Reconstruction of Sumner Avenue at Dickinson Street and Belmont Avenue (The "X")

Proposed Environmental Impact Report

Proponent: City of Springfield

Springfield, Massachusetts

July 17, 2023

Preparer:

FUSS & O'NEILL

1550 Main Street, Suite 400
Springfield, MA 01103

Project No. 20200127.E10

FUSS & O'NEILL

July 17, 2023

Secretary Rebecca Tepper
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Proposed Environmental Impact Report (PEIR)
Reconstruction of Sumner Avenue at Dickinson Street and Belmont Avenue (The "X")
Springfield, Massachusetts

Dear Secretary Tepper,

On behalf of the City of Springfield (City), Fuss & O'Neill is submitting this Proposed Environmental Impact Report (PEIR) for the Reconstruction of Sumner Avenue at Dickinson Street and Belmont Avenue (The "X") project in Springfield, Massachusetts. Through the submittal of this dual PEIR and Expanded Environmental Notification Form (EENF) (submitted under separate cover), the City requests authorization for a rollover EIR as discussed with the MEPA Office during the April 20, 2023 pre-filing meeting.

The proposed project includes roadway reconstruction of the Sumner Avenue corridor and abutting intersections to improve vehicular safety and traffic flow. The project also includes sidewalk and bike lane improvements to promote safer and improved access for pedestrians and bicycle traffic.

On April 20, 2023 Fuss & O'Neill met with the MEPA Office for a MEPA-Environmental Justice (EJ) pre-filing meeting to discuss the submittal type and outreach to environmental justice communities. The MEPA Director and Deputy Director of EJ for External Stakeholder Coordination attended. Feedback received during the pre-filing meeting has been incorporated into the project.

The project exceeds one review threshold for transportation and is within 1 mile of EJ populations. No mandatory EIR thresholds are exceeded. Although there are impacts associated with the proposed reconstruction, the project will result in a net benefit to public safety and access to the surrounding EJ communities.

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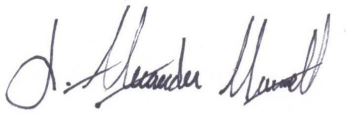
Enclosed with this submittal are the project narrative, figures and plans, and other required materials. This PEIR is being submitted for publication in the July 26, 2023 edition of the Environmental Monitor. Public Notices in English, Spanish, and Vietnamese will also be published in the Springfield Republican newspaper.

We look forward to discussing this project with you. Should you have any questions or require additional information, please contact Alex Maxwell at 617-379-5876 / email at amaxwell@fando.com.

Sincerely,



Alex Maxwell, PhD
Resilience Planner
Fuss & O'Neill, Inc.

Copy:
See distribution list

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1 Introduction

1.1 Summary

Project Name: Reconstruction of Sumner Avenue at Dickinson Street and Belmont Avenue (The "X")
Project Location: Springfield, MA (42.08583, -72.55822)

This project includes approximately 1.1 miles of roadway improvements within the Forest Park neighborhood including the re-alignment of Belmont Avenue at the "X" intersection.

Anticipated permits and approvals include:

- NPDES Construction General Permit from the United States Environmental Protection Agency (EPA)
- Federal Highway Administration (FHWA) 4(f) Temporary Occupancy Determination
- United States Fish and Wildlife Service (USFWS) Northern Long-Eared Bat Consultation for Section 7 of the Endangered Species Act
    - A finding of No Effect was made on April 24, 2023
- Certificate of the Secretary on the Expanded Environmental Notification Form and Environmental Impact Report from the Massachusetts Executive Office of Energy and Environmental Affairs (MEPA Office)
- Determination of Effect from the Massachusetts State Historic Preservation Officer (SHPO)/ Massachusetts Historical Commission (MHC)
    - A finding of No Adverse Effect was made on September 27, 2022
- Public Shade Tree Removal Approval from the City of Springfield

Reconstruction alternatives include the following:

- Alternative 1 – No Action
- Alternative 2 – Reconstruction – Larger Footprint
- Alternative 3 – Reconstruction – Smaller Footprint (Preferred)

Environmental and public health impacts have been minimized to the maximum extent practicable. Impacts primarily consist of the removal of public shade trees, and temporary construction-period impacts. Mitigation measures include compliance with local, state, and federal regulations, implementation of construction-period best management practices, and planting of additional public shade trees. Refer to *Table 7-1* for a list of mitigation measures for the project.

1.2 Purpose and Need

The goal of this project is to improve corridor safety and increase potential economic development opportunities for nearby businesses. The project area currently offers limited pedestrian and bicycle connections and lacks common way-finding signage. Additionally, a 2016 report published by the Pioneer Valley Planning Commission identified Sumner Avenue at Dickinson Street and Belmont Avenue as number one out of the top-100 high crash intersections in the Pioneer Valley Region.

Existing issues to be addressed by the proposed project include:

- Intersection safety
- Congestion and delay
- Cut-through traffic
- Deficient pedestrian facilities
- Inadequate bicycle accommodation
- Obsolete signal equipment

1.3 Project Location

The project site consists of the existing roadways right-of-way and associated sidewalks for Sumner Avenue, Dickinson Street, Belmont Avenue, Oakland Street, Cliftwood Street, Burlington Street, Lenox Street, Commonwealth Avenue, and Ormond Street in Springfield, Massachusetts. The project begins at the Sumner Avenue intersection with Forest Park Main Greeting Road and goes approximately 3,100 feet east to the intersection with Daytona Street. The Belmont Avenue segment begins just northwest of its intersection with Burlington Street and runs approximately 1,650 feet south to the intersection with Ormond Street. The Dickinson Street segment begins at the intersection with Burlington Street and runs south approximately 1,050 feet to the intersection with Cliftwood Street.

The land cover of the project site is primarily impervious area comprised of roadways and sidewalks. Public shade trees along the sidewalk provide limited vegetative cover in the project site. Land use adjacent to the project area primarily includes commercial and residential. Forest Park, a wooded open space with trails, lakes, ponds, and recreational amenities, abuts a portion of the project site to the south of Sumner Avenue. Refer to *Figure 1* in *Appendix A* for the limits of the project.

1.4 MEPA Process

The project is subject to environmental review pursuant to Section 11.01(2)(a) of the Massachusetts Environmental Policy Act (MEPA) regulations (301 CMR 11.00) and it requires a State Agency Action (i.e., funding) and meets or exceeds the following Environmental Notification Form (ENF) review thresholds for Transportation:

- 301 CMR 11.03(6)(b)(2)(b) - Construction, widening or maintenance of a roadway or its right-of-way that will cut five or more living public shade trees of 14 or more inches in diameter at breast height.

The Project does not exceed a traditional mandatory Environmental Impact Report (EIR) threshold, but is located within the Designated Geographic Area (i.e., 1 mile) of an Environmental Justice (EJ) Population and therefore requires an EIR in accordance with 301 CMR 11.06(7)(b). The request for a Rollover EIR is outlined below.

Refer to *Appendix D* for the distribution list, *Appendix E* for a summary of anticipated permits/approvals, and *Appendix I* for a copy of the public notices to be published in The Springfield Republican.

1.4.1 MEPA Coordination

The MEPA-EJ pre-filing meeting was conducted on April 20, 2023 with Fuss & O'Neill and Tori Kim and Carline Lemoine of the MEPA Office. Although previous outreach and community feedback has led to significant design changes that reduced public shade tree impacts, the MEPA office indicated there was concern that potential new community members have not received the opportunity to comment on the proposed project since outreach has not been recently conducted within the past 2 years. Fuss & O'Neill discussed hosting a community meeting concurrently with the MEPA site visit. We understand the MEPA office was amenable to a concurrent MEPA site visit and community meeting, but because of the submittal timeline of the dual Expanded Environmental Notification Form (EENF) and Proposed Environmental Impact Report (PEIR), the City has decided to host the community meeting separate from the MEPA site visit. The community meeting is scheduled for July 18, 2023, prior to the MEPA site visit. Based on the proposed outreach, including distribution of a fact sheet and hosting a community meeting, we understand the MEPA office is amenable to the request of a Rollover EIR for this project.

1.4.2 Request for Rollover EIR

With the submittal of this PEIR and the EENF (submitted under separate cover), the City respectfully requests authorization for a rollover EIR in accordance with 301 CMR 11.06(13) as the dual PEIR/EENF meets the following criteria:

a) *presents a complete and definitive description and analysis of the Project and its alternatives, and an assessment of its potential environmental and public health impacts and mitigation measures sufficient to allow a Participating Agency to fulfill its obligations in accordance with M.G.L. c. 30, §§ 61 and 62K and 301 CMR 11.12(5);*
The proposed project and Alternative Analysis are described in detail in *Section 3*. Existing conditions for EJ communities are described in *Section 4.8*. Potential impacts and mitigation measures including to the environment and EJ communities are provided in *Section 5.1* and in tabular form in *Table 7-1*.

b) *demonstrates that the Project will not materially exacerbate any existing unfair or inequitable Environmental Burden and related public health consequences impacting an Environmental Justice Population, and will not result in a disproportionate adverse effect or increased climate change effects on an Environmental Justice Population;*
The project is a net benefit to the public health and safety of nearby EJ communities. Refer to *Section 4.8.2.4* for the summary of the assessment of existing environmental burdens to EJ communities and benefits of the project to EJ communities.

c) *describes measures taken to provide meaningful opportunities for public involvement by Environmental Justice Populations prior to filing the dual ENF and Proposed EIR, including any changes made to the Project to address concerns raised by or on behalf of Environmental Justice Populations;*
The proposed outreach was discussed with Tori Kim and Carline Lemoine of the MEPA Office during the MEPA-EJ pre-filing meeting. The outreach includes methods to increase public awareness of the project and opportunities to provide comments, including distributing project fact sheets and holding a public meeting. A detailed description of outreach conducted since 2015 is described in *Section 2.8*. Outreach materials are provided in *Appendix G*.

d) shows that comments received on the dual ENF and Proposed EIR do not raise substantial issues not previously considered by the Proponent; and
Comments received on the dual ENF and PEIR will be addressed. Based on the MEPA-EJ pre-filing meeting and extensive outreach conducted since 2015, no substantial issues are anticipated.

e) shows that no substantive issues remain to be resolved.
No substantive issues are anticipated.

1.4.3 Greenhouse Gas Emission Policy Waiver Request

The City is requesting a de minimis waiver to evaluate Greenhouse Gas (GHG) emissions in accordance with the MEPA Greenhouse Gas Emissions Policy and Protocol GHG Policy. The proposed project will not result in new stationary sources of GHG and is not anticipated to increase the potential mobile sources of GHG. The proposed project aims to reduce traffic congestion and will add amenities for pedestrians and bicyclists and is therefore anticipated to reduce potential of GHG emission in the long-term.

1.5 State Agency Coordination

Massachusetts Department of Transportation (MassDOT) has been engaged throughout the planning and design of the project and has reviewed multiple iterations of the design including 25%, 75%, and 100% design.

2 Project Description

The proposed work consists of reconstruction and improvements to the Sumner Avenue corridor and abutting intersections starting in the Forest Park neighborhood of Springfield. The proposed project will result in 12.60 acres of disturbance within the roadway right-of-way.

This project includes the re-alignment of Belmont Avenue at the "X" intersection. In addition, portions of Belmont Avenue abutting the X will be converted from a two-way street to a one-way streets. As part of the proposed project, the intersection of Belmont Avenue and Commonwealth Avenue would be converted into a roundabout. Associated work includes:

- Modification of traffic patterns
- Updates to traffic signal equipment
- Updates to signal coordination
- Addition of 5-foot bicycle lanes
- Reconstruction and reconfiguration of sidewalks, pedestrian facilities
- Upgrades to accessibility
- Improvements to transit stops, street furniture, and landscaping
- Addition of auxiliary lanes

TREE SUMMARY TABLE

ROADWAY	EXISTING TREES	REMOVED TREES	PROPOSED TREES	GAIN/LOSS
Sumner Avenue East	23	8	15	7
Sumner Avenue West	66	17*	29	12
Belmont Avenue East	24	13	21	8
Belmont Avenue West	14	9	23	14
Dickinson Street North	2	0	4	4
Dickinson Street South	9	6	13	7
Oakland Street	8	7	12	5
Ormond Street	11	0	1	1
Commonwealth Avenue	3	1	0	-1
Burlington Street	5	0	0	0
Cliftwood Street	4	0	0	0
Lenox Street	0	0	0	0
TOTALS	**169**	**61**	**118**	**57**

*Reduced from 52 in the 25% design

2.1 Roadway Improvements

The proposed project aims to create a safer corridor for all users by reconfiguring the roadways and making much needed upgrades to outdated signaling equipment. Proposed roadway improvements serve as traffic calming measures that will create a safer corridor, and increase potential economic development opportunities for nearby businesses. See *Appendix B* for the existing conditions and proposed site plans.

Proposed roadway improvements include:

- Addition of turn lanes on Sumner Avenue
- Addition of both flush, traversable, stamped concrete median islands and raised vegetated median islands
- Reconfiguration of Belmont Avenue into a one-lane one-way street, northbound between Sumner Avenue and Burlington Street and southbound between Sumner Avenue and Commonwealth Avenue
- Addition of a signalized driveway exit for Trinity United Methodist Church onto Sumner Avenue
- Reconfiguration of Cliftwood Street to include a single left-turn lane and a through-right lane onto Sumner Avenue
- Modified T intersection at Belmont Avenue and Burlington Street to include bump outs
- Reconfiguration of the Belmont Avenue and Commonwealth Avenue intersection into a roundabout

2.2 Pedestrian and Bicycle Improvements

The area within the project limits currently has limited pedestrian facilities, limited compliance with the Americans with Disabilities Act (ADA), and lacks bicycle lanes. The proposed project aims to improve corridor safety for all users and increase potential economic development for nearby businesses. See *Appendix B* for the existing conditions and proposed site plans.

Proposed pedestrian and bicycle improvements include:

- Addition of a crosswalk with a rectangular rapid flashing beacon on Sumner Avenue, west of the Forest Park entrance
- Addition of crosswalks at Cliftwood Street and Sumner Avenue, Belmont Avenue and Burlington Street, and Belmont Avenue and Ormond Street
- Use of higher visibility, more durable recessed reflective crosswalks as opposed to lower visibility, standard painted crosswalks
- Reconfiguration of existing sidewalk on the north side of Sumner Avenue into an 8-foot wide shared-use path between Cliftwood Street and the westernmost project limits
- Reconfiguration of existing sidewalk on the south side of Sumner Avenue into an 8-foot wide shared-use path between the westernmost project limits and Parkwood Street

- Addition of a 5-foot wide, on-street, painted bike lane on the South side of Sumner Avenue between Parkwood Street and Dickinson Street with a 5-foot-wide exit ramp from the shared-use path
- Addition of a 5-foot wide, on-street, painted bike lane on the North side of Sumner Avenue between Ventura Street and Cliftwood Avenue with a 5-foot-wide entrance ramp onto the shared-use path
- Addition of a 5-foot wide on-street bike lane on Belmont Avenue northbound from Sumner Avenue to Burlington Street
- Addition of pedestrian plazas at Sumner Avenue and Belmont Avenue

2.3 Public Shade Tree Management

The proposed project requires removal of a total of 61 public shade trees. A total of 118 new trees are proposed to be planted, yielding a net gain of 57 trees within the project limits. See *Table 2-1* for a quantitative tree summary. See Appendix B for the Construction Plans which include locations of trees to be removed, and the Planting Plans that include locations of trees to be planted.

Table 2-1
Summary of Public Shade Tree Management

Roadway	Existing Trees within Project Limits	Removed Trees	Proposed Trees	Gain/ Loss
Sumner Ave East	23	8	15	7
Sumner Ave West	66	17	29	12
Belmont Ave East	24	13	21	8
Belmont Ave West	14	9	23	14
Dickinson St North	2	0	4	4
Dickinson St South	9	6	13	7
Oakland St	8	7	12	5
Ormond St	11	0	1	1
Commonwealth Ave	3	1	0	-1
Burlington St	5	0	0	0
Cliftwood St	4	0	0	0
Lenox St	0	0	0	0
Totals	169	61	118	57

Trees to remain shall be protected from damage while the project is constructed around them. Tree protection and professional arborist services will be provided by the Contractor. All necessary care will be taken when excavating or working in the vicinity of existing trees so that the root systems, trunks and branches are not damaged. All precautions will be taken to ensure that heavy equipment does not damage any roots, including those that lie below the limits of excavation. The 118 newly planted trees will be planted on public property within the project limits.

2.4 Best Management Practices

Construction-period Best Management Practices (BMPs) have been incorporated into the design to minimize potential impacts during the course of construction. These include:

- Construction site sweeping and cleaning
- Catch basin silt sacks
- Use of appropriate erosion and sediment controls
- Planting of grasses, perennials, and trees approved by the City Forester

Throughout the duration of the construction process, sweeping and cleaning of surfaces beyond the limits of the project caused by vehicular tracking of materials will be performed to reduce the amount of debris in the roadway, and to prevent debris from entering the stormwater system.

Catch basin silt sacks, sized appropriately to fit any size or shape catch basin, will be used throughout the project limits. All seams of the silt sacks will be double stitched. Permeability of silt sacks are as follows: Regular flow silt sack - 40 gal./min./sq.ft, and high flow silt sack - 200 gal./min./sq.ft.

Existing and proposed catch basins down-gradient of all work areas shall be surrounded by erosion control measures during construction. All controls will be regularly monitored and maintained as necessary to ensure proper functioning for their intended purpose.

Disturbed areas will be loamed and seeded with grasses or perennials vetted and approved by the City Forester. Measures will be implemented to reduce the potential for introduction or spread of invasive species within the project area. Vehicles, equipment, and tools will be cleaned of loose soils and plant materials before mobilization to the site. Vehicles, equipment, and tools that have direct contact with invasive species or loose soils during construction will be cleaned or treated before leaving the project area.

Additional BMPs and other conditions may be identified through the permitting process.

2.5 Anticipated Construction Sequence

The Contractor will be responsible for developing the overall construction schedule and sequence of operations, including all safety measures. In general, work will begin with all underground private utility relocations and replacements, followed by sewers, drainage, and water. Roadway reconstruction will then begin, including curbing and sidewalks, beginning with Sumner Avenue and then each side street. Final construction elements will include the pedestrian plazas, surface paving, pavement markings, signage and traffic signals, then planting of trees and landscaping.

The anticipated construction sequence, as developed by the MassDOT scheduler, is as follows:

1. Installation of Advanced Warning Signs and Performing Test Pits to Verify UG Utility Locations

2. Underground Third Party Utility Relocations: Eversource Electric, Verizon, Comcast, Crown Castle, Local Linx, and Eversource Gas
3. Installation of Sanitary Sewer Manhole & Pipe – Sumner Ave
4. Remodel and Adjust Sanitary Sewer Manholes – Sumner Ave, Belmont Ave, Dickinson St, Cliftwood
   St, Ormond St
5. Installation of Drainage Structures & Pipe – Sumner Ave, Belmont Ave, Burlington St, Ormond St, Dickinson St, Cliftwood St
6. Installation of Bypass Piping, Water Main, Laterals, Hydrants, Pressure Testing, Chlorination, Connecting Services, and Removing Bypass Piping – Sumner Avenue
7. Removal of Raised Median Islands – Sumner Avenue
8. Sawcut, Strip Asphalt, and Excavate to Subgrade, Place & Compact Gravel Borrow and Crushed Stone for Subbase, Installation of Granite Curbing, Pave Base Course, Pave Intermediate Course – Sumner Avenue
9. Installation of Raised Median Islands – Sumner Avenue
10. Excavate, Fine Grade, Compact Gravel Subbase, Form, Reinforce, and Place Concrete for Sidewalks, Wheelchair Ramps, and Driveways – Sumner Avenue
11. Excavate, Fine Grade, Compact Gravel Subbase, Form, Reinforce, and Place Concrete for Sidewalks, Wheelchair Ramps, and Driveways – Belmont Avenue
12. Form, Reinforce, Place, and Cure Concrete Foundation for Granite Steps, Pillars, & Granite Seats, Form, Reinforce, Place, and Cure Concrete Pillars, Install Granite Steps & Granite Seats, and Install
    Stone Veneer and Granite Caps on Concrete Pillars – North and South Plaza
13. Excavate, Fine Grade, Compact Gravel Subbase, Form, Reinforce, and Place Stamped Concrete Medians – Sumner Avenue
14. Excavate, Fine Grade, Compact Gravel Subbase, Place Cement Concrete Pavers for Brick Walk Areas – Sumner Avenue, Belmont Avenue, North & South Plaza, Commonwealth Avenue, Dickinson Street
15. Milling, Adjusting Structures, and Pave Intermediate Course – Sumner Avenue
16. Installation of Loop Detectors – Sumner Avenue
17. Paving Polymer Surface Course – Sumner Avenue
18. Installation of Green Friction Surface for Bike Lanes – Project wide
19. Contractor Request SC, MassDOT Develop Punchlist, and Substantial Completion
20. Contractor completes Punchlist and Contractor Field Completion

During the construction period, the following measures will apply:

1. During construction working hours, traffic flow shall be maintained on all streets.
2. Outside of construction working hours, all existing roadway surfaces shall remain available for vehicle travel.
3. Pedestrian access to all buildings shall be maintained at all times.
4. No detouring of traffic shall be allowed without written permission of the City. Trucks shall not be excluded from any detour roadway.
5. The Fire Department and Police Department shall be notified 48 hours prior to the start of any work that will affect the operations of their departments (e.g. partial street closures, trenching, etc.).

2.6 Schedule

The proposed project is anticipated to begin in September 2024 and conclude in September 2026.

2.7 Climate Change Adaptation and Resiliency

While not quantified specifically to a planning horizon identified using the RMAT Climate Resilience Design Standards Tool, the proposed project incorporates actions that will reduce vulnerability to anticipated climate risks and improve resiliency for future climate conditions. The proposed project includes adding amenities for multi-modal transport (e.g., improved pedestrian facilities and bicycle accommodations), which may contribute to reducing GHG emissions by providing safe options for alternative modes of transport and reducing vehicle miles traveled (VMT). Additionally, while the proposed project removes trees to accommodate the construction of improved bicycle and pedestrian amenities, more trees will be planted than previously existed, resulting in a 34% net increase in trees around the project site. Additional trees will help to sequester carbon and reduce localized heat island effect. Refer to *Table 2-1* for a summary of the locations of proposed new trees.

The Climate Resilience Design Standards Tool Project Report indicates the project area is at high risk of extreme precipitation (urban flooding) and extreme heat. The proposed project includes replacing 4 standard-sized catch basins with deep sump catch basins, and all existing structures to remain will be cleaned and have accumulated sediments removed, which will allow them to operate to their fullest capacity. The additional proposed trees in the project area will mitigate extreme heat through evapotranspiration and by providing shade. Refer to *Appendix F* for the RMAT Climate Resilience Design Standards Tool report.

2.8 Public Outreach

2.8.1 Outreach Conducted Prior to 2023

The City of Springfield began outreach in October of 2015 with a public meeting as part of the "X" Improvements Planning Study and held a second public meeting in February of 2016. In May of 2017, media coverage of the project was posted to MassLive and WWLP (local news station). A stakeholder meeting was held in December of 2017 where the City of Springfield and Fuss & O'Neill presented a pre-25% concept plan to the Forest Park Civic Association. Simultaneously, over the winter of 2017-2018, the City of Springfield sent all property owners within the project limits a letter soliciting comments on the 25% plans. Comments were received, and responses were issued by the City of Springfield Department of Public Works (DPW). A Design Public Hearing was held at Forest Park Middle School on September 17, 2019, where the City and Fuss & O'Neill presented an updated design based on previous public feedback and solicited additional public feedback to develop the 75% and 100% final design plans. The project was then presented at two Historic Commission Meetings in

November and December of 2021, which were open to the public. See *Appendix G* for a table outlining outreach activities conducted prior to 2023.

The design team implemented changes to the design based on public feedback provided during the 25% design. Public feedback indicated concerns about: 1) the quantity of public shade tree removal due to the proposed width of the roadway and 2) the contraflow bike lane on Belmont Avenue. Therefore, the design was updated to reduce the number of existing shade trees being removed, reduce the proposed width of the roadway, and revert the contraflow bicycle lane on Belmont Avenue to a bicycle lane traveling with traffic. The proposed project described in *Section 2* includes these design changes based on public input.

2.8.2 Proposed Public Involvement Plan

The public and environmental justice population outreach plan was discussed and confirmed during the MEPA-EJ pre-filing meeting. Spanish translation of public involvement documents was required as Spanish was identified as a language spoken by at least 5% of the population within the project's DGA through the EEA EJ Maps Viewer. Additionally, the City of Springfield Planning Department, Board of Health, and School District officials were contacted to get a better understanding of additional languages commonly spoken in the area of the project site that may not appear on the EJ Map Viewer. Each individual contacted mentioned Vietnamese as being a common language spoken in the area; therefore, Vietnamese was added to the list of languages used for public involvement, and this was approved during the MEPA-EJ pre-filing meeting.

Outreach to involve the public during the MEPA process included distributing the EJ Screening Form to the MEPA EJ Reference List. The EJ Screening Form was provided in English, Spanish, and Vietnamese, and was also posted to the City of Springfield's project website. A project factsheet was developed, provided in English, Spanish, and Vietnamese and distributed to the City of Springfield City Hall, places of worship in the project area including Trinity United Methodist Church, Calvary's Love Church, St Barnabas & All Saints Church, and Holy Name Parish, and the Springfield City Library: Forest Park Branch. These physical locations were chosen because they are highly trafficked and in close proximity to or adjacent to the project limits. Regular visitors to these destinations may be affected by the project. The factsheet was also distributed through the City of Springfield project website and via email to the Forest Park Civic Association. The goal of the flyer was to provide easily accessible information about the project and contact information for the public to provide comments or questions.

A community meeting is scheduled for Tuesday, July 18, 2023 at 6:30 PM at the John J. Shea Bright Nights Building in Forest Park. This location was chosen due to its proximity to the project site, ADA accommodations, and the community's familiarity with the location. The purpose of the meeting is to provide the surrounding community with the opportunity to learn about the project and provide final comments and feedback. The meeting was advertised through the City of Springfield's project website, via email to the Forest Park Civic Association, and is being published in the Springfield Republican newspaper. Flyers with meeting information were also posted around the City.

The MEPA site visit notice will be posted on the City's project website. In addition, the public notice in English, Spanish, and Vietnamese is scheduled to be published in the Springfield Republican newspaper and in the Environmental Monitor on July 26, 2023. See *Appendix G* for a table of proposed outreach activities.

3 Alternatives to the Project

The Massachusetts Environmental Policy Act (MEPA) requires state agencies undertaking an action that may result in potential significant effects on the environment to consider reasonable alternatives, particularly alternatives that might enhance environmental quality or avoid potential adverse environmental effects. This section describes the preferred alternative (described in detail in *Section 2* of the narrative) and alternatives that were considered in addition to the preferred alternative. Although there were multiple alternatives to specific project elements (e.g., stormwater infrastructure, lighting, signaling, etc.), the alternatives described below are categorized based on the overall footprint of work. Each alternative is described below, and a comparison between the alternatives is provided in *Table 3-1*. The alternatives were evaluated based on public benefit, climate resilience, public shade tree impacts, feasibility, and aesthetics.

3.1 Alternative 1: No Action Alternative

The no action alternative includes no additional safety improvements or traffic pattern modifications to the Sumner Avenue corridor and abutting intersections (the "X"). No action would result in the persistence of unsafe conditions leading to car crashes and other collisions. This alternative was discarded from consideration as it does not provide any safety or complete streets improvements to the "X."

3.2 Alternative 2: Reconstruction – Larger Footprint

Alternative 2 consists of improvements to the Sumner Avenue corridor and abutting intersections starting in the Forest Park neighborhood of Springfield. Associated work would include:

- Traffic pattern modifications
- New traffic signal equipment
- New signal coordination
- 5-foot bicycle lanes
- Reconstruction and reconfiguration of sidewalks
- Pedestrian facility and accessibility upgrades
- Street furniture and landscaping
- Auxiliary lane additions

Alternative 2 includes removing a total of 96 trees, 35 more shade trees than the preferred alternative (Alternative 3). This concept widens the roadway from 55 feet to 64 feet to provide 5-foot bicycle lanes. Alternative 2 includes a shared use path within Forest Park with connections to Sumner Avenue and Cliftwood Street, as well as a shared use path along Trafton Road. This alternative includes modifying the Belmont Avenue and Burlington Street intersection to incorporate a roundabout and includes a contraflow bicycle lane on Belmont Avenue north. Modification to the right-of-way in Alternative 2 results in 5 fee takings, 4 permanent easements, 111 temporary easements, and the potential permanent conversion of parkland to provide unrestricted public occupancy of the Forest Park paths. This alternative was discarded from consideration due to public concerns about the number of shade trees

being removed, the proposed width of the roadway, and the contraflow bike lane on Belmont Avenue, as well as the inability of the City to acquire sufficient private property to accommodate the proposed roundabout at Belmont Avenue and Burlington Street.

3.3 Alternative 3: Reconstruction – Smaller Footprint (Preferred Action)

The preferred alternative consists of improvements to the Sumner Avenue corridor and abutting intersections starting in the Forest Park neighborhood of Springfield. Associated work would include:

- Traffic pattern modifications
- New traffic signal equipment
- New signal coordination
- 5-foot bicycle lanes
- Reconstruction and reconfiguration of sidewalks
- Pedestrian facility and accessibility upgrades
- Street furniture and landscaping
- Auxiliary lane additions, and
- Providing all incidental materials and labor necessary for the operation of the traffic control signals in accordance with the project plans and specifications

The preferred alternative reduces the number of trees removed compared to Alternative 2 and results in a net gain of 57 trees. This concept widens the roadway from 55 feet to 58 feet, utilizing existing sidewalk space to create 8-foot separated shared use paths. Due to unresolved concerns regarding ROW requirements raised for Alternative 2, the Forest Park shared use path (within the park) with connections to Sumner Avenue and Cliftwood Street has been removed from the preferred alternative; the Trafton Road path was also removed at the request of the Springfield Parks Department. The roundabout proposed in Alternative 2 at the Belmont Avenue and Burlington Street intersection has been changed to a modified T intersection due to the inability of the City to acquire sufficient private property to accommodate the roundabout. The preferred alternative has reversed the contraflow bicycle lane on Belmont Avenue, instead including a bicycle lane traveling with traffic. The preferred alternative includes a new mid-block pedestrian crossing with rectangular rapid flashing beacons and a median refuge island on Sumner Avenue west of the Forest Park Main Greeting Road. Modification to the right-of-way under this alternative results in 4 fee takings, 5 permanent easements, and 116 temporary easements.

Table 3-1
Alternatives Analysis

	No Action	Alternative 2: Reconstruction – Larger Footprint	Alternative 3: Reconstruction – Smaller Footprint (Preferred)
Description	The intersection, associated sidewalks and side streets remain in current condition.	Reconfiguration of and improvements to the "X" intersection including: • Traffic pattern modifications • New traffic signal equipment • New signal coordination • 5-foot bicycle lanes • Reconstruction and reconfiguration of sidewalks • Pedestrian facility and accessibility upgrades • Street furniture and landscaping • Auxiliary lane additions • Providing all incidental materials and labor necessary for the operation of the traffic control signals in accordance with the project plans and specifications • Requires more street trees to be removed than in Alternative 3 • Requires a 9-foot increase in roadway width (6 feet wider than Alternative 3) • Includes modifying the Belmont Avenue and Burlington Street	Reconfiguration of and improvements to the "X" intersection including: • Traffic pattern modifications • New traffic signal equipment • New signal coordination • 5-foot bicycle lanes • Reconstruction and reconfiguration of sidewalks • Pedestrian facility and accessibility upgrades • Street furniture and landscaping • Auxiliary lane additions • Providing all incidental materials and labor necessary for the operation of the traffic control signals in accordance with the project plans and specifications • Removes fewer street trees than Alternative 2 • Requires a 3-foot increase in roadway width relative to existing (6 feet less than Alternative 2) • Includes a modified T intersection at Belmont Avenue and Burlington Street

		intersection to incorporate a roundabout • Includes a contraflow bicycle lane on Belmont Avenue north • Includes a shared use path within Forest Park with connections to Sumner Avenue and Cliftwood Street, as well as a shared use path along Trafton Road	• Includes a bicycle lane traveling with traffic on Belmont Avenue north • The Forest Park shared use path with connections to Sumner Avenue and Cliftwood Street has been removed from the preferred action, as well as the Trafton Road path at the request of the Springfield Parks Department
Feasibility	Results in no short-term costs, although maintenance to improve compliance with ADA should be conducted No repairs or maintenance may result in the persistence of unsafe conditions leading to car crashes and other collisions.	Construction will cost more than Alternative 3 due to additional construction costs associated with: • Additional roadway widening • Additional shade tree removal • Acquiring sufficient private property to accommodate the proposed roundabout at Belmont Avenue and Burlington Street proved infeasible • Addition of Trafton Road shared use path • 5 fee takings, 4 permanent easements, 111 temporary easements	Construction will cost less than Alternative 2 due to: • Reduced constructed roadway width • Fewer trees being removed • Reconfiguration of the Belmont Avenue and Burlington Street intersection • Removal of the Trafton Road shared use path • 4 fee takings, 5 permanent easements, and 116 temporary easements
Climate Resilience	Will not change from existing conditions Anticipated increases in heat and precipitation due to climate change will exacerbate localized heat island effect and urban flooding.	• Anticipated to mitigate the localized heat island effect with an addition of 22 street trees • Involves reconfiguration of the roadway to include amenities for multi-modal transport which contribute to reducing GHG emissions by providing safe options	• Anticipated to mitigate the localized heat island effect with an addition of 57 street trees • Involves reconfiguration of the roadway to include amenities for multi-modal transport which contribute to reducing GHG emissions by providing safe options

		for alternative modes of transport and reducing VMT	for alternative modes of transport and reducing VMT
Public Health & Safety	No additional safety improvements Would likely result in the persistence of unsafe conditions leading to car crashes and other collisions	• Anticipated to benefit public health and safety • Proposed roadway reconfiguration includes traffic calming measures to reduce vehicle speed • Amenities for multi-modal transport will contribute to improved air quality by reducing the number of fume-emitting vehicle trips	• Anticipated to benefit public health and safety • Proposed roadway reconfiguration includes traffic calming measures to reduce vehicle speed • Amenities for multi-modal transport will contribute to improved air quality by reducing the number of fume-emitting vehicle trips • More street trees than existing, which provides localized heat island mitigation
Aesthetics	The intersection, associated sidewalks and side streets remain in current condition.	Improves aesthetics of the urban setting by: • Repaving and remarking the roadways • Enhancing the public realm with the addition of pedestrian plazas, street furniture, and landscaping (more trees and canopy cover) • Replacing old sidewalks with new	Improves aesthetics of the urban setting by: • Repaving and remarking the roadways • Enhancing the public realm with the addition of pedestrian plazas, street furniture, and landscaping • Replacing old sidewalks with new
Public Shade Tree Impacts	No impacts to public shade trees. • Existing trees within project limits: 169	Net gain of trees within the project limits. • Existing trees within project limits: 169 • Removed trees: 96 • Proposed trees: 118 • Gain: 22	Net gain of trees within the project limits. • Existing trees within project limits: 169 • Removed trees: 61 • Proposed trees: 118 • Gain: 57

4 Existing Environment

4.1 Resource Areas Not Present

Some environmental resources do not occur in the project area and consequently would not be affected by the proposed action. These resources, described below, are not included in the description of existing conditions or analysis of impacts in this PEIR:

- Surface and Groundwater Hydrology and Quality – The project area does not include Outstanding Resource Waters (ORW), Designated Wild and Scenic River, Wetlands, Waterways, or Tidelands.

- Plant and Animal Species and Habitat – The project area does not include Natural Heritage and Endangered Species Program (NHESP) mapped Estimated Habitats of Rare Wildlife or Priority Habitats of Rare Species.

- Rare or Unique Features – The project area does not include Areas of Critical Environmental Concern (ACECs). The project area is a pre-disturbed environment including existing roadways and associated sidewalks.

4.2 Topography and Soils

The project site is generally flat and ranges in elevation between 181 and 191 feet. The project site and surrounding areas are highly developed and therefore consist of disturbed soils. According to Web Soil Survey the project site is mapped as Urban Land (Map Unit 602). Surficial geology of the site consists of glacial stratified deposits.

4.3 The Built Environment and Human Use

The project site is located within the Forest Park neighborhood in Springfield, MA. Springfield is the state's third most populous city and is the county seat of Hampden County. The Pioneer Valley Planning Commission (PVPC) considers Springfield to be the cultural and commercial center of the Pioneer Valley region.[1]

The project site consists of existing roadways and sidewalks. Human use of the site is generally limited to travel, either through the project site or to a destination adjacent to the project site. Destinations adjacent to the project site include residences, offices, places of worship, retail, restaurants, and services. Vehicular travel is the predominant travel mode, though walking and bicycling are also available modes of travel. Existing utilities in the project area include storm drainage, sanitary sewer, combined sewer, water, gas, electrical and communications. The Pioneer Valley Transit Authority (PVTA) serves the project area with over 10 bus stops, on three fixed routes, Green Bus Routes 1, 2, and 5.

[1] https://www.pvpc.org/towns/springfield

In 2016, the PVPC issued a report identifying the Top-100 High Crash Intersections in the Pioneer Valley region, and the main "X" intersection within the project site was listed as number one.

The project area abuts the General Business (Bus A), Service Business (Bus B), Neighborhood Commercial (Com A), Commercial Parking (Com P), Non-owner-occupied Residential Office (Office A), Urban Residential (Res B), High Density Residential (Res C), and Open Space zoning districts, and is partially located within the Neighborhood Commercial Overlay District. The purpose of the Neighborhood Commercial Overlay District is to preserve and enhance neighborhood character in commercial and mixed-use areas that exhibit traditional urban character and architecture.

Local plans call for improved infrastructure and enhanced access to recreational facilities. The City of Springfield's Draft Community Development Action Plan aims to strengthen neighborhoods by improving the physical environment through enhancement of streets, parks, streetscapes, bikeways, and open space. The City's Safety Action Plan proposes to use data-informed analysis and community needs to identify and prioritize opportunities to reduce fatal and serious injury crashes and crash risk for all road users. Additionally, the City's Open Space and Recreation Plan sets a goal to envision, promote, and create programs and projects that further healthy living by creating safe access to recreational facilities. The regional land use plan developed by the Pioneer Valley Planning Commission, Valley Vision 4, aims to move the region toward smart, sustainable development including through a multi-modal, environmentally sound transportation system that moves people and goods safely and efficiently.

4.4 Air Quality, GHG Emissions, and Noise

The Massachusetts Department of Environmental Protection (MassDEP) monitors the seven criteria pollutants for which the U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) including: ground-level ozone, particulate matter (PM) pollution (PM 2.5 and PM 10), carbon monoxide, lead, sulfur dioxide, and nitrogen dioxide. The 2021 Annual Air Quality report developed by MassDEP and published in October 2022 indicates Massachusetts is in attainment and/or meets the most recent standards for criteria pollutants.[2]

The project site does not have any stationary sources present, as the site only consists of roadways, right-of-way, and associated sidewalks. Mobile sources of air pollutants on the project site include vehicles and service equipment. It is not anticipated that the proposed project will generate new vehicle trips.

The existing noise environment of the site is dominated by traffic along the subject corridors, namely Sumner Avenue, Dickinson Street, and Belmont Avenue, noise associated with residential and commercial buildings adjacent to the site, and foot traffic around the "X."

[2] https://www.mass.gov/doc/2021-annual-air-quality-report/download

4.5 Traffic, Transit, and Pedestrian and Bicycle Transportation

The project site consists of heavily traveled roadway rights-of-way and associated sidewalks for Sumner Avenue, Dickinson Street, Belmont Avenue, Oakland Street, Cliftwood Street, Burlington Street, Lenox Street, Commonwealth Avenue, and Ormond Street. Roadways range from one to four lanes.

Within the project limits:

- Sumner Avenue is a four-lane road with sidewalks, no bike lanes, and no on-street parking.
- Dickinson Street is a two-lane road with sidewalks, no bike lanes, and on-street parking on the North side of Sumner Avenue.
- Belmont Avenue is a two-lane road with sidewalks, no bike lanes, and on-street parking.
- Oakland Street is a two-lane road with sidewalks, no bike lanes, and on-street parking.
- Cliftwood Street is a southbound one-way one-lane road with sidewalks, no bike lanes, and no on-street parking.
- Burlington Street is a two-lane road with a sidewalk on the north/west side and partial sidewalk on the south/east side, no bike lanes, and on-street parking on the north/west side.
- Lenox Street is a northbound one-way two-lane road with sidewalks, no bike lanes, and no on-street parking.
- Commonwealth Avenue is a two-lane road with sidewalks, no bike lanes, and no on-street parking.
- Ormond Street is a two-lane road with sidewalks, no bike lanes, and on-street parking on the east side of the street.

Each of the roadways in the project area have sidewalks, however, not all are fully ADA compliant, and there are no existing bicycle lanes. Existing issues associated with the project site include outdated vertical pole-mounted signal equipment, traffic congestion and delays, and cut-through traffic. In 2016, the PVPC issued a report identifying the Top-100 High Crash Intersections in the Pioneer Valley region, and the main "X" intersection within the project site was listed as number one.

Springfield is the hub of regional bus service provided by the Pioneer Valley Transit Authority (PVTA). The PVTA serves the project area with three fixed bus routes, Green Bus Routes 1, 2, and 5. Over 10 bus stops are within the project limits. The Springfield Amtrak station is approximately 2.5 miles northeast of the project site.

A detailed traffic analysis and planning study can be provided upon request.

4.6 Scenic Qualities, Open Space and Recreational Resources

Large shade trees and grass strips line the roadways within the project site; however, the site limits consist predominantly of paved surfaces. The westernmost edge of the project area abuts Forest Park, where the main entrance enters from and exits onto Sumner Avenue. Forest Park, founded in 1884, is

Springfield's largest and oldest public park and is Article 97 land protected in perpetuity for recreation (according to MassMapper). Covering over 735 acres, Forest Park spans from Sumner Avenue to the north, southward to Converse Street, and then east to west between Trafton Road and Interstate 91. Recreational resources within the park include tennis courts, walking trails, a skating rink, and baseball fields. The proposed project does not include work within land protected under Article 97. Forest Park is subject to protection under Section 4(f) of the Department of Transportation Act.

4.7 Historic Structures or Districts, and Archaeological Sites

The project site abuts several historic buildings with significant architectural qualities including Chapin Block with its characteristic Art Deco style, the Neo Gothic Revival designed Trinity Methodist Episcopal Church, and the Shingle Style Forest Park Trolley Waiting Pavilion. Just outside of the project limits to the east is the Forest Park Heights Historic District, with many examples of Colonial Revival and Queen Anne architectural style homes.

Research conducted through the Massachusetts Cultural Resources Information System (MACRIS) indicates that within 1 mile of the project limits there are 957 inventoried points and 13 inventoried areas. Of the 957, 2 individual properties are listed on the National Register of Historic Places Individual, 491 are within a National Register of Historic Places District, and 481 are within a Local Historic District. Inventoried areas and properties located adjacent to or near the project site include:

- Forest Park Heights Historic District (SPR.BD)
  - Located east of the project limits
- Forest Park Trolley Pavillion (SPR.2501)
  - Located at the eastern most end within the project limits
- Forest Park Center (SPR.3854)
  - Located on the northeast end of the project limits
- Forest Park Branch Library (SPR.3770)
  - Located on the northeast end of the project limits
- Trinity Methodist Episcopal Church (SPR.3865)
  - Located on the east end of the project limits
- All Saints Episcopal Church (SPR.3855)
  - Located on the northeast side of the project area
- Kesser-Israel Synagogue (SPR.3853)
  - Located on the northeast side of the project area
- Chapin Block (SPR.3788)
  - Located in the center of the project area, at the intersection of Sumner Avenue, Dickinson Street, and Belmont Avenue
- Holy Name Complex (SPR.BV)
  - Located north of the project limits

A map of the historic properties adjacent to the project limits is provided in *Figure 2* of *Appendix A*.

4.8 Public Health Conditions / Environmental Justice Population

The purpose of this section is to describe and analyze aspects of the proposed project that may affect EJ Populations located in whole or in part within the Designated Geographic Area around the Project and provide a detailed baseline in relation to existing unfair or inequitable Environmental Burden and related public health consequences impacting EJ Populations in accordance with 301 CMR 11.07(6)(n)1. The Designated Geographic Area for this project is the area within a 1-mile radius of the site.

4.8.1 Existing Conditions

There are 150 census block groups that meet Environmental Justice (EJ) population criteria within five (5) miles of the project limits, 34 of which are located within one (1) mile of the project limits. The EJ populations that the project intersects have identifying criteria of Minority; Income; Minority and Income; and Minority, Income, and English Isolation. The project limits directly intersect seven (7) EJ populations. The EJ populations that the project intersects have identifying criteria of Minority; and Minority and Income. Within 5 miles of the project limits, 30 census tracts are identified as having languages spoken by 5 percent or more of the EJ population who also identify as not speaking English "very well," 6 of which are within 1 mile of the project limits. Languages identified include Spanish or Spanish Creole.

Refer to *Appendix G* for a map of the EJ communities within a 1- and 5-mile radius of the project site. Tables G-4 and G-5 show EJ characteristics and languages spoken by census tract.

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Table G-4

Summary of Languages Spoken within the Vicinity of the Project Site

Census Tract	Municipality	County	Language	1 mile	5 miles
8001.01	Springfield	Hampden	Spanish or Spanish Creole		X
8002.01	Springfield	Hampden	Spanish or Spanish Creole		X
8002.02	Springfield	Hampden	Spanish or Spanish Creole		X
8003	Springfield	Hampden	Spanish or Spanish Creole		X
8004	Springfield	Hampden	Spanish or Spanish Creole		X
8005	Springfield	Hampden	Spanish or Spanish Creole		X
8006	Springfield	Hampden	Spanish or Spanish Creole		X
8007	Springfield	Hampden	Spanish or Spanish Creole		X
8008	Springfield	Hampden	Spanish or Spanish Creole		X
8009	Springfield	Hampden	Spanish or Spanish Creole		X
8011.01	Springfield	Hampden	Spanish or Spanish Creole		X
8011.02	Springfield	Hampden	Spanish or Spanish Creole		X
8012	Springfield	Hampden	Spanish or Spanish Creole		X
8013	Springfield	Hampden	Spanish or Spanish Creole		X
8014.01	Springfield	Hampden	Spanish or Spanish Creole		X
8015.01	Springfield	Hampden	Spanish or Spanish Creole		X
8015.02	Springfield	Hampden	Spanish or Spanish Creole		X
8015.03	Springfield	Hampden	Spanish or Spanish Creole		X
8012.02	Springfield	Hampden	Spanish or Spanish Creole		X
8016.03	Springfield	Hampden	Spanish or Spanish Creole		X
8018	Springfield	Hampden	Spanish or Spanish Creole	X	
8019.01	Springfield	Hampden	Spanish or Spanish Creole	X	
8019.02	Springfield	Hampden	Spanish or Spanish Creole		X
8020	Springfield	Hampden	Spanish or Spanish Creole		X

Census Tract	Municipality	County	Language	1 mile	5 miles
8021	Springfield	Hampden	Spanish or Spanish Creole	X	
8022	Springfield	Hampden	Spanish or Spanish Creole	X	
8023	Springfield	Hampden	Spanish or Spanish Creole	X	
8026.01	Springfield	Hampden	Spanish or Spanish Creole	X	
8122.02	Springfield	Hampden	Spanish or Spanish Creole		X
8123	Springfield	Hampden	Spanish or Spanish Creole		X

Table G-5

Summary of Environmental Justice Populations within the Vicinity of the Project Site

Block Group	Census Tract	Municipality	County	EJ Characteristic	1 Mile	5 miles
2	8001	Springfield	Hampden	Minority and income		X
3	8001	Springfield	Hampden	Minority and income		X
1	8001.01	Springfield	Hampden	Minority and income		X
2	8002	Springfield	Hampden	Minority		X
3	8002	Springfield	Hampden	Minority		X
4	8002	Springfield	Hampden	Minority and income		X
5	8002	Springfield	Hampden	Minority and income		X
1	8002.01	Springfield	Hampden	Minority and income		X
1	8002.02	Springfield	Hampden	Minority and income		X
1	8003	Springfield	Hampden	Minority		X
2	8003	Springfield	Hampden	Minority and income		X
3	8003	Springfield	Hampden	Minority		X
4	8003	Springfield	Hampden	Minority and income		X

Block Group	Census Tract	Municipality	County	EJ Characteristic	1 Mile	5 miles
1	8004	Springfield	Hampden	Minority, income and English isolation		X
2	8004	Springfield	Hampden	Minority, income and English isolation		X
3	8004	Springfield	Hampden	Minority		X
4	8004	Springfield	Hampden	Minority and income		X
5	8004	Springfield	Hampden	Minority, income and English isolation		X
1	8005	Springfield	Hampden	Minority, income and English isolation		X
2	8005	Springfield	Hampden	Minority		X
3	8005	Springfield	Hampden	Minority		X
1	8006	Springfield	Hampden	Minority, income and English isolation		X
2	8006	Springfield	Hampden	Minority, income and English isolation		X
3	8006	Springfield	Hampden	Minority, income and English isolation		X
1	8007	Springfield	Hampden	Minority, income and English isolation		X
2	8007	Springfield	Hampden	Minority, income and English isolation		X
1	8008	Springfield	Hampden	Minority, income and English isolation		X
2	8008	Springfield	Hampden	Minority, income and English isolation		X
1	8009	Springfield	Hampden	Minority, income and English isolation		X
2	8009	Springfield	Hampden	Minority, income and English isolation		X
3	8009	Springfield	Hampden	Minority and income		X
1	8011.01	Springfield	Hampden	Minority, income and English isolation		X
1	8011.02	Springfield	Hampden	Minority and income		X
2	8011.02	Springfield	Hampden	Minority, income and English isolation		X
1	8012	Springfield	Hampden	Minority, income and English isolation		X
2	8012	Springfield	Hampden	Minority and income		X
3	8012	Springfield	Hampden	Minority and income		X
1	8013	Springfield	Hampden	Minority, income and English isolation		X
2	8013	Springfield	Hampden	Minority and income		X

Block Group	Census Tract	Municipality	County	EJ Characteristic	1 Mile	5 miles
3	8013	Springfield	Hampden	Minority and income		X
4	8013	Springfield	Hampden	Minority		X
2	8014	Springfield	Hampden	Minority, income and English isolation		X
1	8014.01	Springfield	Hampden	Minority and income		X
1	8014.02	Springfield	Hampden	Minority and income		X
2	8014.02	Springfield	Hampden	Minority and income		X
2	8015	Springfield	Hampden	Minority		X
3	8015	Springfield	Hampden	Minority		X
4	8015	Springfield	Hampden	Minority		X
1	8015.01	Springfield	Hampden	Minority and income		X
1	8015.02	Springfield	Hampden	Minority and income		X
2	8015.02	Springfield	Hampden	Minority and income		X
3	8015.02	Springfield	Hampden	Minority, income and English isolation		X
1	8015.03	Springfield	Hampden	Minority and income		X
2	8015.03	Springfield	Hampden	Minority and income		X
3	8015.03	Springfield	Hampden	Minority		X
1	8016	Springfield	Hampden	Minority		X
2	8016	Springfield	Hampden	Minority		X
3	8016	Springfield	Hampden	Minority and income		X
4	8016	Springfield	Hampden	Minority and income		X
1	8016.02	Springfield	Hampden	Minority and income		X
2	8016.02	Springfield	Hampden	Minority		X
3	8016.02	Springfield	Hampden	Minority		X
1	8016.03	Springfield	Hampden	Minority		X
2	8016.03	Springfield	Hampden	Minority		X
1	8016.04	Springfield	Hampden	Minority		X

Block Group	Census Tract	Municipality	County	EJ Characteristic	1 Mile	5 miles
2	8016.04	Springfield	Hampden	Minority		X
1	8016.05	Springfield	Hampden	Minority and income		X
2	8016.05	Springfield	Hampden	Minority		X
3	8016.05	Springfield	Hampden	Minority		X
1	8017	Springfield	Hampden	Minority and income		X
2	8017	Springfield	Hampden	Minority and income		X
3	8017	Springfield	Hampden	Minority and income		X
4	8017	Springfield	Hampden	Minority and income		X
5	8017	Springfield	Hampden	Minority and income	X	
6	8017	Springfield	Hampden	Minority and income		X
1	8018	Springfield	Hampden	Minority and income		X
2	8018	Springfield	Hampden	Minority and income		X
3	8018	Springfield	Hampden	Minority and income	X	
4	8018	Springfield	Hampden	Minority, income and English isolation		X
5	8018	Springfield	Hampden	Minority and income	X	
1	8019	Springfield	Hampden	Minority and income	X	
2	8019	Springfield	Hampden	Minority and income	X	
1	8019.02	Springfield	Hampden	Minority, income and English isolation		X
2	8019.02	Springfield	Hampden	Minority and income		X
3	8019.02	Springfield	Hampden	Minority, income and English isolation	X	
1	8020	Springfield	Hampden	Minority, income and English isolation		X
2	8020	Springfield	Hampden	Minority, income and English isolation	X	
3	8020	Springfield	Hampden	Minority, income and English isolation	X	
1	8021	Springfield	Hampden	Minority and income	X	
2	8021	Springfield	Hampden	Minority	X	
3	8021	Springfield	Hampden	Minority	X	

Block Group	Census Tract	Municipality	County	EJ Characteristic	1 Mile	5 miles
4	8021	Springfield	Hampden	Minority	X	
5	8021	Springfield	Hampden	Minority and income	X	
6	8021	Springfield	Hampden	Minority and income	X	
1	8022	Springfield	Hampden	Minority and income	X	
2	8022	Springfield	Hampden	Minority, income and English isolation	X	
3	8022	Springfield	Hampden	Minority and income	X	
1	8023	Springfield	Hampden	Minority and income	X	
2	8023	Springfield	Hampden	Minority	X	
3	8023	Springfield	Hampden	Minority, income and English isolation	X	
4	8023	Springfield	Hampden	Minority and income	X	
5	8023	Springfield	Hampden	Minority and income	X	
1	8024	Springfield	Hampden	Minority		X
2	8024	Springfield	Hampden	Minority		X
3	8024	Springfield	Hampden	Minority	X	
4	8024	Springfield	Hampden	Minority and income	X	
1	8025	Springfield	Hampden	Minority		X
2	8025	Springfield	Hampden	Minority		X
3	8025	Springfield	Hampden	Minority and income		X
4	8025	Springfield	Hampden	Minority	X	
5	8025	Springfield	Hampden	Minority and income	X	
6	8025	Springfield	Hampden	Minority	X	
1	8026	Springfield	Hampden	Minority and income	X	
2	8026	Springfield	Hampden	Minority	X	
3	8026	Springfield	Hampden	Minority and income	X	
4	8026	Springfield	Hampden	Minority and income	X	
5	8026	Springfield	Hampden	Minority and income	X	

Block Group	Census Tract	Municipality	County	EJ Characteristic	1 Mile	5 miles
6	8026	Springfield	Hampden	Minority	X	
1	8026.02	Springfield	Hampden	Minority	X	
1	8107	Chicopee	Hampden	Minority and income		X
2	8107	Chicopee	Hampden	Minority		X
3	8107	Chicopee	Hampden	Minority and income		X
4	8107	Chicopee	Hampden	Minority and income		X
5	8107	Chicopee	Hampden	Minority		X
1	8108	Chicopee	Hampden	Minority and income		X
2	8108	Chicopee	Hampden	Minority and income		X
3	8108	Chicopee	Hampden	Minority		X
1	8109	Chicopee	Hampden	Minority and income		X
2	8109	Chicopee	Hampden	Minority and income		X
1	8109.02	Chicopee	Hampden	Minority		X
2	8109.02	Chicopee	Hampden	Minority		X
3	8109.02	Chicopee	Hampden	Minority and income		X
4	8109.02	Chicopee	Hampden	Minority and income		X
4	8110	Chicopee	Hampden	Income		X
1	8122	West Springfield	Hampden	Minority and income		X
2	8122	West Springfield	Hampden	Minority and income		X
3	8122	West Springfield	Hampden	Minority and income		X
2	8122.02	West Springfield	Hampden	Income		X
3	8122.02	West Springfield	Hampden	Minority and income		X
4	8122.02	West Springfield	Hampden	Minority and income		X
1	8123	West Springfield	Hampden	Minority and income		X
2	8123	West Springfield	Hampden	Minority and income		X
3	8123	West Springfield	Hampden	Minority and income		X

Block Group	Census Tract	Municipality	County	EJ Characteristic	1 Mile	5 miles
4	8123	West Springfield	Hampden	Minority and income		X
5	8123	West Springfield	Hampden	Minority and income		X
1	8124.03	West Springfield	Hampden	Minority		X
2	8124.03	West Springfield	Hampden	Minority and income		X
1	8124.04	West Springfield	Hampden	Minority		X
2	8132.07	Agawam	Hampden	Income		X
2	8132.08	Agawam	Hampden	Income		X

4.8.2 Assessment of Existing Unfair or Inequitable Environmental Burden

The purpose of this section is to meet the requirements of Section 58 or the Act and 301 CMR 11.07(6)(n).

4.8.2.1 Department of Public Health EJ Tool Review

The DPH EJ Tool was consulted to identify whether municipalities or census tracts that include one or more of the identified EJ populations exhibit one or more of four "vulnerable health EJ criteria." The EJ populations within a 1-mile and 5-mile radius of the project site do exhibit health indicators that place an "unfair or inequitable" environmental burden and related public health consequences on these communities. However, the project that has been proposed will not have an adverse impact on the health of nearby environmental justice communities.

According to the DPH EJ Tool, Springfield exhibits all four "vulnerable health EJ criteria," including elevated blood lead prevalence, low birth weight, heart attack, and childhood asthma. It is not anticipated that any of these vulnerable health EJ criteria will be exacerbated by the proposed project.

The project is anticipated to result in long-term benefits that promote improved health outcomes. The reduced traffic congestion from the road reconfiguration is anticipated to result in improved air quality compared to existing conditions. Also, the addition of 57 trees will increase the potential for trees to remove particles and gases from the atmosphere that could exacerbate asthma. The additions and/or improvements to pedestrian and bicycle access will promote opportunities for physical activity in the project area. These improvements enhance opportunities to decrease the risk of heart disease, s not getting enough exercise can lead to heart disease.

Research conducted using MADPH's Environmental Justice Tool indicated that within the municipality identified above the Elevated Blood Lead Prevalence per 1,000 for the years 2016 – 2020 was 32. The data also indicated that the Low Birth Weight Rate per 10,000 for the years 2011 – 2015 was 255. The Pediatric Asthma Emergency Department Visit Rate per 10,000 and Heart Attack Rate per 10,000 are 221 and 36 respectively. According to the DPH EJ Tool, there is one municipality that is within a 1-mile radius of the site that exhibits one or more "vulnerable health EJ criteria."

Second, other layers of the DPH Tool were consulted to identify other potential sources of pollution within the boundaries of the EJ populations within a 1-mile radius of the site. Areas within a 1-mile and 5-mile radius of the site do experience unfair and inequitable environmental burdens, but again, none of

these burdens will be exacerbated by the project that has been proposed. Refer to *Table 4-1* below for an analysis of the results.

Table 4-1
Department of Public Health Tool Results within the Designated Geographic Area (1-mile) from the Site

Category	Within 1 Mile of the Site: Quantity for EJ census tracts[3]	Within an EJ census tract partially located within the DGA, but Facility Located Outside of DGA	Names of Facilities/Locations	Description
MassDEP Major Air and Waste Facilities: Large Quantity Generators	3 (Facility/Location # 1-3)	1 (Facility/Location # 4)	1. Poly-Metal Finishing Inc. 2. Balise Hyundai 3. Balise Chevrolet 4. Balise Mazda	The closest Large Quantity Generator to the Site is Poly-Metal Finishing Inc, which is approximately 0.80-miles north of the Site.
MassDEP Major Air and Waste Facilities: Large Quantity Toxic User	1 (Facility/Location # 1)	1 (Facility/Location # 2)	1. Poly-Metal Finishing Inc 2. F&G Agawam Recycling LLC	The closest Large Quantity Toxic User to the Site is Poly-Metal Finishing Inc, which is approximately 0.80-miles north of the Site.
MassDEP Tier Classified 21E Sites	4 (Facility/Location # 1-4)	5 (Facility/Location # 5-9)	1. Two Family Residence / 41 Crystal Ave (Tier 1D) (RTN 1-0017336) 2. Mill River / Locust @ Dickinson Street (Tier 1D) (1-0019024) 3. Residence / 118 Allen Street (Tier 1D) (RTN 1-0019677) 4. Owner Occupied Rental / 639 Sumner Ave (Tier 1D) (RTN 1-0017192) 5. Sunoco Station / 720 West Columbia Ave (Tier 1D) (RTN 1-0015052) 6. York Street Jail / 79 York St (A3) (RTN 1-0013316) 7. Apartment Complex / 51 Oswego St (Tier II) (RTN 1-0021365) 8. Bondis Island Wastewater Treatment Plant / 250 M Street (Tier I) (RTN 1-0020904) 9. No Location Aid / 327 Hancock St (Tier 1D) (RTN 1-0011081)	According to the EEA Data Portal[4], eight of the nine Tier Classified 21 E Site are open and have not reached regulatory closure to-date. York Street Jail, classified as a Tier II site, reached a Class A3 Response Action Outcome (RAO), meaning a permanent solution has been achieved; Contamination has not been reduced to background and an Activity and use Limitation (AUL) has been implemented. The Bondis Island Wastewater Treatment Plant is classified as a Tier I site, indicating that it is located within a GW-1 area, an imminent hazard is present at the property, one or more immediate response action are required, and/or a critical exposure pathway exists. Response actions are still occurring on site for the Apartment Complex at 51 Oswego St, although no imminent hazards are present based on response action completed as of July 2021.
Massachusetts "Tier II" Toxics Use Reporting Facilities	7 (Facility/Location # 1-7)	7 (Facility/Location # 8-14)	1. City of Springfield, MA – 233 Allen St 2. Converse Substation 07S – 17 Converse Rd 3. Rocky's Hardware, Inc. – 50 Island Pond Rd 4. Poly-Metal Finishing, Incorporated – 1 Allen St 5. Springfield Paridon - USID61855 6. Balise Chevrolet Buick GMC – 440 Hall of Fame Avenue 7. Balise Hyundai – 683 East Columbus 8. Springfield College – 263 Alden St	Seven facilities were observed within a 1-mile radius of the Site. Of these seven locations, one (Poly-Metal Finishing, Incorporated) has extremely hazardous substances (EHS) above or equal to the threshold planning quantity (TPQ). This means additional emergency planning requirements are triggered for this facility. The closest facility to the Site is Converse Substation 07S, which is approximately 1,000-ft (0.21-miles) to the east.

[3] All census tracts within the DGA (1-mile from the site) are EJ populations.
[4] https://eeaonline.eea.state.ma.us/portal#!/search/wastesite

			9. Springfield Water and Sewer Commission - Superneau Operations Center – 71 Colton St 10. Wilbraham Substation 06N – 310 Wilbraham Ave 11. Luster-On Products, Inc – 54 Waltham Ave 12. Verizon Springfield HMC/VZB Equipment (VZ- MA855707) – 365 State St 13. Springfield Regional Wastewater Treatment Facility – 190 M St 14. Pioneer Valley Resource Recovery Facility – 188 M St	
MassDEP sites with AULs	8 (Facility/Location # 1-8)	5 (Facility/Location # 9-13)	1. Balise Motor Sales / 440 West Columbus Ave (RTN 1-0000997) 2. FL Roberts / 487 East Columbus Ave (RTN 1-0000175) 3. No Location Aid / 500 West Columbus Ave (RTN 1-0013152) 4. Nathan Bill Park / Plumtree Rd (RTN 1-0014300) 5. No Location Aid / 155 hickory St (RTN 1-0017333) 6. Apartment Building / 75 Longhill St (RTN 1-0017625) 7. 58 Kenwood Park / 58 Kenwood Park (RTN 1-0018352) 8. Balise Chevrolet Rear Parking Lot / 440 Hall Of Fame Ave (RTN 1-0019164) 9. No Location Aid / 270 Maple St (RTN 1-0012008) 10. York Street Jail / 79 York St (RTN 1-0013316) 11. Auth Fuels / 507 North Main St (RTN 1-0000801) 12. Baystate Medical Center / 140 High St (RTN 1-0010078) 13. No Location Aid / 605-609 State St (RTN 1-0012040)	Eight RTNs were observed within a 1-mile radius of the Site, while five RTNs were observed outside of the DGA but within a census tract that is partially within the DGA. Two of the properties achieved a permanent solution with conditions (PSC), indicating that Activity and Use Limitation (AUL) was implemented. The other six properties achieved a class A-3 RAO, indicating that a permanent solution was achieved with contamination not reduced to background and an AUL was implemented, and remedial action has not been conducted due to a level of No Significant Risk, but that level is contingent upon one or more AULs implemented, respectively. 58 Kenwood Park is the closest recorded AUL to the Site, approximately .2 miles or 1,100 ft to the north of the Site.
MassDEP groundwater discharge permits	0	0	NA	NA
MassDEP public water suppliers	0	1	1. Springfield Water and Sewer Commission	Springfield Water and Sewer Commission (MA1281000).
Wastewater treatment plants	0	1	1. Springfield WWTP	The layer within the DPH Screen Tool database was titled "Draft NPDES points."
Underground storage tanks (USTs)	15 (Facility/Location # 1-15)	11 (Facility/Location # 16-26)	1. Shell / 61-67 Locust St 2. Stop N Save / 172 White St 3. K&B Realty MGMT LLC DBA Savmore / 190 Orange St 4. Sunoco 0374 5700 / 730-744 Sumner Ave 5. Racing Mart / 685 Sumner Ave 6. Felixs Exxon Inc / 914 Sumner Ave 7. O'Connell's Convenience Plus 32 / 570 Sumner Ave 8. FL Roberts 475 / 491 Allen St 9. Sunoco Inc / 487 East Columbus Ave 10. Food Bag Citgo 515 / 707 Dickenson St 11. O'Connell's Convenience Plus 21 / 527 Allen St 12. Le Belcher Inc / 940 Belmont Ave 13. Balise Chevrolet / 440 West Columbus Ave 14. Cumberland Farms 2401 / 470-480 Sumner Ave 15. Grimaldi Oil Burner Serv / 295 Allen St 16. Pride Convenience Inc / 618 North Main St 17. Main Street Gulf / 679 Main St 18. York Street Pump Station / York St	Two of these facilities are located on parcels adjacent to project site, O'Connell's Convenience Plus 32 and Cumberland Farms 2401.

			19. Sunoco Inc / 720 West Columbus Ave 20. East Columbus Mobil / 833 East Columbus Ave 21. FL Roberts 461 / 93 West Broad St 22. FL Roberts 474 / 321 Walnut St 23. B&D Citgo / 273 Hancock St 24. Springfield Municipal Water Work / 71 Colton St 25. Baystate Medical Center / 140 High St 26. Franconia Golf Course / 619 Dwight Rd	
EPA facilities – Toxic Release Inventory Sites, Superfund Sites	0	1	1. Luster-On Products Inc	One facility, Luster-On Products Inc, characterized under Toxic Release Inventory Sites (2017), is located outside of the DGA but within an EJ census tract that is partially within the DGA.
Road Infrastructure – MassDOT Roads, Bikes Lanes	1 (Facility/Location # 1)	2 (Facility/Location # 2-3)	1. State Route 83 2. U.S Route 5 3. Interstate 91	Although not identified by the DPH tool, U.S Route 5 and Interstate 91are located within the 1-mile DGA.
MBTA bus and rapid transit – MBTA Bus Shelters, Bus Stops, MBTA Rapid Transit Stops, MBTA Commuter Rail, Ferry Stops, Parking Lots, MBTA Bus Routes, MBTA Rapid Transit, MBTA Commuter Rail Lines, Ferry Routes	0	0	NA	Local bus and rapid transit around the immediate vicinity of the Site is described in *Section 4.5*.
Other Transportation Infrastructure: Airports, Freight Rail Yards, Water Taxis, Railroad Tracks, Ferry Routes	1	0	1. Pan Am Railways	Pan Am railways/CSX Railroad run approximately .5 miles east of the site
Regional transit agencies: RTA stops, RTA Routes	8 (Facility/Location # 1-8)	Unknown	1. Tripper 1 Helper Service 2. Tripper 2 Helper Service 3. Tripper 5 Helper Service 4. Tripper 92 Helper Service 5. Chicopee / Sumner-Allen-Canon Circle 6. Carew-East Springfield / Belmont-Dwight Rd 7. Dickinson-Jewish Home/Longmeadow 8. Inner Crosstown	The Site is within the Pioneer Valley Regional Transit Authority (PVTA). Eight PVTA bus routes are within the DGA. Although not identified by the DPH tool, the site contains at least 10 RTA stops.
Energy Generation and Supply: nuclear power, power plants	0	0	NA	NA

4.8.2.2 RMAT Report

The Resilient Massachusetts Action Team (RMAT) Climate Resilience Design Standards Tool was used to better understand the climate-related vulnerabilities associated with the project site. The tool's Project Report indicates the site is at high risk of both extreme precipitation (urban flooding) and extreme heat. The Climate Resilience Design Standards Summary suggests 2050 as the target planning horizon for both extreme precipitation and extreme heat, and the 50-yr (2%) return period and 90th percentile, respectively.

Refer to *Appendix F* for the RMAT report results, and *Section 2.7* for other climate change adaptation and resilience considerations of the proposed project.

4.8.2.3 US EPA EJ Screen Tool Review

The US EPA EJ Screen Tool provides a percentile ranking by census block group compared to statewide average, for the 11 environmental indicators listed in Table 4-2. The tool indicates that the project area is in the >50 - 100 percentile range compared to statewide percentiles for each of the 11 environmental indicators. The indicators listed in Table 4-2 were analyzed using the US EPA EJ Screen Tool, and they highlight potentially unfair or inequitable environmental burdens impacting EJ populations.

The project will not contribute to long-term environmental quality issues, as the reconstruction does not emit fumes, water, or waste that would contribute to the degradation of the listed environmental indicators; and therefore, the project does not create an unfair or inequitable environmental burden that would impact the surrounding EJ population.

Table 4 – 2
US EPA EJ Screening and Mapping Tool Results

Indicator	Exposure v. Risk	Key Medium	Percentile
NATA Air Toxics Cancer Risk (lifetime exposure)	Risk/Hazard	Air	>50 - 100
NATA Respiratory Hazard Index Ratio	Risk/Hazard	Air	>50 - 100
NATA Diesel PM (DPM)	Potential Exposure	Air	>50 - 100
Particulate Matter (PM2.5) (annual average)	Potential Exposure	Air	60 - 90
Ozone (summer seasonal average, daily 8-hr max)	Potential Exposure	Air	60 - 100
Lead Paint (% of housing built before 1960)	Potential Exposure	Dust/lead paint	50 - 100
Traffic Proximity and Volume Count of Vehicles (average annual)	Proximity/Quantity	Air	>50 - 100

Proximity to RMP (Risk Management Plan/ Hazardous waste cleanup) Sites	Proximity/Quantity	Waste/Water/Air	>50 – 100
Proximity to TSDFs (Hazardous waste treatment, storage, and disposal facilities)	Proximity/Quantity	Waste/Water/Air	50 - 100
Proximity to NPLs (National Priority List/ Superfund sites)	Proximity/Quantity	Waste/Water/Air	>50 - 80
Wastewater Discharge Toxicity (based on NPDES permitted discharge locations)	Proximity/Quantity	Water	>50 – 100

4.8.2.4 Conclusion

Based on the assessment of existing environmental burdens through the DPH tool, RMAT, and US EPA Screen Tool, it appears the EJ census tracts within the DGA exhibit an unfair or inequitable environmental burden based on the increased quantities of:

- MassDEP Major Air Waste Facilities
- Tier Classified 21E Sites
- "Tier II" toxic use reporting facilities
- Sites with AULs
- Higher amounts of ozone, PM2.5, lead paint, and proximity to TSDFs (as compared to the State)
- MassDOT infrastructure (associated with lower air quality and increased emissions)

The burden is exacerbated by the potential for reduced air quality and increased contamination within EJ census tracts. In addition, the EJ census tracts within the DGA had a high amount of underground storage tanks (USTs). The presence of a UST does not necessarily directly present an unfair burden to EJ communities. However, USTs do present a risk to public health and the environment if the UST were to leak or rupture, or if they are not managed properly. If mismanaged or in poor condition, USTs have a potential to present an unfair burden to EJ communities. Based on the review, it is not anticipated that the existing environmental burdens within the DGA would be exacerbated by the proposed project. None of these baseline conditions result in the proposed project bearing an "unfair or inequitable" environmental burden to the community. The project is anticipated to be a net benefit to the surrounding EJ community, as it will provide enhanced open space through the implementation of landscaping and pocket park pedestrian plazas, improved mobility (particularly for those without access to a car), increased public safety and reduced traffic congestion through road reconfiguration, improved air quality through reduced traffic congestion, improved stormwater management through road reconfiguration and implementation of deep sump catch basins, resulting in cleaner water, and increased opportunity for potential economic development.

5 Assessment of Impacts

5.1 Summary of Impacts

5.1.1 Public Shade Trees

There are 169 existing trees within the project limits. The proposed project requires cutting 61 public shade trees with a diameter at breast height (DBH) greater than 14", which could impact heat conditions in the project area. Satellite imagery and land use coverage (MassMapper) of the project area show that the existing environment is predominantly built and or paved impervious surface, with an abundance of forested area located to the southwest of the project area within Forest Park. The proposed removal of public shade trees may have impacts on local heat conditions directly within the project area. A total of 118 trees will be planted as part of the proposed project, yielding a net gain of 57 trees within the project limits, resulting in long-term environmental benefits and reduced heat island impact. See *Table 2-1* for a quantitative tree summary.

5.1.2 Air Quality, GHG Emissions, and Noise

Construction activities may result in short-term impacts to ambient air quality due to direct emissions from construction equipment and fugitive dust emissions. Heavy construction equipment associated with site development may result in temporary increases in noise levels in the immediate area of construction. Long term impacts include improved air quality and reduced noise levels anticipated through reduced traffic congestion. It is anticipated that the project will help to reduce GHG emissions by providing safe options for alternative modes of transport and reducing VMT.

5.1.3 Solid and Hazardous Waste

The solid waste generated from this project will include, but is not limited to: asphalt pavement, concrete, and wood. The disposal of these items will be conducted in accordance will all local, state, and federal laws.

5.1.4 Stormwater

The proposed project consists of roadway geometry and intersection alignment improvements, as well as traffic, safety, pedestrian, and bicycle enhancements. There are no major areas of construction, significant increases in impervious cover, or substantial drainage alterations to existing drainage patterns proposed. The proposed project includes the installation of 4 deep sump catch basins and repairing, replacing, or cleaning (as necessary) the existing drainage pipes and structures within the project limits. Proposed deep sump catch basins will provide stormwater improvements by allowing sediments and other suspended solids to settle out of stormwater runoff before discharging to receiving waters.

Stormwater impacts will be minimized to the extent practicable by minimizing the work area and implementing best management practices such as erosion and sediment controls. No wetland resource areas are located within the limits of the project. The proposed project is not subject to the Wetlands Protection Act Regulations set forth at 310 CMR 10.0 or the Water Quality Certification Regulations set

forth at 314 CMR 9.00. The proposed project is not subject to the MassDEP Stormwater Management Regulations, but it complies with them to the maximum extent practicable as described below:

Standard 1: No New Untreated Discharges

No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

> There are no new, untreated discharges proposed as part of this project. The project will retain the existing outfalls and drainage patterns within the project limits. The project complies with Standard 1.

Standard 2: Peak Rate Attenuation

Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates. This Standard may be waived for discharges to land subject to coastal storm flowage as defined in 310 CMR 10.04.

> The project is a redevelopment effort and will result in a minor increase in the post-development peak discharge rates due to the proposed increase in impervious surface. This proposed increase in impervious surface cover is associated with the construction of pedestrian and bicycle accommodations intended for non-motorized vehicular use. The project has minimized the construction of new impervious areas to the extent practicable while still achieving the necessary capacity, accessibility, and safety improvements. The project complies with Standard 2 to the maximum extent practicable.

Standard 3: Groundwater Recharge

Loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook.

> The project meets the criteria for redevelopment based on the Stormwater Handbook. No new infiltration systems are proposed. Opportunities for the implementation of additional treatment best management practices (BMPs) are limited due to a lack of available space within the public right-of-way, and the residential and commercial density of the area.

Standard 4: Water Quality

Stormwater management systems shall be designed to remove 80% of the average annual postconstruction load of Total Suspended Solids (TSS). This Standard is met when:

a. Suitable practices for source control and pollution prevention are identified in a long-term pollution prevention plan, and thereafter are implemented and maintained;
b. Structural stormwater best management practices are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook; and
c. Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook.

> As a result of the proposed realignment and reconstruction of existing roadways along with construction of additional pedestrian and bicycle accommodations, the project will result in an increase in impervious surface cover totaling 19,602 square feet. Opportunities for the implementation of additional treatment best management practices (BMPs) are limited due to a

lack of available space within the public right-of-way, and the residential and commercial density of the area. The project complies with Standard 4 to the maximum extent practicable.

Standard 5: Land Uses with Higher Potential Pollutant Loads (LUHPPLs)

For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and/or pollution prevention all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. §§ 26-53 and the regulations promulgated at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.

The project consists of work on roadways, sidewalks, bicycle lanes, and commercial/ residential driveways, none of which are considered land uses with higher potential pollutant loads.

Standard 6: Critical Areas

Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply, and stormwater discharges near or to any other critical area, require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook. A discharge is near critical area if there is a strong likelihood of a significant impact occurring to said area, taking into account site-specific factors. Stormwater discharges to Outstanding Resource Waters and Special Resource Waters shall be removed and set back from the receiving water or wetland and receive the highest and best practical method of treatment. A "storm water discharge" as defined in 314 CMR 3.04(2)(a)1 or (b) to an Outstanding Resource Water or Special Resource Water shall comply with 314 CMR 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A are prohibited unless essential to the operation of a public water supply.

There are no Stormwater Critical Areas within or adjacent to the project limits.

Standard 7: Redevelopment

A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Managements Standards and improve existing conditions.

The project consists of the redevelopment of the existing roadways and portions of the adjacent residential and commercial properties. The project complies with the Stormwater Management Standards to the maximum extent practicable and provides an improvement over the existing conditions through maintenance and improvements to the existing drainage infrastructure. Proposed improvements include repairs to the existing closed drainage system and the installation of new deep sump catch basins which will provide an opportunity for sediment and suspended solids to settle out of stormwater runoff prior to discharging to receiving waters.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control Measures

A plan to control construction-related impacts such as erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation,

and pollution prevention plan) shall be developed and implemented.

Since the project will disturb more than one acre of land, the Contractor will be required to file a Notice of Intent to the EPA for coverage under the National Pollution Discharge Elimination System (NPDES) Construction General Permit. As part of the application, the Applicant is required to prepare a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will be prepared by the Contractor and will include erosion and sediment controls, temporary stormwater management measures, Contractor inspection schedules, materials management, waste disposal, spill prevention and response, sanitation, and non-stormwater discharges.

Erosion controls shall consist of compost filter tubes, silt fences or similarly effective devices. In addition, silt sacks will be installed in catch basins. The erosion and sedimentation control measures will be installed and maintained in accordance with the Massachusetts Erosion and Sedimentation Control in the Site Development Massachusetts Conservation Guide, September 1983.

Temporary erosion and sedimentation control measures shall be installed prior to the commencement of any site work, maintained during construction and remain in place until site work is completed, and ground cover is established (at least 75% uniform coverage by new seedlings). All erosion and sedimentation control measures shall be maintained in effective condition throughout the construction period. The contractor shall inspect the erosion controls daily and clean accumulated materials from behind them as necessary. All erosion and sedimentation control measures found to need repair or replacement shall be immediately corrected. Any sediment removed from control structures shall be disposed of in an appropriate manner. No equipment or material of any kind shall be stockpiled or deposited in a regulated area. Stockpiled soil within jurisdictional areas shall be surrounded with siltation fences to prevent and control siltation and erosion. Stockpiles that will remain exposed for more than 30 days shall be stabilized with mulch or seeded for temporary vegetative cover. All disturbed areas that remain exposed or undisturbed for a period of fourteen days or longer shall be stabilized with mulch or seeded for temporary vegetative cover.

The contractor shall inspect all portions of the site in anticipation of rainfall events to determine if site grading is sufficient to prevent erosion of slopes and / or the transportation of sediments to wetlands and watercourses in the surrounding areas. All disturbed earth slopes shall be stabilized with permanent vegetative cover as soon as possible. There shall be no direct discharge from dewatering operations in any wetland, watercourse or drainage system unless allowed by regulatory permits.

A stockpile of erosion control materials shall be kept on site throughout the construction work and shall be installed at the direction of the engineer to mitigate any erosion/sedimentation conditions that may arise.

Standard 9: Long Term Operation and Maintenance Plan

A long-term operation and maintenance plan shall be developed and implemented to ensure that stormwater management systems function as designed.

The Springfield DPW is responsible for maintenance of stormwater structures, including the four (4) deep sump catch basins that are part of the preferred alternative design. Maintenance includes street sweeping and sediment removal.

Standard 10: Illicit Discharges

All illicit discharges to the stormwater management system are prohibited. There are no known illicit discharges to the existing system within the project limits.

> If any potential illicit connections are detected during the construction, the nature and source of the discharge will be determined and, if no permit exists, the connection will be plugged and abandoned.

5.1.5 Transportation

The project is not anticipated to generate traffic. Construction activities may result in short-term impacts to traffic in the project area, including delays. Upon completion, the project will improve bicycle and pedestrian accommodations, and reduce traffic congestion and delays.

5.1.6 Scenic Qualities, Open Space and Recreational Resources

The proposed work does not include any land disposition or transfer or conveyance of ownership or other interests, any change in physical or legal control, or any change in use subject to Article 97. The proposed improvements will enhance open space through the implementation of landscaping and pocket park pedestrian plazas, increase public safety, and reduce traffic congestion through road reconfiguration. Additionally, the project will improve connectivity to Forest Park from Sumner Avenue through enhancements to pedestrian and bicycle amenities.

5.1.7 Historic Structures or Districts, and Archaeological Sites

No impacts to historical or archaeological resources are anticipated. The MHC correspondence dated September 27, 2022 determined that the "X" improvements will have No Adverse Effects on the adjacent historical properties. Copies of any responses received, and proof of delivery are included in *Appendix H*.

5.1.8 Environmental Justice Population

Based on the review described in *Section 4.8*, it is not anticipated that the existing environmental burdens within the DGA would be exacerbated by the proposed project. None of the baseline conditions result in the proposed project bearing an "unfair or inequitable" environmental burden to the community.

Construction activities may result in short term air quality, GHG emissions, and noise impacts to the surrounding EJ population as described in *Section 5.1.2*. Construction activities may also result in temporary traffic delays.

Upon completion, benefits to the surrounding EJ population include improved air quality and reduced noise levels through reduce traffic congestion and cut-through traffic, and improved transit and pedestrian facilities, as well as improved landscaping and street furniture.

6 Statutory and Regulatory Standards and Requirements

The following section identifies financial assistance from an agency of the Commonwealth and describes state, federal, and local permitting and review requirements associated with the project.

6.1 Financial Assistance

The proposed project has received financial assistance from the following agencies:

- Massachusetts Department of Transportation: $3,455,162.06
- Federal Highway Administration: $13,820,648.23

6.2 Regulatory Requirements

The proposed project has been designed to avoid environmental impacts when possible and minimize unavoidable impacts when practicable. Descriptions of the project's compliance with the regulatory requirements of pertinent state and federal regulatory programs are provided in the following sections.

6.2.1 NPDES Construction General Permit

A Notice of Intent (NOI) for coverage under the EPA's National Pollutant Discharge Elimination System (NPDES) Program 2022 Construction General Permit (CGP) will be required as the project will result in a site disturbance of greater than one acre. The project will comply with the key requirements of the NPDES CGP including, but not limited to:

- Develop a Stormwater Pollution Prevention Plan (SWPPP)
- Submit the electronic Notice of Intent (NOI) to the EPA using the online filing system, NPDES eReporting Tool (NeT)
- Implement erosion and sedimentation controls and pollution prevention practices throughout the entire construction project
- Conduct the required inspections
- Perform corrective action to fix problems with controls or discharges
- Complete documentation of all site inspections, dewatering inspections, and corrective actions
- Comply with turbidity monitoring requirements for dewatering discharges to sensitive waters (if applicable)
- Comply with any state, tribal, or territory-specific requirements in Part 9 of the permit

6.2.2 Massachusetts Historical

Commission

Any project that involves state or federal funding and/or approvals requires review by the MHC to determine potential impacts to historic and/or archaeological resources and to ensure compliance with MGL c.9 § 26-27I and Section 106 of the Natural Historic Preservation Act. MassDOT Cultural Resources Unit (CRU) has reviewed the proposed project under the Massachusetts Statewide Programmatic Agreement for Section 106 of the National Historic Preservation Act of 1966, as amended [36 CFR 800], and has determined that the "X" improvements have No Adverse Effects on the adjacent historical properties. In addition, the project received a concurrence of a Section 106 finding of No-Adverse-Effect from the MHC on September 27, 2022. Copies of any responses received, and proof of delivery are included in *Appendix H*.

6.2.3 Public Shade Tree Removal Approval

In accordance with M.G.L. Chapter 87, all trees within the public way proposed to be cut, trimmed, or removed require a permit in writing from the City Forester. The Springfield City Forester has been involved throughout the planning phases of this project. Input from the City Forester, including species selection of replacement trees, has been incorporated into the design. Prior to commencement of the project, the City will conduct a public shade tree public hearing. The hearing will abide by the following requirements:

- The public hearing will be posted in two or more public places in the City and upon the tree at least seven days before such hearing
- The public hearing information will be published in a newspaper of general circulation in the City once in each of two successive weeks, the first publication to be not less than seven days before the day of the hearing

7 Proposed Section 61 Findings

MGL c.30 § 61 requires that "all authorities of the Commonwealth … review, evaluate, and determine the impact on the natural environment of all works, projects or activities conducted by them and … use all practicable means and measures to minimize [their] damage to the environment. … Any determination made by an agency of the Commonwealth shall include a finding describing the environmental impact, if any, of the project and a finding that all feasible measures have been taken to minimize said impact." Each state agency that issues a permit for the project shall issue a Section 61 Finding in connection with permit issuance, which identifies mitigation measures necessary to satisfy the Section 61 requirement.

A table of mitigation measures is included below in *Table 7-1*. All mitigation will be the responsibility of the project proponent and their contractor(s). *Table 7-1* identifies the agencies that are expected to take agency action on the project and issue Section 61 Findings, as well as the expected actions and permit issuances required. A proposed Section 61 Finding is provided in this section.

Proposed Section 61 Finding

Project Name:	Reconstruction of Sumner Avenue at Dickinson Street and Belmont Avenue (The "X")
Project Location:	Springfield, MA (42.08583, -72.55822)
Project Proponent:	City of Springfield c/o Christopher M. Cignoli, P.E. Director of Public Works 70 Tapley Street Springfield, MA 01104

The potential environmental impacts of the proposed project have been characterized and quantified in the EENF dated July 17, 2023 and *Section 5* of this PEIR, which are incorporated by reference into this Section 61 Finding. As a corridor safety improvement project, the project will result in net public health and safety benefits. The project proponent has aimed to develop appropriate mitigation measures to address short-term impacts, the majority of which are associated with construction-period activities. With the mitigation measures proposed and carried out in cooperation with state agencies, [AGENCY] finds that there are no significant unmitigated impacts associated with the project.

The project proponent takes ultimate responsibility for both the identification of appropriate mitigation measures and implementation of said measures throughout the duration of the project, whether carried out by the project proponent themselves, or by the proponent's contractor(s). The proponent has prepared *Table 7-1* of mitigation measures that outline these responsibilities.

Having reviewed the MEPA filings for the project, including the mitigation measures referenced above and described in greater detail in the EENF and this PEIR, [AGENCY] finds pursuant to MGL c.30 § 61, that with the implementation of the aforesaid measures, all practicable and feasible means and measures will have been taken to avoid or minimize potential damage from the project to the environment.

[Agency]

[By]

[Date]

Table 7-1 below describes mitigation measures included in the planning and design to avoid, minimize, and mitigate potential damage to the environment resulting from the Project.

Table 7-1
Summary of Potential Impacts and Avoidance, Minimization, and Mitigation Measures

Subject Matter	Potential Impacts	Avoidance, Minimization, and Mitigation Measures	Action or Permit	Schedule and Cost
Public Shade Trees	• Cutting 61 public shade trees with a diameter at breast height (DBH) greater than 14" • Impact to heat conditions in the project area	• A total of 118 trees are proposed to be planted, yielding a net gain of 57 trees within the project limits • Contractors will not store equipment or stockpile materials within drip line of trees or in areas enclosed by tree protection fencing • All excavation within ten feet of designated trees shall be performed by hand labor to preserve the root system of the tree • All cutting or trimming of trees to be preserved shall be executed by a Massachusetts Certified Arborist	City of Springfield – Public Shade Tree Removal Approval	Implementation schedule: prior to, during, and after construction Total construction cost: $22,732,791.69
Land	• Increase in impervious surface cover within the project limits by 19,602 square feet	• Direct disturbance area is on previously disturbed land; limits of work are to be minimized to the maximum extent practicable • Phase construction to minimize area disturbed at one time • Implement erosion and sediment controls • Restore vegetated staging areas with loam and seed • A total of 118 trees are proposed to be planted, yielding a net gain of 57 trees within the project limits	US EPA NPDES Construction General Permit	Implementation schedule: prior to and during construction Total construction cost: $22,732,791.69
Rare Species	None	None	N/A	N/A
Wetlands, Waterways, and Tidelands	None	None	N/A	N/A
Water Supply	None	None	N/A	N/A
Wastewater	None	None	N/A	N/A
Transportation (Traffic & Roadways)	• Temporary slowdowns from construction equipment entering and leaving project area • Reduced traffic congestion through road reconfiguration	• Stage equipment and machinery to be located in areas that will avoid congestion to the maximum extent practicable • Signage notifying of upcoming construction and partial lane closures to be provided • Project limits and scope have been designed not to conflict with PVTA operations • Continue coordination with MassDOT	None	Implementation schedule: during construction Total construction cost: $22,732,791.69
Energy	None	None	N/A	N/A

Table 7-1
Summary of Potential Impacts and Avoidance, Minimization, and Mitigation Measures

Subject Matter	Potential Impacts	Avoidance, Minimization, and Mitigation Measures	Action or Permit	Schedule and Cost
Air Quality	• Construction activities may result in short-term impacts to ambient air quality due to direct emissions from construction equipment and fugitive dust emissions • Heavy construction equipment associated with site development may result in temporary increases in noise levels in the immediate area of construction • Long term impacts include improved air quality and reduced noise levels through reduced traffic congestion. • Reduced GHG emissions through providing safe options for alternative modes of transport and reducing VMT • Improved air quality through reduced traffic congestion	• On and off-road idling will be restricted to the maximum extent practicable. • All construction and demolition activities will be managed in accordance with applicable Air Pollution Control (310 CMR 7.01, 7.09-7.10). • Operation of equipment will be limited to between 7:00 AM and 3:30 PM from Monday to Friday. • Work will be performed in accordance with the City of Springfield Noise Ordinance. • Contractors will be encouraged to use construction equipment with engines manufactured to Tier 4 federal emission standards. • Selection of project contractors that have installed retrofit emissions control devices or vehicles that use alternative fuels to reduce emissions of volatile organic compounds (VOCs), carbon monoxide (CO) and particulate matter (PM) from diesel-powered equipment to the maximum extent practicable. • Utilization of dust control measures including wetting agents, truck bed covers, periodic street cleaning	None	Implementation schedule: during construction Total construction cost: $22,732,791.69
Stormwater	• Increase in impervious surface cover within the project limits by 19,602 square feet • Minor increase in the post-development peak discharge rates due to the proposed increase in impervious surface • There are no new, untreated discharges proposed • Improved stormwater management through road reconfiguration and implementation of deep sump catch basins, resulting in cleaner water	• Installation of 4 deep sump catch basins which will provide stormwater improvements by allowing sediments and other suspended solids to settle out of stormwater runoff before discharging to receiving waters. • Repair, replace, or clean as necessary the existing drainage pipes and structures within the project limits. • Minimize the construction of new impervious areas to the extent practicable while still achieving the necessary capacity, accessibility, and safety improvements. • Erosion controls shall consist of compost filter tubes and silt fences. • Temporary erosion and sedimentation control measures will be installed prior to the commencement of any site work, maintained during construction and remain in place until site work is completed, and ground cover is established. • Perform sediment and erosion control inspections in accordance with the SWPPP. • All erosion and sedimentation control measures found to need repair or replacement will be corrected in accordance with the SWPPP. • Any sediment removed from control structures will be disposed of in an appropriate manner. • If any potential illicit connections are detected during the construction, the nature and source of the discharge will be determined and, if no permit exists, the connection will be plugged and abandoned. • Equipment to be refueled at pre-approved, designated area with appropriate spill prevention and control measures.	US EPA NPDES Construction General Permit	Implementation schedule: prior to, during, and after construction Total construction cost: $22,732,791.69

Table 7-1
Summary of Potential Impacts and Avoidance, Minimization, and Mitigation Measures

Subject Matter	Potential Impacts	Avoidance, Minimization, and Mitigation Measures	Action or Permit	Schedule and Cost
		• Any stockpiles will be located away from stormwater inlets and surrounded by appropriate erosion controls.		
Solid And Hazardous Waste	• The solid waste generated from this project will include, but is not limited to: asphalt pavement, concrete, and wood • No AULs are on any portion of the project site	• Materials will be re-used and recycled to the maximum extent practicable. • Equipment to be refueled at pre-approved, designated area with appropriate spill prevention and control measures. • MassDEP shall be notified if oil and/or hazardous materials are found during construction in accordance with the Massachusetts Contingency Plan (310 CMR 40.00). • All construction and demolition activities will be managed in accordance with applicable Solid Waste Facilities regulations (310 CMR 16.00 and 310 CMR 19.00).	None	Implementation schedule: during construction Total construction cost: $22,732,791.69
Historical And Archaeological Resources	None	• If historical and archaeological resources are encountered during the course of the project, the selected contractor shall take steps to limit adverse effects and notify the SHPO and the Massachusetts Historical Commission (as well as other appropriate agencies) immediately, in accordance with state, regional, and local plans and policies.	MHC Determination of No Effect	Implementation schedule: during construction Total construction cost: $22,732,791.69
Climate Change Adaptation and Resiliency	• Increase in impervious surface cover within the project limits by 19,602 square feet • Cutting of public shade trees may have impacts on local heat conditions directly within the project area • Reduce traffic congestion and enhanced pedestrian and bicycle amenities will result in improved air quality	• Through additional tree planting, the project will result in a net gain of 57 trees. Trees and other plantings will be approved by the City Tree Forester. These actions will help to sequester carbon and mitigate localized heat island impact. • Contractor specifications will require that the contractor comply with the provisions of MGL Chapter 90 Section 16A and the DEP Anti-Idling Regulations (310 CMR 7.11(b)) which prohibit unnecessary engine idling and require that engines be shut down if the vehicle will be stopped for more than five minutes. • Addition of amenities for multi-modal transport (e.g., improved pedestrian facilities and bicycle accommodations) contribute to reducing GHG emissions by providing safe options for alternative modes of transport and reducing VMT.	MEPA Certificate	Implementation schedule: prior to, during, and after construction Total construction cost: $22,732,791.69

Table 7-1
Summary of Potential Impacts and Avoidance, Minimization, and Mitigation Measures

Subject Matter	Potential Impacts	Avoidance, Minimization, and Mitigation Measures	Action or Permit	Schedule and Cost
Environmental Justice	• Temporary construction-period impacts on air quality resulting from increased noise and the transport and operation of construction equipment • Diesel emissions resulting from transport and operation of equipment will result in a minor and temporary increase in pollution generation resulting from the project • Reduced traffic congestion and enhanced pedestrian and bicycle amenities will result in improved air quality • The stormwater management improvements will result in improved water quality • Removal of 61 trees, planting of 118 trees, counteracting long-term heat island effects • Enhanced open space through the implementation of landscaping and pocket parks • Increased public safety for pedestrian, bicycle, and vehicle traffic • Increased opportunity for potential economic development	• To mitigate emissions, on and off-road idling will be restricted to the maximum extent practicable. • Contractors will be encouraged to use construction equipment with engines manufactured to Tier 4 federal emission standards. • To mitigate noise, contractors will be required to comply with the Springfield Noise Ordinance. • Operation of equipment will be limited to between 7:00 AM and 3:30 PM from Monday to Friday. • The project will strive to keep the project area accessible to the maximum extent possible with police officer or flagger controlled, alternating, single-lane traffic control and restriction of work in traveled ways to non-peak hours (9:00 AM to 3:00 PM). • The Contractor shall be required to provide safe and convenient access to all abutters during the prosecution of the work. • Necessary access for fire apparatus and other emergency vehicles will be maintained at all times. • Planting of additional trees will result in a net gain of 57 trees.	MEPA Certificate	Implementation schedule: prior to, during, and after construction Total construction cost: $22,732,791.69

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Appendices

Under Separate Cover