — Interstate Highway | ■ Demolished |
| — Easements | ■ Proposed |
| Right of Way | ■ Parcels |
| — Public | — New Lot Line |
| — Private | — Line Removed |
| — Railroad | — Pavement |
| — Paper Street | — Wetland |
| — Old Lot Lines | — Streams |
| — Swimming Pools | — Rivers |



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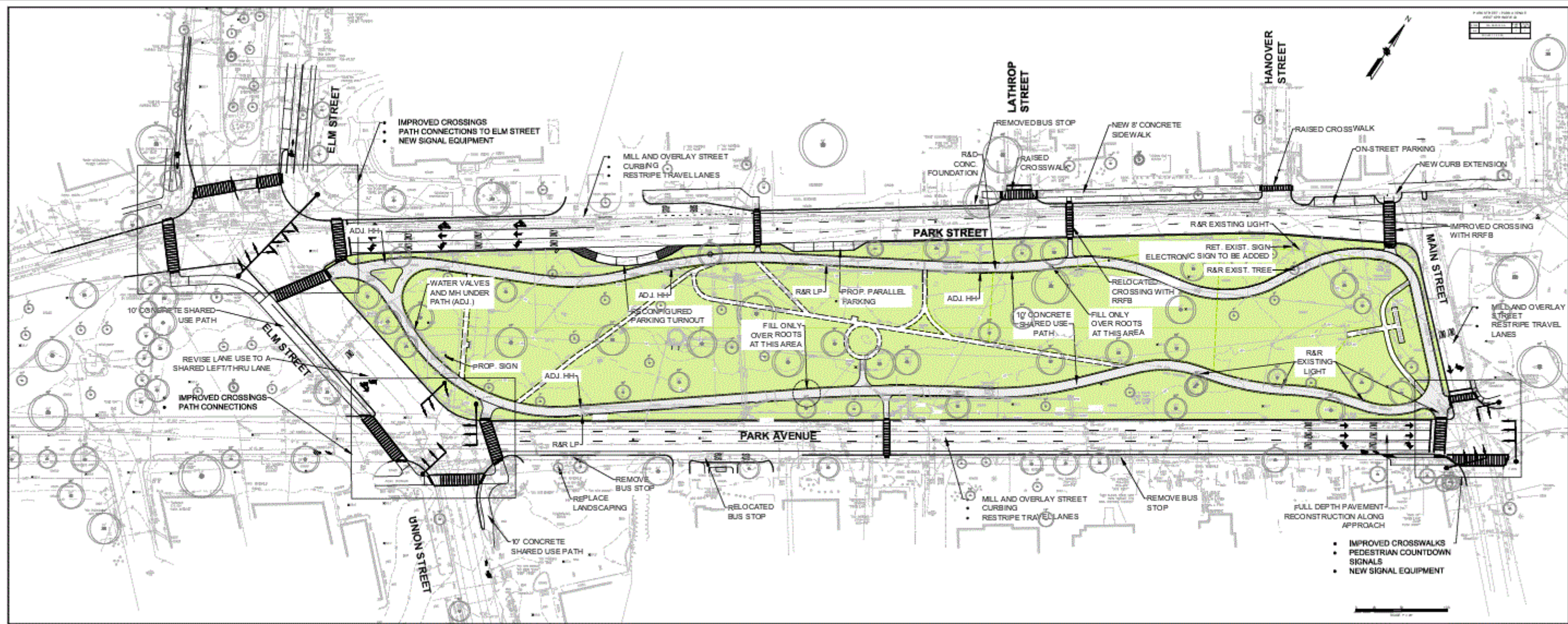
1 inch = 190.42183 feet

Town of West Springfield, MA, GIS

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APPENDIX E

PARK AVENUE / PARK STREET RENDERING



APPENDIX F

CONSULTANT PROPOSAL



January 29, 2021

Ref: 81090.17

Mr. James Czach, P.E.
Town Engineer
Department of Public Works
Town of West Springfield
26 Central Street, Suite 17
West Springfield, MA 01089

Re: Transportation Engineering for Elm Street Corridor
Park Avenue to Worthen Street

Dear Mr. Czach,

The Town of West Springfield is embarking on an important initiative to rehabilitate and improve a section of Elm Street (Route 20) from Park Avenue to Worthen Street. This project is approximately 1,300-linear feet and is an important connection between the intersection of Park Street/ Park Avenue (to be constructed in the summer 2021), Westfield Street (Route 20) and Southworth Street (access to Coburn School currently under construction).

The goal of this project is to modify and advance the preliminary design previously prepared by another engineering firm to accommodate features that meet the ever changing needs of users and business owners. The new plan will review options for the construction of a multi-use shared use path, drainage improvements between Westfield Street and Southworth Street, sidewalk improvements to accommodate outside dining and other business uses, and signal improvements at Westfield Street all while maintaining (or adding) as much on-street parking as possible. The project will transition into a design that is already completed for the Park Street/ Park Avenue intersection improvement project, prepared by another firm. In addition, the project will transition to the future restriping of Elm Street north of Southworth Street, which is proposed by the Town in the near future. VHB designed Westfield Street (Route 20) from Elm Street to the Chestnut Street, and we are working with the local planning agency now to assess Route 20 west with MassDOT, so we have knowledge of the area and the needs of stakeholders.

Our Springfield office will be responsible for managing and delivering to you a timely and cost-effective product customized to your needs. With the resources of 450 professional, technical, and support personnel from our Springfield, Worcester, Watertown, and Boston offices, we offer the professional services of a large multifaceted firm combined with the knowledge and personality of a local office.

Engineers | Scientists | Planners | Designers

One Federal Street
Building 103-3N
Springfield, Massachusetts 01105
P 413.747.7113
F 413.747.0916



Extensive, Local Project Experience

VHB has been partnering with the Town of West Springfield for almost 20-years. Our project work includes Route 20 (Westfield Street), Amostown Road Sidewalk Improvement Project, Roundabout Feasibility Studies, Peer Review Services, Pavement Management, and other projects that navigated MassDOT design processes. Through these projects, we have developed a working knowledge of the Town, its residents, and staff—experience that will benefit the Town on the Elm Street project.

A Strong Project Management Team

We have put in place a strong project management structure to assure the coordination of team members, assignment of staff, and prompt response to the Town. As Director of Municipal Services and Principal at VHB, it is my responsibility to make available appropriate resources to the team to enable them to complete the project within the budget and on schedule. I was also involved with the Route 20 (Westfield Street) design. To respond to the goals and objectives of the Town, VHB has assigned **Van Kacoyannakis, PE, IMSA II**, as Project Manager. Van is an experienced manager who has worked with the Town and many other Western Massachusetts municipalities on a variety of projects. He brings to this team an understanding of technical issues necessary to meet the Town's objectives within the project schedule and budget. **Christine Champeau, PE** will act as the lead Highway Designer. Christine is VHB's Assistant Chief Engineer and will be tasked with completing the highway design with the VHB project team. These three bring almost 75-years of combined and extensive experience in a variety of designs including MassDOT design that include highway, traffic and complete streets engineering that implement healthy transportation solutions. These three will be assigned to the project for the duration and will see it through to the end. Supporting them will be a team of experienced professionals working out of the VHB's Springfield and Worcester offices. Resumes and a team organization chart can be provided for the remainder of the team upon request.

Why Choose VHB?

VHB has the ability and experience required to effectively manage and design this project and we look forward to the technical challenges it will involve. VHB brings an extensive amount of experience have worked on similar projects with similar constraints and we also have team members who are bicycle instructors that are actively part of various national bicycle committees. We also know the Town, we understand the project and potential constraints, and we bring unmatched enthusiasm and commitment to improving this section of Elm Street. Finally, we also have an on-call engineering contract with the Town and can hit the ground running if selected to advance this project.



Scope Outline

The following provides a brief outline for our approach, scope, and fee. VHB would be pleased to provide a more detailed scope and fee for the Town's review, but we understand that this letter is being used to pursue funding through a grant application and it could take some time to confirm if funding is available. It is noted that VHB will be advancing Task 1 with the Town through an Agreement over the next couple of weeks, therefore, while Task 1 is summarized below we have deducted that fee from the overall fee or grant request for final engineering. VHB understands that a significant amount of design has occurred already to date, so our approach will be to use as much information as possible and advance the design quickly to a final engineering phase. The following scope assumes a review through the Town only, meaning no MassDOT or other involvement. At the end of this letter there is an overall summary of the fee. It noted that we have included an allowance for updates to the survey base plan (if needed) and for right-of-way coordination where a Professional Land Surveyor (PLS) might be needed (such as filing of easements to the registry of deeds). VHB plans to retain the previous surveyor for this work.

Project Approach, Scope and Fee

VHB will work with the Town to investigate various roadway cross sections that accommodate all modes of transportation. This includes reviewing the feasibility of bicycle lanes, shared use paths, enhance crosswalks, traffic calming techniques, handicap accessible sidewalks and wheelchair ramps, on-street parking, and streetscape/ hardscape enhancements. In addition, we will take into consideration businesses needs through outreach and do our best to minimize impacts to adjacent properties (this minimizing right-of-way needs). We will also review overhead and underground utilities locations to lessen those impacts, while preparing a design that is cost effective and meeting the needs of key stakeholders.

Task 1: Project Development - \$ 31,500

As noted above in the Scope Outline section, this task is being advanced by the Town now.

Project Development – VHB will develop conceptual design plans on the surveyed base plan that can be used for public outreach and coordination with key stakeholders. VHB understands that this corridor must meet the needs of all modes of transportation. VHB will develop this plan in a manner that supports bicycles, pedestrians, vehicles, transit users, and most importantly business needs (sidewalk space, on-street parking, pedestrian connectivity, etc.). We will develop typical sections and discuss different scenarios with the Town in selecting a viable or preferred plan. This will build on the visioning recently completed by the Town and the plans prepared by others.

Design Memorandum – VHB will prepare a design memorandum that discusses items such as alternative analysis, traffic volumes, and transportation modes. This memorandum will build off the previous data collected and traffic assessments. No new traffic counts or pavement data is anticipated to be needed or collected. The goal is not to recreate but reuse data that is suitable. Topics for discussion include operations assessment at the Westfield Street (Route 20) signal, corridor and intersection safety concerns, on-street parking impacts, and a description of the alternatives reviewed.



Environmental (Permitting) – It is anticipated that environmental permitting will not be needed.

Order of Magnitude Cost Estimate – VHB will prepare an order of magnitude construction cost estimate for the Town to budget the project and seek funding for construction. This estimate will not be prepared to a MassDOT 25% design format but will incorporate major items and contingencies and build off of previous estimates provided by the Town. The estimate will be updated and prepared to a MassDOT itemized format during the Final Engineering phase below.

Public Outreach and Town Coordination – The intent of this task is to conduct outreach for the project to obtain input and feedback from interested citizens, local and regional groups, and elected officials to maintain a strong support for the project moving forward. VHB will coordinate with the Town two public outreach meetings but will be available to coordinate additional meetings as needed with the Town or individual business/ property owners.

Task 2: Final Engineering - \$ 84,000

Upon the approval of the plan prepared as part of the Project Development phase above, VHB will update the plans to address comments and then advance to the Final Engineering phase so the Town can coordinate the bidding and construction process. During the preparation of this submission, VHB will advise the Town of any new constraints or design issues that need to be coordinated with DPW, property owners, or utility companies. This will be coordinated during this design phase and addressed prior to completing the final engineering phase. A pavement design will be developed using previous work by the previous engineer, no new pavement testing will be conducted. A cursory review of the existing drainage system will be included in this task from Westfield Road northerly Southworth Street. We have carried additional budget for the project surveyor to collect additional data if needed for the drainage work or to extend the base plan north to match the Town restriping project.

The design memorandum previously prepared will be updated to reflect the final design, so that the Town has documentation of the improvements to be constructed. This design will use the Town Design Standards and the MassDOT Design Guidebook and other associated guidelines such as MUTCD or other. Coordination with the Town will occur on any conflicts of design requirements.

VHB will provide the Town with two submissions under this task: 1. a draft set of final engineering plans that can be reviewed and used for discussions with property owners, utility companies, or others as need; and 2. a final set of engineering plans addressing comments from the submission above and also including specifications, construction cost estimate, geotechnical information for signal mast arms, and other relevant information for bidding the project. It is anticipated that the second submission will be provided to the Town for review and then comments will be addressed under the bidding task below where construction documents/ plans and bid tabs will be prepared. Budget for geotechnical evaluations for the signal mast arms are summarized below as an expense and not included in the fee for this task. The budget allows for VHB to retain a driller for this field work. VHB's coordination with the driller is included in this task.



Task 3: Right-of-Entries and Easements - \$ 18,000

In discussions with the Town, the goal will be to minimize property impacts. Where temporary easements are needed, VHB will work with the Town to prepare rights-of-entries (ROE) to complete the work rather than temporary easement plans. VHB will prepare ROE for up to 15 properties. In addition, we will prepare up to five permanent easements in coordination with the previous surveyor. Permanent easements could be realized in areas where the roadway layout is constrained. The right-of-way needs will be coordinated closely with the Town during each design phase above. VHB's intent is to retain the documented surveyor for the project and coordinate with them since they are the PLS on record for the survey that has been prepared to date. Until the new design can be developed, and additional outreach with abutters, we have carried an allowance for this coordination in our expenses.

Task 4: Bid Documents and Bid Coordination - \$ 15,000

VHB will coordinate with the Town any final revisions associated with the review of the Final Engineering Plans noted above and as part of our second final design submission. Bid tabs will also be prepared as part of this task. Budget has been allocated to allow VHB to address comments during the bidding process. We will also assist the Town in the review of bids. Construction phase services, including the review of shop drawings, etc. are not included as part of this fee. This task also anticipates that the Town will prepare the final bid package and will facilitate the advertisement of the project and distribute plans (assumed to be electronically and not printed hard copies by VHB).

Fee Summary and Schedule

Fee Summary - The following summarizes the fee for this effort, pulling the budgets allocated above into this table and then adding expenses and other services needed to complete the design including geotechnical and survey services that were not included above.

Task	Description	Fee
Task 1:	Project Development – Town Advancing, Fee: \$31,500	\$ 0
Task 2:	Final Engineering	\$ 84,000
Task 3:	Right-of-Entries and Easements	\$ 18,000
Task 4:	Bid Documents and Bid Coordination	\$ 15,000
	Geotechnical Services (Driller – Mast Arm Foundations)	\$ 6,000
	Surveyor Services PLS (Additional Survey and Right-of-Way)	\$ 15,000
	VHB Expenses (Printing, Mileage, and Postage)	\$ 1,000
TOTAL FEE		\$139,000



Schedule – VHB will work with the Town to establish a schedule for the work to be performed. Depending on how quickly coordination can occur with the Town, VHB can complete this design is roughly 6 to 8 months. The schedule is based on weather conditions, the scheduling of meetings with the Town, or the public outreach meetings, and timely reviews from the Town.

We are ready to apply our local understanding, experience gained on similar projects across the Commonwealth, and deep commitment to delivering a successful project on time and on budget. As you review this letter, should you have any questions or require additional information, please contact me or Van Kacoyannakis at vkacoyannakis@vhb.com or 413.241.5877. Thank you for the opportunity to submit this scope outline for your review. We look forward to continuing to serve the Town and its residents.

Sincerely,

VHB

A handwritten signature in blue ink, appearing to read "M. Chase".

Matthew J. Chase, PE, PTOE
Principal and Director of Municipal Services.

A handwritten signature in blue ink, appearing to read "Van Kacoyannakis".

Van Kacoyannakis, PE, IMSA II
Project Manager

APPENDIX G

TRAFFIC COUNTING EQUIPMENT QUOTE



JAMAR

Technologies, Inc.

*You count
with us!*

Telephone 1-215-361-2244
Toll Free 1-800-776-0940
Fax 1-215-361-2267
E-Mail sales@jamartech.com
Web Site www.jamartech.com

Price Schedule: Black Cat II Radar Recorder

Black Cat II Radar Recorder with Bluetooth and Lithium Battery		
Black Cat II Radar Recorder Kit Includes Mounting Kit, (2) 12V 12AH lithium batteries & battery charger	BCII-BT	3900.00
Black Cat II Radar Recorder Kit - with STARnext V1 (2 Seat) Includes STARnext software (2 seat), Mounting Kit, (2) 12V 12AH lithium batteries, battery charger, and USB cable	BCII-BT-S	4300.00
Black Cat II Radar Recorder Kit - with Laptop Includes Laptop Kit, Mounting Kit, (2) 12V 12AH lithium batteries, battery charger, and USB download cable (Software not included)	BCII-BT-C	4300.00
Black Cat II Radar Recorder Kit - with Laptop and STARnext V1 (2 Seat) Inc. STARnext(2 seat), Laptop Kit, Mounting Kit, (2)12V 12AH lithium batteries, charger & USB cable	BCII-BT-SC	4700.00
Black Cat II Radar Recorder with Bluetooth and Modem		
Black Cat II Radar Recorder Kit - with Modem Includes Mounting Kit, (2) 12V 15AH Lead Acid batteries, battery charger, manual, internal modem*, cellular antenna and solar panel kit	BCII-BT-M	4995.00
Black Cat II Radar Recorder Kit - with Modem & STARnext V1 (2 Seat) Includes STARnext software (2 seat), Mounting Kit, (2) 12V 15AH Lead Acid batteries, battery charger, manual, USB download cable, internal modem*, cellular antenna and solar panel kit	BCII-BT-M-S	5395.00
Black Cat II Radar Recorder Kit - with Modem & Laptop Includes Mounting Kit, (2) 12V 15AH Lead Acid batteries, battery charger, manual, USB download cable, internal modem*, cellular antenna & solar panel kit (Software not included)	BCII-BT-M-C	5395.00
Black Cat II Radar Recorder Kit - with Modem, Laptop & STARnext V1 (2 Seat) Includes STARnext software (2 seat), Mounting Kit, (2)12V 15AH Lead Acid batteries, battery charger, manual, USB download cable, internal modem*, cellular antenna and solar panel kit	BCII-BT-M-SC	5795.00
Kits and Accessories		
Radar Recorder Mounting Kit - V2 (comprised of the following)	RRII-M-K	100.00
(1) BCII Pole Mounting Bracket	RRII-PMB	39.00
(1) Radar Clamp Kit	BR-4001	12.00
(3) EMDKAY Locks	J-0718	(@15.00) 45.00
(1) Chain 6 ft.	J-5515	12.00
Spare BCII Pole Mounting Bracket Kit (BCII Pole Mounting Bracket & Clamp Kit)	RRII-PMB-K	50.00
Radar Recorder Laptop Kit (Software not included)	DL-RRBC-K1	695.00
Laptop	DL-224-9196	595.00
Laptop Carrying Case	DL-A3081403	40.00
USB Flash Drive	JTAP-0001	25.00
USB Download Cable	J-8874	15.00
Cellular Antenna	BCII-ANT-3G	59.00
Bluetooth Computer Adapter	BTD-V201	25.00
Battery, 12V, 15AH Lead Acid	J-5701	79.00
Battery, 12V, 12AH Lithium	J-6000	199.00
NOCO Genius G2 6V/12V Lithium/Lead Acid Battery Charger	NOCO-G2	59.00
NOCO Genius G4 6V/12V Lithium/Lead Acid Gang Charger w/ 4 battery clamp connectors	NOCO-G4-K	259.00
Service Contracts		
Optional Extended Warranty 2 additional years (for a total of 3)**	*1000	199.00

FOB Hatfield, PA
March 2020 US

*Requires activated SIM card on cellular plan, \$199/6 months or \$299/year
**Does not cover vandalism or abuse

All Prices in US Dollars
Subject to Change Without Notice

Quality Hardware • Quality Software • Quality Service

APPENDIX H

ROUTE 20 CORRIDOR STUDY EXCERPTS



Route 20 Corridor Study



OFFICE COPY
DO NOT DAMAGE
ALTER OR REMOVE

June 1999



Pioneer Valley Planning Commission
26 Central Street
West Springfield, MA 01089

Route 20 Corridor Study

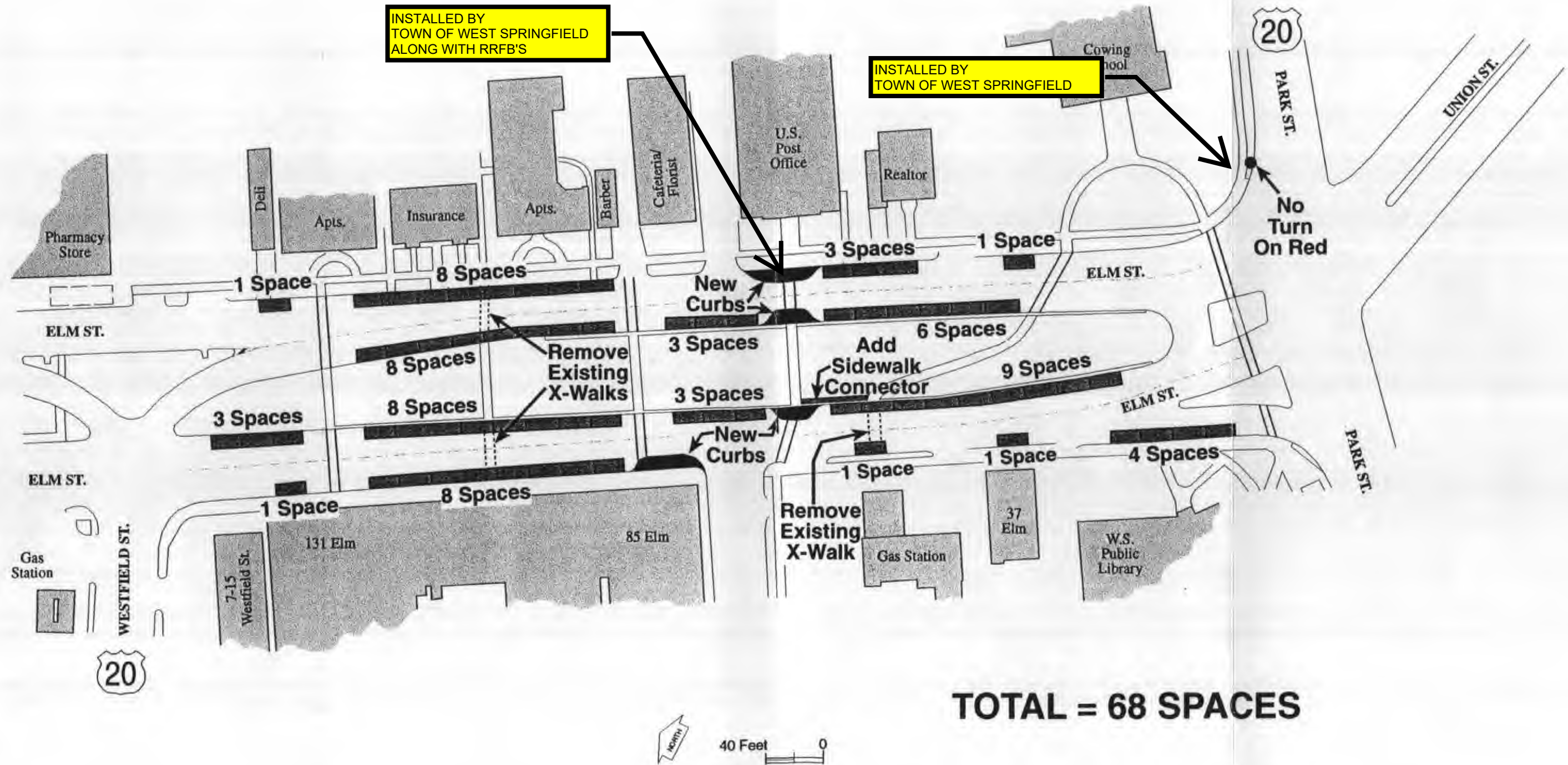
June 1999

**Prepared for:
Town of West Springfield
City of Westfield**

**Prepared by:
Pioneer Valley Planning Commission
26 Central Street
West Springfield, MA 01089**

**Prepared in cooperation with the Massachusetts Highway Department and the U.S. Department of Transportation
Federal Highway Administration and the Federal Transportation Administration.**

Route 20 Corridor Study WEST SPRINGFIELD ELM STREET PROPOSED IMPROVEMENTS



D. Implementation

MassHighway, the Town of West Springfield, and the City of Westfield all have jurisdictional authority over various section of the Route 20 corridor. Table 3 identifies the responsible party for the implementation of the proposed improvement recommendations of the study.

Table 3 Implementation Plan

Recommendation	Location	Implementing Agency
Repainting of pavement markings	Rte 20 Corridor	Based on jurisdiction.
Elm Street improvements	West Springfield	Town of West Springfield
Park Street/Elm Street intersection improvements	West Springfield	Town of West Springfield
"No Parking" signs and construction of parking	West Springfield	Town of West Springfield
Install "STOP" sign	Westgate Plaza	Westgate Plaza
Install curve warning signs near Sibley Avenue	West Springfield	MassHighway
Removal of "No U-turn" restriction at Rte. 20	Westfield	MassHighway
Improvement and maintenance of roadway signs.	Rte 20 Corridor	Based on jurisdiction.
Relocation of pedestrian crossing signal	West Springfield	MassHighway
Raised median to prohibit movements from Elmdale St. to Main St.	West Springfield	Town of West Springfield
Improvements to Rte. 20 viaduct and bridge between Union St. & Little River Rd.	Westfield	MassHighway
Traffic signal maintenance program	Rte. 20 Corridor	Based on jurisdiction.
Traffic volume monitoring program	Rte. 20 Corridor	PVPC
Shoulder/sidewalk construction (where feasible)	Rte. 20 Corridor	Based on jurisdiction.
Street light installation	Rte. 20 Corridor	Respective Community
Two-way left turn lane along Rte. 20 from North Boulevard to King's Highway	West Springfield	Town of West Springfield
Closed loop traffic signal system on Rte. 20 from Union St. to Mainline Dr.	Westfield	MassHighway
Traffic impact study for reuse of H.B. Smith site.	Westfield	City of Westfield
Feasibility study on replacement of the Route 5/20 rotary w/traffic signals	West Springfield	MassHighway
Land use recommendations	Rte. 20 Corridor	Respective Community
Increased marketing of Rte. Red 10	Rte. 20 Corridor	PVTA
Internal transit service for Westfield Shops and Westgate Center	Westfield	Shopping Centers, PVTA
Red 10/Green 02 transfers	Springfield	PVTA
Transit safety recommendations	Rte. 20 Corridor	PVTA
Bus stop recommendations	Rte. 20 Corridor	PVTA
Transit service for Meadow St., Mechanic St., Montgomery St. and Union St.	Westfield	PVTA
Transportation Center at Park Square	Westfield	City of Westfield
Limited Stop/Express Bus Service along Rte. 20	Rte. 20 Corridor	City of Westfield

APPENDIX I

PVPC WESTFIELD STREET AT ELM STREET STUDY



Catalyst for Regional Progress

PVPC

Timothy W. Brennan Executive Director

July 20, 2016

Mayor William Reichelt
26 Central Street
West Springfield, MA 01104

Dear Mayor Reichelt:

The Pioneer Valley Planning Commission (PVPC) has completed its work on the Local Technical Assistance (LTA) request for the Town of West Springfield at the intersection of Elm Street and Westfield Street (Route 20). This request consisted of the PVPC conducting traffic counting and analysis of the intersection to improve pedestrian safety and crossings at this location. The following sections present more information on the results of this analysis.

Existing Conditions

Elm Street intersects with Westfield Street (Route 20) to form a signalized three way intersection. Due to the boulevard style of Elm Street, northbound through moving traffic does not operate under traffic signal control at this intersection. Left turning traffic from Westfield Street yields to northbound through traffic upon completion of their turn to merge with northbound traffic on Elm Street.

Sidewalks and street lights are located on both sides of Elm Street and Westfield Street. Pavement markings in fair condition are present on all approaches to the intersection. Crosswalks are provided across Elm Street north of Westfield Street and Westfield Street west of Elm Street. No crosswalk is provided across Elm Street immediately south of the intersection. Wheelchair ramps with inverted tactile domes are located at every crosswalk. No pedestrian signals are provided for the intersection.

The eastbound approach of Westfield Street is marked as a single travel lane but vehicles were observed to form two lanes when queued for a red light. A right turn arrow allows right turning vehicles to operate from Westfield Street during the phase for left turns from Elm Street in the northbound direction. Right turns on red are currently permitted from Westfield Street.

Elm Street provides two unmarked travel lanes in the southbound direction. Vehicles were observed to form a third travel lane to turn right onto Westfield Street. An older phasing diagram (date unknown) for the intersection does depict an exclusive right turn lane for this approach, however, no pavement markings or signs currently exist in the vicinity of the intersection. Right turns on red are permitted from the southbound approach of Elm Street. On-street parking is permitted in designated spaces on both sides of Elm Street.

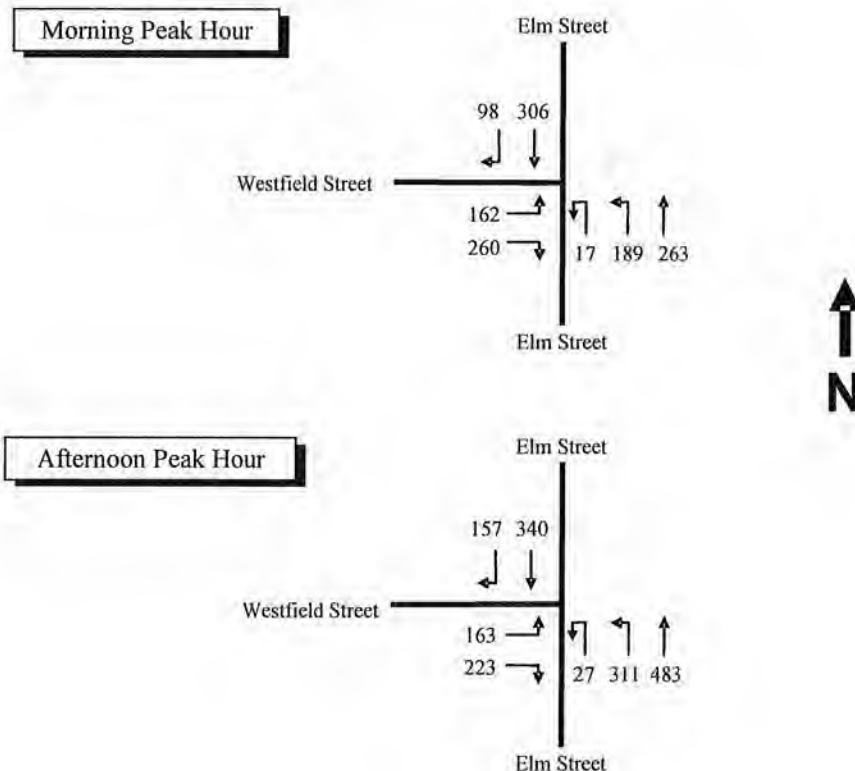
Pioneer Valley Transit Authority (PVTA) bus stops are located on each side of Elm Street and Westfield Street in the vicinity of the intersection. These bus stops are currently served by the Red 10 (Springfield to Westfield) and Purple 20 (Springfield to Holyoke) PVTA routes.

Safety

PVPC reviewed the most recent data available through the Massachusetts Department of Transportation (MassDOT) to determine crash experience at this intersection. MassDOT data identified a total of 12 crashes from 2011 – 2013. On closer inspection, three of these crashes were determined to not have occurred in the immediate vicinity of the intersection. Three crashes were angle collisions, three were side-swipes, two involved a vehicle striking a pedestrian, and one was a rear-end collision. Both pedestrian crashes resulted in a non fatal injury to the pedestrian. One occurred in February 2011 during the early evening as a result of a vehicle backing into a pedestrian. The second occurred in March 2012 during daylight hours when a vehicle travelling northbound on Elm Street struck a pedestrian.

Traffic Volume

Turning movement counts were conducted at the intersection by PVPC on May 10, 2016 from 7:00 AM to 9:00 AM and from 2:00 PM to 6:00 PM. The morning peak hour of traffic occurred between 8:00 AM and 9:00 AM and the evening peak hour of traffic occurred between 4:15 PM and 5:15 PM. Traffic volumes were observed to be relatively high with some congestion. A summary of the peak hours of traffic are provided below. A complete copy of the turning movement count is attached to this letter.



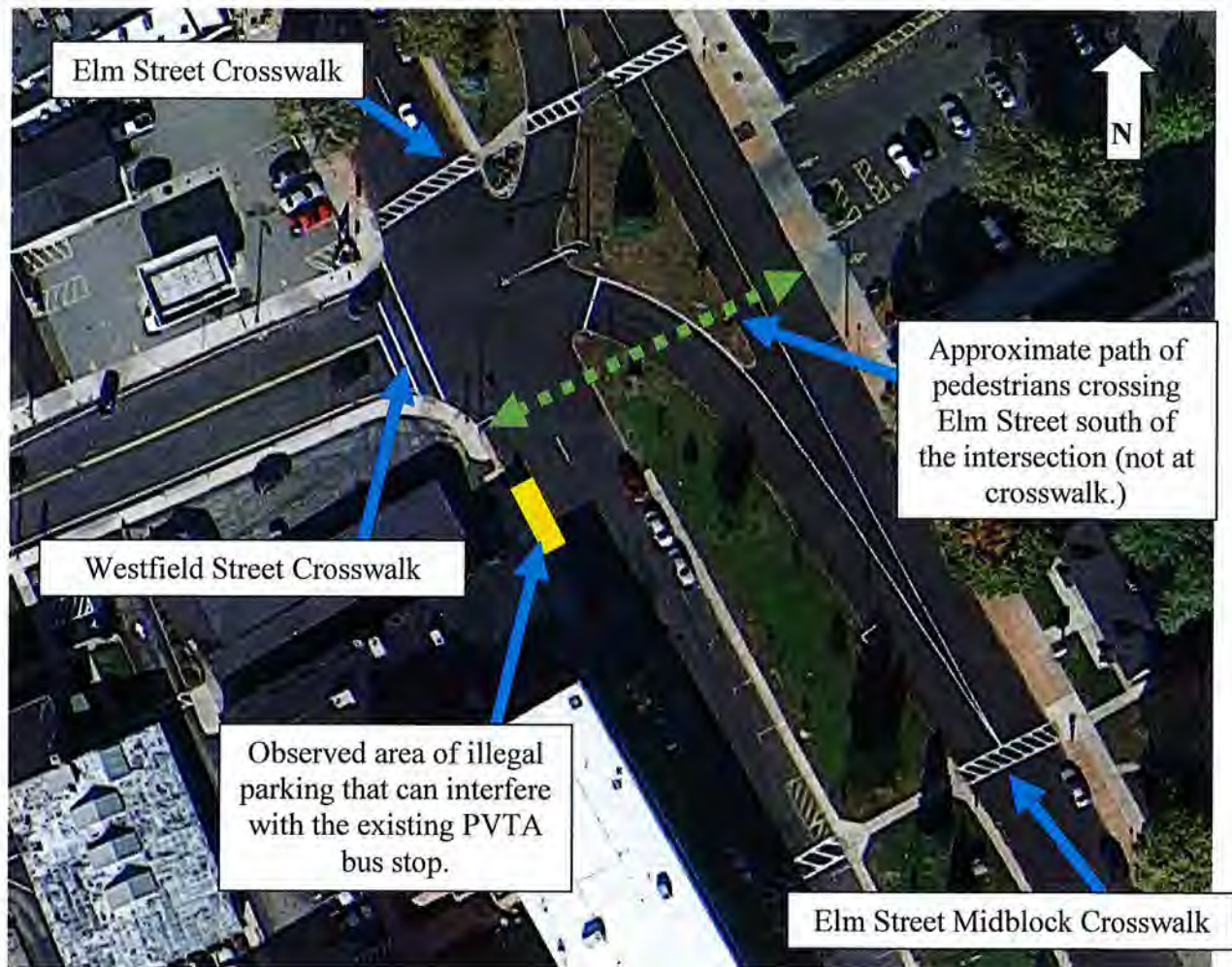
In addition to vehicular traffic, PVPC also recorded the level of pedestrian traffic in the vicinity of the intersection and at the mid-block crosswalk across Elm Street in the vicinity of the United Bank. This information is summarized in the following table.

Pedestrian Count AM Period	Elm Street Midblock Crosswalk Both Directions	Elm Street at Intersection from East to West	Elm Street at Intersection from West to East	Total Elm Street Pedestrians Intersection	Westfield Street at Intersection from North to South	Westfield Street at Intersection from South to North	Total Westfield Street Pedestrians
7:00	0	0	0	0	0	0	0
7:15	1	0	0	0	2	0	2
7:30	0	1	1	2	0	1	1
7:45	3	0	2	2	0	0	0
8:00	0	0	0	0	2	1	3
8:15	1	0	0	0	1	0	1
8:30	0	1	3	4	0	0	0
8:45	4	0	2	2	0	1	1
AM Total	9	2	8	10	5	3	8

Pedestrian Count PM Period	Elm Street Midblock Crosswalk Both Directions	Elm Street at Intersection from East to West	Elm Street at Intersection from West to East	Total Elm Street Pedestrians Intersection	Westfield Street at Intersection from North to South	Westfield Street at Intersection from South to North	Total Westfield Street Pedestrians
2:00	2	5	0	5	2	1	3
2:15	2	5	4	9	2	1	3
2:30	1	0	5	5	1	2	3
2:45	2	7	2	9	1	3	4
3:00	5	3	2	5	1	2	3
3:15	2	2	0	2	3	0	3
3:30	1	1	0	1	4	0	4
3:45	2	4	1	5	0	2	2
4:00	1	2	0	2	0	2	2
4:15	0	0	1	1	0	2	2
4:30	2	0	2	2	0	1	1
4:45	5	1	0	1	0	0	0
5:00	3	2	0	2	0	3	3
5:15	6	1	2	3	4	2	6
5:30	4	1	1	2	4	0	4
5:45	2	0	0	0	1	0	1
PM Total	40	34	20	54	23	21	44

Pedestrian activity was observed to be rather low on the day of the data collection. The weather and temperature on May 10th was sunny with temperatures in the upper 60s. Pedestrian activity was observed to be higher in the afternoon, particularly in the 2:45 PM – 3:00 PM interval when parents were observed to escort children from the nearby Coburn Elementary School.

A total of four pedestrians were observed to cross Elm Street south of the intersection and not utilize the marked crosswalks. This number rose to 27 during the afternoon hours. These totals are included in the summary table for the total number of pedestrians crossing Elm Street. Pedestrians use the green space on the center median and raised islands as refuge areas as an alternative to waiting for the appropriate traffic signal phase to cross Elm Street or walk 250 feet south of the intersection to the mid-block crosswalk. A figure of the crosswalk layout at the intersection is shown below.



Source: Google Maps

Level of Service

A Level of Service Analysis (LOS) was completed using traffic counts and field timings of the existing traffic signal phases conducted by PVPC staff. The traffic control signal permit dated 10/17/1967 indicated that the intersection was controlled by an actuated and coordinated traffic signal. During a field visit, PVPC staff observed a three phase traffic signal operation that varied from 75 to 100 seconds cycle length. The timings were not consistent with the information on the traffic signal permit. It is unclear if this intersection is currently coordinated with the intersection of Park Street with Elm Street. The LOS analysis is based solely off of the observed field timings which only reflect the operations present at that time of day.

The Town of West Springfield was interested in evaluating the intersection conditions and comparing traffic delays during existing conditions with traffic delays that could be realized as a result of improvements proposed in a concept developed by the West Springfield Engineering Department. These improvements include:

- Realigning and restriping of the existing crosswalk on the northern side of the intersection.
- Installing a "NO RIGHT TURN ON RED" Sign on Elm Street Southbound and Westfield Street Eastbound.
- Eliminating the Right Turn Green Arrow for the Westfield Eastbound approach to eliminate conflict with U-Turns from Elm Street, or eliminate the northbound U-Turn.
- Eliminating the Elm Street mid-block crosswalk currently located 250 feet south of intersection and relocating it on the southern side of the intersection.

Based on analysis results, the intersection of Elm Street with Westfield Street currently operates at level LOS "B" during the morning peak hour and at LOS "C" during the evening peak hour. The following table summarizes the existing levels of service for all three intersection approaches during both AM and PM peak hours.

Existing Level of Service

Approach	Movement	AM Peak Hour		PM Peak Hour	
		Delay *	LOS **	Delay *	LOS **
Elm Street Southbound	Through	20.4	C	22.5	C
	Right	5.1	A	5.5	A
Elm Street Northbound	Left	21.1	C	35.0	D
Westfield Street Eastbound	Left	48.2	D	41.6	D
	Right	4.6	A	4.1	A

Cycle Length: 83

Source: PVPC

* Delay in seconds ** Level of Service

Left turning traffic on the eastbound approach of Westfield Street and left turning traffic on the northbound approach of Elm Street were both calculated to operate at LOS "D" during the evening peak hour. This is considered acceptable for an urban area. The through movement from the southbound approach of Elm Street was calculated to operate at LOS "C". In general, delays were greater during the evening peak hour for Elm Street and less for Westfield Street reflecting the difference in traffic volumes between the two periods.

Proposed Scenario Analysis

The following two scenarios were developed to reflect the desired pedestrian accommodation improvements at this intersection:

Scenario 1: Restrict right turns on red using the existing traffic signal timing plan.

Scenario 2: Restrict right turns on red using an optimized traffic signal timing plan.

A LOS Analysis was conducted for each scenario and traffic delay comparisons are presented in the following tables. Restricting right turns on red resulted in an increase in delay for most intersection approaches. The only movement that experienced a minor improvement were left turns from the eastbound approach of Westfield Street.

Scenario 1

In scenario 1, right turns were restricted on the Elm Street southbound approach and the Westfield Street eastbound approach while continuing to use the existing traffic signal timing plan. The intersection was calculated to operate at level LOS "C" during the morning peak hour and at LOS "D" during the evening peak hour.

"No Turn On Red" Level of Service

Approach	Movement	AM Peak Hour		PM Peak Hour	
		Delay *	LOS **	Delay *	LOS **
Elm Street Southbound	Through	22.1	C	23.8	C
	Right	23.8	C	27.2	C
Elm Street Northbound	Left	39.3	D	65.5	E
Westfield Street Eastbound	Left	45.2	D	41.1	D
	Right	15.2	B	13.6	B

Cycle Length: 83

Source: PVPC

* Delay in seconds ** Level of Service

This scenario resulted in an increase in delay and caused the LOS for left turns from the northbound approach of Elm Street to drop to LOS "E." Delay was calculated to increase for every movement at the intersection indicating that vehicles queue and congestion will be negatively impacted without modification to the existing signal timing.

Scenario 2

Scenario 2 changes the traffic signal timing plan to optimize operations of the intersection during both morning and evening peak hours while also restricting right turns on red from Elm Street and Westfield Street. The intersection was calculated to operate at level LOS "C" during both morning and evening peak hours assuming modifications to the existing traffic signal timing plan.

Optimized "No Turn On Red" Level of Service

Approach	Movement	AM Peak Hour		PM Peak Hour	
		Delay *	LOS **	Delay *	LOS **
Elm Street Southbound	Through	22.0	C	26.1	C
	Right	23.8	C	33.1	C
Elm Street Northbound	Left	38.8	D	43.8	D
Westfield Street Eastbound	Left	48.5	D	43.6	D
	Right	14.5	B	10.6	B
Cycle Length: 76					

Source: PVPC

* Delay in seconds ** Level of Service

Scenario 2 results in an improvement to intersection LOS over Scenario 1. While delay remained larger than existing conditions, the overall impact was not as significant as Scenario 1. Further improvements to vehicle detection and lane assignments could result in more efficient intersection operations.

Recommendations

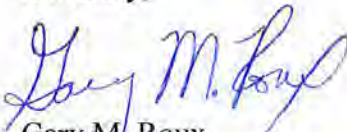
The following recommendations are proposed for the Town of West Springfield to reduce congestion and enhance safety at the intersection of Elm Street with Westfield Street.

- Installation of "No Turn of Red Signs" is recommended for the south bound approach of Elm Street and the eastbound approach of Westfield Street to improve pedestrian safety. This would require the implementation of a new traffic signal timing plan to minimize delay and congestion at the intersection.
- In the long term, it is recommended the traffic signal be upgraded to conform to the current standards of the Manual on Uniform Traffic Control Devices (MUTCD). Pedestrian crossing signals with countdown timers and push button actuation should be included as part of a future upgrade.
- Many pedestrians were observed to cross Elm Street south of the intersection despite the lack of a painted crosswalk. The Town of West Springfield should consider painting a crosswalk in this location to enhance pedestrian safety.
- Based on our limited traffic count, very few people crossed Elm Street at the existing mid-block crosswalk, 250 feet south of the intersection. Removal of this crosswalk does not appear to create a problem, however, pedestrians may continue to cross midblock in this area to reach parked cars and businesses in this area.
- The current level of U-Turns observed from the Elm Street northbound approach do not appear to conflict with right turning traffic from Westfield Street. The Town should consider keeping the existing right turn arrow and installing a sign to alert U-Turn drivers to yield to right turning traffic. A second option would be the installation of a sign to prohibit U-Turns from this approach.
- The Town should examine the existing lane width on Westfield Street to determine if separate left and right turn lanes can be designated for this approach.

- It is recommended that addition pavement markings be considered for left turning traffic off of Westfield Street prior to its merge onto Elm Street. The installation of in-pavement "YIELD" markings would clarify that the through movement on Elm Street has the right of way. The MUTCD recommends a solid row of white triangles to highlight the point at which traffic is expected to yield.
- In the short term, it is recommended that pavement markings on the southbound approach of Elm Street be repainted to clearly identify two travel lanes. The easternmost lane should be designated as a through traffic only lane and the western lane as a shared through/right turn lane. Additional white "gore area" pavement markings are also recommended in the area presently used by right turning vehicles to discourage vehicles from executing a right turn from this area. This will increase safety by reducing the potential for conflicts between vehicles and pedestrians attempting to cross Westfield Street. In the long term, the Town of West Springfield should determine if there is sufficient width and sight distance to paint an exclusive right turn lane on the southbound approach of Elm Street as part of any upgrade to the intersection.
- Vehicles were observed to briefly park illegally in the vicinity of the intersection for pick and drop off activity at the PVTa bus stops. This behavior has a negative impact on traffic flow and should be discouraged. This was most prominent in the vicinity of the bus stop by the Majestic Theater. Vehicles parked illegally in this area force the bus to stop closer to the intersection which restricts traffic flow. The approximate area of this illegal parking has been indicated on the figure on page 4.

The PVPC is pleased to have completed this analysis for the Town of West Springfield as part of the Local Technical Assistance Program. Please feel free to contact me if you have any questions.

Sincerely,


 Gary M. Roux
 Principal Planner

cc: Timothy Brennan, Executive Director, PVPC
 Robert J. Colson, Director of Public Works
 James Czach, P.E. Town Engineer

APPENDIX J

SURROUNDING COMMUNITY AGREEMENT EXCERPTS

SURROUNDING COMMUNITY AGREEMENT

This surrounding community agreement (this "Agreement") is entered into this ____ day of _____, 2014 (the "Effective Date") by and between Blue Tarp reDevelopment, LLC ("MGM"), a Massachusetts limited liability company, with an office address of 1441 Main Street, Suite 1137, Springfield, MA, owner and developer of the MGM Springfield project in Springfield, Massachusetts and West Springfield, Massachusetts (the "Community", the "Town" or "West Springfield"), a municipality in the Commonwealth of Massachusetts (MGM and the Community hereinafter collectively the "Parties" or individually a "Party").

RECITALS

WHEREAS MGM is an affiliate of MGM Resorts International (NYSE: MGM) ("MGM Resorts").

WHEREAS, the MGM Springfield project is a destination casino resort planned for downtown Springfield, Massachusetts expected to cost approximately \$800 million and include 1,000,000 square feet (the "Project"). When constructed, it is anticipated to be the largest private development in Western Massachusetts history. The Project is anticipated to have 250 hotel guest rooms, a 125,000 square foot casino, 54 market rate apartments, a 15-lane bowling alley, a 12-screen luxury movie theatre, an outdoor park and seasonal skating rink, and dozens of shops and restaurants, in addition to large open outdoor public spaces.

WHEREAS, the Project is anticipated to employ 2,000 construction workers and, upon completion, 3,000 permanent workers.

WHEREAS, MGM has submitted RFA-1 and RFA-2 applications under Chapter 23k (the "Gaming Act") to the Massachusetts Gaming Commission (the "Commission"), seeking approval to proceed with an application for issuance of the sole Western Massachusetts gaming license (the "Gaming License").

WHEREAS, the Gaming Act provides a mechanism by which communities, other than the host community, that are proximate to the Project and are expected to be significantly and adversely impacted by the Project, have an opportunity to mitigate such adverse impacts on their respective communities through designation as a "Surrounding Community".

WHEREAS, pursuant to 205 CMR 125.00 (the "Surrounding Community Regulation"), MGM has designated West Springfield as a Surrounding Community, thereby recognizing that the West Springfield will experience significant adverse impacts as a result of the Project...

AGREEMENT

NOW THEREFORE, for valuable consideration, the sufficiency and receipt of which are hereby acknowledged by the Parties, and in consideration of the mutual promises and covenants contained herein, the Parties agree as follows:

1. Upfront Payment of \$665,000 for a Community Grant plus Reimbursement of Consulting and Legal Fees. Within thirty (30) days of the Commission's award of the Gaming License to MGM, MGM shall pay to the Community Six Hundred and Sixty-Five Thousand Dollars (\$665,000.00), representing the design and permitting costs (but not the construction costs) for reconstruction of Memorial Avenue in West Springfield. In addition, within thirty (30) days of the effective date of this agreement, MGM shall reimburse the Town for the actual expenses incurred by the Town for the payment of any consultants or legal advisors, whether internal or external (collectively, its "Advisors" or "the Community's Advisors") providing services related to or in any way arising from the Community's review of the Project ("Project Review"), including without limitation participation in the arbitration proceeding giving rise to this agreement. MGM's payment for Project Review fees shall be reduced by the amount of any previous grants to the Town for this purpose.

2. Guaranteed Minimum Annual Payments. The Parties agree that, commencing with the opening of the Project to the public (i.e., the date on which MGM begins to collect revenue under the terms of the Gaming License) (the "Grand Opening") and for each year following the Grand Opening through the expiration of MGM's initial gaming license and any extensions thereof (the "Term"), MGM shall pay to the Community: (i) Three Hundred and Seventy-Five Thousand Dollars annually (\$375,000.00) (the "Annual Mitigation Payment"); and (ii) a total of Seven Hundred and Fifty Thousand Dollars (\$750,000.00) in annual payments pursuant to the schedule further detailed below which are acknowledged to be reimbursement of expenses for participation in the Look Back Studies, as defined below (the "Annual Study Cost Reimbursement"). The Annual Study Cost Reimbursement shall be paid as follows: (i) Fifty Thousand Dollars (\$50,000.00) in the first year following the Grand Opening; (ii) One Hundred Thousand Dollars (\$100,000.00) in the second year following the Grand Opening; (iii) Fifty Thousand Dollars (\$50,000.00) in each of the third through fifth years following the Grand Opening; (iv) One Hundred Thousand Dollars (\$100,000.00) in the sixth year following the Grand Opening; and (v) Fifty Thousand Dollars (\$50,000.00) in the seventh through thirteenth years following the Grand Opening. The Parties acknowledge that the Community shall be free to direct the Annual Mitigation Payment and Annual Study Cost Reimbursement (together, the "Annual Payments") to any uses it deems appropriate and shall not be restricted to use the funds for any purpose set forth herein. The Annual Payments shall be made within ninety (90) days of the Grand Opening, and on each twelve month anniversary, as long as such payments are due hereunder, and shall be adjusted annually by the CPI Adjustment Factor applied to host community impact fee payments, as defined in §1(gg) of and as set forth in Exhibit A to the Host Community Agreement between MGM and the City of Springfield.

APPENDIX K

MEPA CERTIFICATE EXCERPTS



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Deval L. Patrick
GOVERNOR

Maeve Vallely Bartlett
SECRETARY

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December 31, 2014

**CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT**

PROJECT NAME : MGM Springfield
PROJECT MUNICIPALITY : Springfield
PROJECT WATERSHED : Connecticut River
EEA NUMBER : 15033
PROJECT PROPONENT : Blue Tarp Redevelopment LLC
DATE NOTICED IN MONITOR : November 24, 2014

As Secretary of Energy and Environmental Affairs, I hereby determine that the Final Environmental Impact Report (FEIR) submitted on this project **adequately and properly** complies with the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and with its implementing regulations (301 CMR 11.00).

Project Description

As described in the FEIR, the project consists of a 881,691 gross square foot (sf) mixed-use redevelopment consisting of a casino, a retail and entertainment center, a hotel, apartments, and a daycare center. It is proposed on a 14.5-acre site in downtown Springfield. On November 6, 2014 the Proponent was awarded a Category 1 gaming license pursuant to Chapter 194 of the Acts of 2011: An Act Establishing Expanded Gaming in the Commonwealth and M.G.L. Chapter 23K, Section 19, as amended by Section 16 of the Expanded Gaming Act (the Gaming Act), which authorizes the Massachusetts Gaming Commission (MGC) for Region B of the Commonwealth.¹ As required by the Gaming Act, a Host Community Agreement between the

¹ The Act identifies three regions of the state - Region A (Suffolk, Middlesex, Essex, Norfolk and Worcester counties), Region B (Hampshire, Hampden, Franklin and Berkshire counties) and Region C (Bristol, Plymouth, Nantucket, Dukes and Barnstable counties). This project is located in Region B.

Abutter Site Circulation

The FEIR summarized potential traffic circulation impacts associated with the construction and operation of the MGM Springfield project on three abutters: the Colvest Property, Red Rose Pizzeria, and the Bacon & Wilson Property. Specifically, the discontinuation of Howard Street and Bliss Street will alter existing access patterns to these sites. The FEIR described existing access/egress driveways for each site, proposed changes to access/egress (e.g., changes to allowed turning movements, etc.), and comparative travel distance changes due to modified access and egress points.

I received several comments from abutting property owners immediately adjacent to the project site. As a result of the discontinuation of Howard Street and Bliss Street, as well as the construction of new access and egress points for the project, existing operations (e.g., entry and exit points, delivery or trash pick up access, etc.) at these adjacent sites will be altered. I strongly encourage the Proponent to establish a dialogue with each abutter to clarify potential project-related impacts, proposed mitigation measures, and seek to remedy additional impacts to the extent the Proponent is legally obligated to do so. The Proponent should continue to evaluate design or operational measures to ameliorate project-related impacts to abutting properties, including but not limited to, design treatments to reduce the visual impact of the garage, confirmation of the constructability of the garage from entirely within the Proponent's property, mitigation measures to reduce noise, vibration or emissions associated with the proposed central plant, maintenance of safe pedestrian access, and enhanced communication protocols during the construction period. I note the specific concerns expressed by Colvest/East Columbus, LLC regarding potential conflicts with traffic exiting this property's driveway to the through lane onto Union Street due to the addition of the westbound right-turn only lane and the potential for cut-through traffic exiting the project garage onto Howard Street. The Proponent should specifically review these concerns with respective abutters and the City of Springfield prior to finalizing the project's mitigation plan to determine if there are additional opportunities to mitigate potential impacts.

Bicycle and Pedestrian Infrastructure

The FEIR included graphics and a supporting narrative that described existing bicycle and pedestrian infrastructure within the study area, noting width, condition, signage, ADA-compliance, push buttons, bicycle detection capabilities, etc. The Proponent will implement a series of bicycle and pedestrian infrastructure improvements to enhance existing and future operations and to improve the safety of study area roadways and intersections for pedestrians and bicyclists. The Proponent will install way-finding signage at key entry points within Downtown Springfield and along primary MGM Springfield access/egress corridors to facilitate pedestrian and bicycle use. The project will also enhance bicycle and pedestrian access to the Connecticut River Walk and Bikeway by providing improved railroad crossing signage and striping along the at-grade bikeway access point along West Columbus Avenue (opposite State Street) and adding way-finding signage and improved lighting under the I-91 viaduct at State Street and Union Street. Proposed improvements must be reviewed and approved by the City of Springfield. For

those improvements located on NHS-roadways additional review and approval by MassDOT will be required.

Proposed pedestrian improvements include:

- Installation of updated MUTCD-compliant pedestrian signal equipment (i.e., push buttons and signage, countdown signal housings, audible warning devices (where necessary));
- Modification or retrofitting of accessible wheelchair ramps to achieve compliance with ADA standards (i.e., installing tactile warning devices, providing sufficient ramp openings, and providing adequate ramp slope);
- Reconstruction of sidewalks (widening where possible) and providing additional amenities such as benches, pedestrian-level lighting, landscaping, and other streetscape improvements;
- Upgrades to mid-block crossing locations along the site frontage (i.e., new crosswalks, pedestrian flashing signals, refuge islands, etc.); and
- Modification of the existing pedestrian crossing across East Columbus Avenue north of the intersection with State Street to eliminate pedestrian/vehicle conflicts.

The Proponent should review the comments provided by the City of Springfield regarding proposed pedestrian signal equipment, pedestrian crossing phasing, and sight lines, and modify design plans as necessary to ensure proposed mitigation measures adequately enhance the pedestrian environment in the study area. I strongly encourage the Proponent to implement MassDOT's request to provide highway lighting at each crosswalk at the North End Rotary for consistency with the proposed mitigation at the Memorial Bridge Rotary as a pedestrian safety measure.

Proposed bicycle improvements include:

- Installation of bicycle pavement marking and signage (i.e., bicycle lanes, "sharrows" and "share the road" bicycle signage, bicycle boxes, etc.);
- Provision of secure, covered bicycle racks with storage for up to 28 bicycles within the Armory Square block and near major project entryways (State Street and Union Street);
- Provision of approximately 24 secure, weather-protected, long-term bicycle parking (for employees and residents) spaces at designated locations in the MGM Springfield parking garage;
- Installation of way-finding signage at key entry points within Downtown Springfield and along primary MGM Springfield access/egress corridors; and
- Implementation of a bicycle share program with a total of 16 bicycles for use by MGM employees, patrons and residents. This system will include a U-lock to allow users to secure the bicycle at a destination location without an electronic locking system.

Springfield parking garage. The Proponent is continuing to work with owners of other public and private parking lots in the area to accommodate any overflow charter bus parking that may occur during events or peak periods. A total of 90 preferential parking spaces, located on the second level of the garage near employee entrances to the casino and Armory Square, will be designated for use by employees and residents participating in carpool or rideshare programs or who use hybrid vehicles. Finally, the Proponent has designated a total of 190 preferred spaces for electric vehicles (EV) spaces, along with approximately 50 charging stations, to be provided along the outside of levels 2, 3 and 4, of the MGM Springfield parking garage near entryways, elevators, and staircases. EV charging stations will also be provided in the valet parking area on the basement level. Signage will be provided directing drivers to EV parking and charging stations.

Transportation Demand Management

The FEIR summarized the components of the TDM program to reduce SOV trips and promote multi-modal transit options by employees and patrons. These measures are listed in the mitigation section of this Certificate.

The Proponent established the following mode share targets, by land use, assuming implementation of the TDM program.

Mode	Casino/Hotel Patrons	Casino/Hotel Employees	Residential	Armory Retail	Armory Office
SOV ^a	85.5%	67.0%	95.0%	95.0%	79.5%
Carpool/Rideshare ^a	N/A ^a	13.0%	0.0%	N/A ^a	15.5%
Public Transit	2.0%	16.0%	4.0%	4.0%	4.0%
Pedestrian/Bicycle	0.5%	4.0%	1.0%	1.0%	1.0%
Taxi	2.0%	-	-	-	-
Charter Bus	10.0%	-	-	-	-

^a For Casino/Hotel Patron and Armory Retail trips, all vehicle trips were assumed to be double-occupant vehicle trips.

A Transportation Coordinator will be responsible for developing additional TDM measures should the monitoring program identify any unanticipated or unmitigated project-specific impacts. Should the monitoring program identify such impacts, additional improvements will be identified and implemented to mitigate the project-specific impacts.

Monitoring

The project general contractor will prepare a Transportation Monitoring Program (TMP) for review and approval by the City and MassDOT. The TMP is intended to monitor traffic operations, parking occupancy, public transportation utilization, and pedestrian/bicycle use throughout the construction period and for a period of five years following completion of the project. The TMP's intent is to monitor project impacts to ensure consistency with the