



# 20

## COMMUNITY MITIGATION FUND

### APPENDIX D

**2020 Transportation Planning Grant Application BD-20-1068-1068C-1068L-46130**

*Please complete the entire application.*

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1.	<b>NAME OF MUNICIPALITY(IES)/GOVERNMENT ENTITY(IES)/DISTRICT(s)</b> Town of Saugus and City of Revere
2.	<b>PROJECT NAME (limit 10 words)</b> Advanced planning and design of Route 1 traffic improvements
3.	<b>BRIEF PROJECT DESCRIPTION (limit 50 words)</b> The City of Revere and the Town of Saugus seek funding to continue development of Route 1 improvements plans, including the surrounding transportation network impacted by the operation of the Encore Boston Harbor Casino. The effort will build upon valuable information and planning tools realized through prior Joint MGC Grants.
4.	<b>DEPARTMENT RECEIVING FUNDS</b> City of Revere, Department of Strategic Planning and Economic Development
5.	<b>LEAD APPLICANT - NAME AND TITLE OF INDIVIDUAL RESPONSIBLE FOR HANDLING OF FUNDS (CONTRACT MANAGER)</b> Robert O'Brien, Director - Revere Department of Strategic Planning and Economic Development
6.	<b>ADDRESS OF INDIVIDUAL RESPONSIBLE FOR HANDLING OF FUNDS (CONTRACT MANAGER)</b>  City Hall 281 Broadway Revere, MA 02151

**2020 TRANSPORTATION PLANNING GRANT APPLICATION**

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**8. NAME AND CONTACT INFORMATION OF JOINT APPLICANTS - MUNICIPALITIES /GOVERNMENT ENTITIES/DISTRICTS**

City of Revere  
281 Broadway  
Revere, MA 02151  
781-286-8111

Town of Saugus  
298 Central Street  
Saugus, MA 01906  
781-231-4111

**9. NAME AND TITLE OF INDIVIDUAL(S) AUTHORIZED TO COMMIT FUNDS ON BEHALF OF MUNICIPALITY(IES)/GOVERNMENTAL ENTITY(IES)**

Mayor Brian Arrigo: 781-286-8111 [barrigo@revere.org](mailto:barrigo@revere.org)

Town Manager Scott Crabtree: 781-231-4111 [scrabtree@saugus-ma.gov](mailto:scrabtree@saugus-ma.gov)

**10. ADDRESS OF INDIVIDUAL(S) AUTHORIZED TO COMMIT FUNDS ON BEHALF OF MUNICIPALITY(IES)/GOVERNMENTAL ENTITY(IES)**

Mayor Brian Arrigo  
City of Revere, MA  
281 Broadway  
Revere, MA 02151

Town Manager Scott Crabtree  
Town of Saugus  
298 Central Street  
Saugus, MA 01906

**11. PHONE #, EMAIL, AND ADDRESS OF INDIVIDUAL(S) AUTHORIZED TO COMMIT FUNDS ON BEHALF OF MUNICIPALITY(IES)/GOVERNMENTAL ENTITY(IES)**

Mayor Brian Arrigo  
781-286-8181  
[barrigo@revere.org](mailto:barrigo@revere.org)

Town Manager Scott Crabtree  
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[scrabtree@saugus-ma.gov](mailto:scrabtree@saugus-ma.gov)

**12. NAME OF GAMING LICENSEE**

Encore Boston Harbor Casino – Everett, MA

**1. IMPACT DESCRIPTION**

Please describe in detail the transportation related impact that is attributed to the operation of a gaming facility. Please provide support for the determination that the operation of the gaming facility caused, is causing or may cause the impact.

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Please describe in detail the transportation related impact that is attributed to the construction or operation of a gaming facility. Please provide support for the determination that the construction or operation of the gaming facility caused, is causing or may cause the impact.

In 2018, the Massachusetts Gaming Commission awarded a joint Transportation Planning grant of \$425,000 to the Town of Saugus and the City of Revere. This grant fund was intended to fund for one year, a transportation planning specialist and to begin the process of preliminary design of certain smaller components of the Route 1 Improvement Project. The communities were unable to find a qualified party for this position and with the approval of MGC instead engaged a consultant traffic engineer to undertake the effort. BETA of Norwood, MA has been engaged by the communities and has been working on this effort for several months. This firm is focused on achievable transportation improvement projects that are intended to mitigate anticipated traffic increases generated by the Encore Boston Harbor Casino in Everett on the Route 1 – Route 99 corridor as well as along Routes 1A, 107 and 16. The City of Revere and the Town of Saugus are applying for an additional 2019 Joint Transportation Planning Grant from the Mass Gaming Commission (MGC) to continue this initiative and to advance certain achievable elements of long planned improvements to the Route 1 project and other elements of their transportation network impacted by the operation of the Encore Boston Harbor Casino. The communities seek \$425,000 for this purpose.

The City of Revere and the Town of Saugus have long been plagued by the woeful inadequacy of outmoded old Route 1. The highway is subject to ever increasing traffic volumes and virtual gridlock during attenuated morning and evening rush hours. A number of Route 1 interchanges have very high accident rates because of this increased traffic. The City and the Town believe the Casino in nearby Everett is bringing new traffic onto the Route 1-Route 99 corridor.

Saugus believes that to a lesser but still significant degree, some casino generated traffic may bypass lower Route 1 exiting the highway onto Walnut Street-Central Street or Main Street/Center Street and on to Winter Street then Ballard Street and then Route 107 as an alternative way to access route 16 towards Everett.

Revere will be negatively impacted by traffic heading to Route 16 west from Route 1 south and some northeast originated traffic will choose to follow route 107 through the heart of the city to access route 16 west. And of course, Revere will undoubtedly see an increase of traffic along

already overtaxed route 1A as residents of North Shore coastal communities use that route to connect to route 16 and the Wynn Casino.

The City and the Town plan to work together to enlist the support of other nearby impacted communities, so as to affect key roadway improvements along these arterials that will help alleviate existing traffic and offset anticipated traffic problems resulting from increased volume attributable to the new casino.

**2. PROPOSED USE OF TRANSPORTATION PLANNING FUNDS (Please attach additional sheets/supplemental materials if necessary.)**

a) Please identify the amount of funding requested.

\$425,000

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

The City of Revere is acting as administrative agent for the Joint Transportation Planning Grant of \$150,000 awarded to the City and the Town of Saugus for the purpose of engaging a traffic engineering firm to analyze transportation impacts expected to come from traffic generated by the Encore Boston Harbor Casino. Following a public procurement process, the City and Town engaged the services of BETA Group, traffic engineers, to closely examine potential casino generated impacts on Route 1, Route 16, Route 99, Route 107 and associated roads and feeder routes and to make preliminary recommendations for traffic system improvements to mitigate the impacts of casino bound traffic.

BETA has examined traffic impact reports, the state Transportation Improvement Plan (TIP), and past proposals for roadway improvements on these specific arterials. The City and Town used a second Joint Transportation Planning grant of \$275,000 from the Massachusetts Gaming Commission to do more specific analysis and conceptual design one or more of these traffic improvement at the critical Route 1 and Route 99 interface with the goal of ultimately designing and building improvements to alleviate some of the expected casino traffic on these roadways. The following details actions BETA has undertaken:

**FY17 MGC TRANSPORTATION PLANNING GRANT 1 (\$150,000)**

Budget remaining = \$5,000

**Work completed as of October 2019:**

- Conducted a project briefing on the status of the Route 1 study with the three communities (Saugus, Malden and Revere) and Roseland consultant (CDMSmith) on July 17, 2019
- Collaborated with Revere and Saugus on the potential need to perform a before and after traffic impacts evaluation based on the grand opening of the Encore Casino on June 23, 2019.
- Follow up on traffic impact reports related to the June 23<sup>rd</sup> Encore Casino Grand opening.
- Conducted a project briefing on the status and preliminary Route 1 Design with MassDOT Officials (Boston highway staff, District 4 Engineers) and Roseland consultant (CDMSmith) on June 20, 2019.
- Collaborated with MassDOT Boston Highway Engineers on the preliminary Route 1 concept design in June.
- Reviewed the Suffolk Downs Redevelopment Mater Plan PUD Special Permit (Sept 2018)
- Reviewed latest Suffolk Downs Route 1A Design that incorporated MassDOT request.
- Reviewed Suffolk Downs DEIR (October 2018)
- Attended four additional meetings with MassDOT Suffolk Downs Transportation Working Group (May/June/July 2019)\
- Attended two coordination meetings with Revere and Saugus Officials
- Coordinated with project development group to discuss concept design features and design compatibility
- Attended four Suffolk Downs Development Advisory Group and Project Review Board meetings and presentations (Fall 2018)
- Attended Road Safety Audit for Copeland Circle, Revere. Reviewed the Road Safety Audit Report and provided comments (August 2018)
- Reviewed relevant documents including Route 1 traffic studies in Saugus on Route 1 (Essex Landing, Saugus Ridge, Everett Casino EIR, Suffolk Downs Casino DEIR, previous Route 1 studies and concepts, CTPS regional transportation studies (fall 2018, winter 2019)
- Attended Revere Waterfront Traffic Study Presentation (10/10/18)
- Attended Boston MPO meeting (1/17/19)
- Attended project kick-off meeting in Saugus on 10/23/18
- On-going collaboration with Revere/Saugus, Abutters Development and MassDOT
- Attended MPO meeting on Capital Improvement Projects and Long Range projects
- Attended additional MassDOT Suffolk Downs Transportation Working Group meetings
- Reviewed new analysis results developed by CTPS and MassDOT for Suffolk Downs project to be used for FEIR
- Review Suffolk Downs FEIR
- Defined purpose and need and justification for improvements to Route 1 in terms of safety, mobility, access/egress, circulation, and congestion/delay. Identified constraints to potential improvements.
- Drafting summary report of reviewed documents in a report
- Developed Route 1 NB project schedule per MassDOT TIP project design development procedure



**Remaining Tasks**

- Finalize summary reviewed documents in a report

**FY18 MGC Transportation Planning Grant 2 (\$275,000)**

**Budget remaining = \$50,000**

**Work completed as of October 2019:**

- Conducted comprehensive Route 1 traffic observations and travel time runs (December 2018)
- Conducted comprehensive traffic data collection effort of Route 1 corridor (traffic volumes, speed, travel times)
- Summarized crash data (2012-2016) along Route 1 corridor and calculated crash rates
- Developed Vissim traffic model roadway network, geometry and attributes of Route 1 corridor
- Summarized Existing conditions traffic data and input data into VISSIM traffic model
- Began calibration of VISSIM Route 1 traffic model to existing conditions based on travel times, speeds, volumes and queuing
- Developed base map of the Route 1 study corridor
- Compiled Level of Service analysis of Route 1 corridor and study intersections for Existing conditions and analyzing speed density, travel time and queuing
- Developed future year 2040 No-Build traffic volumes based traffic generated by other planned projects in the area and general background growth rate confirmed with CTPS
- Summarized No-Build conditions traffic data and input data into VISSIM traffic model
- Coordination with Revere and Saugus to identify potential improvements along Route 1 corridor and began modeling several options in Vissim
- Developed six concept options to improvement traffic on Route 1
- Concept Options are developed based on a construction cost increment approach
- Performed preliminary roadway bridge sections review at three locations for possible widening to accommodate proposed roadway improvement design.
- Per MassDOT Highway Engineers, developed a hybrid version of the proposed diamond interchange concept for the Salem Street interchange to address the Route 1 southbound On and Off Ramp traffic queue and congestion issues.
- Collaborated with MassDOT official on the outcome of the June 20<sup>th</sup> meeting in trying to narrow down the preferred concept.
- Developed draft scope of work, cost estimate and schedule for Route 1 NB project
- Identified preliminary safety, mobility, access management, and geometric deficiencies along the study corridor
- Validated Vissim traffic model to Existing conditions and summarize in Calibration Report
- Performed Level of Service Analysis for 2040 No-Build condition
- Met with Revere, Saugus, Malden, MassDOT and developers along the Route 1 corridor to discuss projects proposed by others and potential improvements
- Continuous collaboration with City of Revere, Town of Saugus and MASSDOT staff

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- Attended meeting at Saugus Town Hall with Malden, Revere and Saugus staff on Wednesday, October 16, 2019 to review draft project scope of work
- Attended meeting at MassDOT headquarters in Boston on Friday, October 4, 2019 for presentation from CTPS on future year 2040 Build traffic volumes for the Suffolk Downs project
- Developed draft scope of work, cost estimate and schedule for Route 1 NB project
- Updated scope of work to MassDOT standard based on acceptance of the Route 1 Northbound improvement as an official TIP project by MassDOT.
- Continue collaboration with City of Revere, Town of Saugus and MASSDOT staff on the TIP project process.
- Attended coordination meeting at Saugus Town Hall with Malden, Revere and Saugus staff on Wednesday, October 16, 2019 to review draft project scope of work and discuss overall project design approach and integration with abutters development projects
- Attended meeting at MassDOT headquarters in Boston on Friday, October 4, 2019 for presentation from CTPS on future year 2040 Build traffic volumes for the Suffolk Downs project
- Analyzed Level of Service, travel time, speeds and queueing for the Route 1 alternatives
- Identified preliminary right of way constraints
- Identified preliminary design constrain at the three bridges (Salem Street, Community Trail Bridge and Cross Town Culvert)
- Summarized measures of effectiveness and benefits for each alternative (up to 3)
- Collaborate and prioritize the proposed preliminary concept options
- Collaborated with MassDOT to secure Transportation Improvement Project (TIP) grant with focus on the Route 1 northbound improvements by creating one additional travel lane (from two to three lanes).
- The Route 1 northbound improvement concept development plan was recognized by MassDOT and listed in the MassDOT TIP program website in early October as an official project.
- Coordinated with MassDOT to refine the scope of services and to seek approval

### **Remaining Tasks**

- Summarize geometric conditions along the Route 1 corridor
- Identify "stand alone" projects from the overall program between Revere and Saugus. The potential improvement locations may include:
  - Route 1/Route 16 interchange
  - Intersection of Route 107/Route 60
  - New northbound lanes and bridge over the Route 99 ramp to Route 1
  - The addition of one travel lane on Route 1 SB conceptual design plan
- Continue to perform traffic simulations using the Vissim model of the future Build 2040 alternatives on the Route 1 corridor for current alternatives and additional alternatives
- Collaborate with MassDOT Boston Office staff and MassDOT District 4 staff on the Route 1 NB concept layout

**FY2019 MGC Joint Transportation Planning Grant (\$425,000)**

The City of Revere and the Town of Saugus submitted a 2019 Joint Transportation Planning Grant application to MGC. The application identified the following scope of study/action to be undertaken with the grant if awarded.

- Identify Route 1 improvement projects and update MassDOT's PNF and PIF submissions
- Coordinate with Revere, Saugus and MassDOT
- Held public informational hearings at the respective impacted communities
- Held public project update meetings at the respective communities and stakeholders
- Coordinate concept design with proposed development projects along the Route 1 corridor
- Assisted Revere and Saugus address any MGC questions going forward
- Select final two standalone projects, one in Revere and one in Saugus to be advanced
- Advance Route 1 preferred conceptual plans
- Obtain mapping and field survey information
- Further identify right of way impacts and prepare preliminary costs estimates for the two projects
- Perform detailed roadway bridge section based on the preferred conceptual plans
- Prepare summary report including preliminary costs and, right of way impacts, regulatory/environmental issues, constraints, and phasing

In late July 2019, the MGC notified the two communities that the \$425,000 Joint Transportation Planning Grant had been awarded. The final scope of services and schedule has recently been submitted to MGC. Actions under this grant will follow MGC requirements that specific activities be developed in consultation with MassDOT.

**Scope of Proposed 2020 Joint Transportation Planning Grant**

The most recent grant awarded by MGC to the two communities involved the development of preliminary plans for the necessary improvements to alleviate the "bottle neck" along Route 1 northbound from Copeland Circle to the Route 99 interchange. Reducing congestion along Route 1 will motivate users to remain on Route 1 and not "cut-through" neighborhoods along local roadways to access their destinations. Improvements to Route 1 northbound were selected based on meetings with Revere, Saugus, Malden and MassDOT, as well as prior improvement studies that highlighted incremental improvements along the corridor. From these joint collaboration efforts, it was determined that there are cost effective improvements that could be constructed to provide significant improvement in relieving congestion along Route 1 northbound.



The proposed improvements from the previous grants will not alleviate all of the congestion within this corridor, but through the additional 2020 Joint Transportation Planning Grant the Vissim traffic model that was previously developed to identify congestion issues can be updated to reflect the changes proposed under the previous grants and identify the next group of incremental improvements that will benefit all users including vehicles, buses, bicyclists and pedestrians.

Similar to the previous grants, the goal of each of these potential improvements would be to identify individual “standalone” projects as described below that could be funded through available sources and provide incremental improvement. This will be accomplished in a similar manner/process to the previous studies through a series of collaborations with Revere, Saugus, Malden, MassDOT and private business owners and developers along the study area. Each proposed improvement would be accompanied by evaluation, concept development and a summary report describing the nature of the project along with an estimated cost, right of way impacts, environmental impacts and required permitting, and any impacts to utilities and the associated costs to relocate or protect them. It should be noted that a portion of the funds will be utilized to design the proposed improvements for the requested Revere-Saugus Joint 2020 Construction Grant. To differentiate the two efforts, the scope of services are broken into two parts as follows:

**Part 1 will focus on the following traffic improvements:**

- Evaluate the need to improve traffic operations within the Route 1 designated limits of the study.
- Evaluate the feasibility of geometry improvements to the southbound side of Route 1 to improve traffic operations and increase safety for all users.
- Evaluate geometry improvements to the on and off-ramps to improve weave operations particularly the Route 1 southbound weaving section between the Lynn Street on-ramp and the Route 60 South (Squire Road) off-ramp at Copeland Circle.
- Evaluate Lynn Street interchange improvements to traffic operational issues
- Analyze and develop concepts for improvements at the Route 99 interchange including a possible turn-around that would reduce congestion at Essex Street

**Part 2 will focus on the following safety improvements:**

- Develop design plans for pedestrian and curb-cut management safety improvements on the Route 1 northbound side between Linehurst Street (Kappy's Liquor) and Lark Ave (Prime Corporate Offices), approximately 2000 feet. The design will include preliminary and final design for the sidewalks, ADA ramps, curb-cut access and egress management. As part of the

curb-cut management improvements evaluation, consideration to convert the shoulder lane into deceleration and acceleration lanes will be explored.

ENGINEER will consult with MassDOT on the area of study.

#### **PART 1: SCOPE OF SERVICES**

Effort will consist of refreshing and updating the engineering data and documentation. Review and update data to account for recent land developments that have subsequently been constructed and/or are known to be in planning since the previous analyses. This would include the recent data collected with the opening of the Encore Boston Harbor Casino.

Efforts would involve updating current traffic information from the casino, safety data/analysis; incorporating land use changes; confirming highway elements; Vissim (computer simulation model); and updating the concept as needed.

A general breakdown of the efforts are as follows:

##### **Traffic Data Update**

- Post traffic data collected by the casino will be reviewed. Once the review of current traffic data is completed the Vissim traffic model will be updated as needed.
- Also review collision history along the corridor using data for the most recent available data for the previous year. Summarize data and identify trends along the corridor to highlight particular problematic areas/conditions.

##### **Traffic Analysis**

- Update Vissim micro-simulation model for the AM and PM peak hours. Perform merges, weaving and capacity /operational analysis of the corridor. Evaluate up to two future scenarios associated with the Lynn Street interchange. Findings will be summarized in a project report.

##### **Base Plan**

Building upon the previous conceptual base plan of the corridor and the preliminary design for the Route 1 northbound, BETA will update recent relevant information such as lane assignments, key access points and geometric changes proposed by recent or planned public projects and private developments.

##### **Corridor Audit**

- Assess the current geometrics of the existing Route 1 southbound corridor/interchanges and identify the deficiencies based on current highway standards, traffic analysis and collision history.

**Conceptual Roadway Design Plans**

- Evaluate the traffic operational issues on Route 1 southbound at the Route 1/Lynn Street interchange, and the Route 1 southbound weaving section between the Lynn Street On-Ramp and the Route 60 South (Squire Road) Off-Ramp.
- Conceptual improvements will be based on traffic modeling/assessments and the corridor audit. It is anticipated that existing surrounding conditions, such as right-of-way, environmental resources and fixed physical limitations, along the corridor could restrict what is feasible to construct. The approach will be to identify project improvements within the larger project that are achievable over a short term, mid-term and longer term. Right-of-way requirements will be depicted on the plans. Up to three concept design plans will be developed and evaluated.
- Analyze and develop concepts for improvements at the Route 99 interchange including a possible turn-around that would reduce congestion at Essex Street

**Estimates**

- Prepare estimate of probable construction cost for use in programming projects in the MassDOT TIP.

**Technical Memorandum Report**

- Traffic analysis results and findings will be summarized in a technical memorandum.

**Project Communications/Meetings**

- Maintain communications and attend meetings with the communities as well as MassDOT. Also communications are expected to be required with local stakeholders, and others. The fee has an allowance of these efforts.

**Part 2: SCOPE OF SERVICES**

This scope of work consists of the development of preliminary and final design plans for pedestrian and curb-cut management safety improvements on the Route 1 northbound side between Linehurst Street (Kappy's Liquor) and Lark Ave (Prime Corporate Offices), approximately 2000 feet.

This effort would complement the proposed construction project that is under design as part of the 2019 Joint Transportation Planning Grant. The construction completed as part of this contract would be focused on improvements that could be completed prior to the larger construction project and could reduce congestion during construction and after the completion of the larger construction project. The proposed improvements for this section of the safety improvements are expected to include: realignment of existing curb cut/driveway locations to increase safety and improve access and egress to

private properties; the relocation of existing curbing, sidewalks, guardrail and other roadway edge treatments to improve safety and accommodate the proposed roadway cross section. The work could also include the relocation of utilities in preparation of the larger construction project to decrease traffic impacts and construction duration. As part of the curb-cut management improvements evaluation, consideration to convert the shoulder lane into deceleration and acceleration lanes will be explored.

All work performed will be done in conjunction with MassDOT's review and approval and contribute to reducing congestion and improving safety for all users.

**1. Project Start up**

- Attend start up meeting with representatives of the involved communities and MassDOT to confirm the project approach and MassDOT's requirements for the design package. It is currently anticipated that the PROJECT documents to be submitted to MassDOT will be a 40-scale plan package consisting of Construction Plans, Traffic Marking and Signing Plans, Grading plan, Traffic Management Plans and Miscellaneous Details. The plan package will be accompanied by an Item List, Quantity Take-off and Engineer's Estimate of Probable Construction Cost and Special Provisions. It is anticipated that MassDOT will perform all appraisals and related filings for property actions.
- Conduct Field Reconnaissance to observe prevailing roadway conditions. Note features that would impact the design.

**2. Field Survey and Base Plans**

- Obtain recent photogrammetric base mapping for the project corridor suitable for design purposes.
- Compile State Layout/Right-of-Way Information for the north side of the corridor. Adjacent Property Owners and parcel lines will be obtained from assessor files/plans.
- Collect available information on underground utilities within the proposed area of work along northbound roadway sideline from municipalities, MassDOT and private utility companies.
- Establish Control for the Project. Survey is to be tied into layout/property monuments (where these are visible). Vertical Control is to be established. Tie survey control into the survey control performed by others.
- Perform detailed topographic ground survey along this section of the roadway. Coverage will from the curb line to a point 10 feet beyond the back of sidewalk and the location of the sloped edging/guardrail at the median coupled with measurement of the existing width of

pavement from curb-to-curb. Detail coverage will include such items as: edge of pavement, walks, driveways, utility castings, utility poles, utility markings, walls, fences, and signs.

- Develop Cross-Section data at 50-foot intervals to the extent of the topographic survey. In addition, elevations are to be taken at key points, such as significant break points, driveway openings, centerline grades at drives, as well as pipe and rim elevations at drainage structures adjacent to the curb line.
- Perform Office Calculations and electronically plot survey information. The work will include the development of a TIN.
- Prepare Base Plans - scale 1" = 40'. Record information obtained from utility owners, as well as roadway layout and abutting property parcel lines are to be compiled on the base plans.

### **3 Traffic Analysis**

**B.3.1 Evaluate the feasibility of using the shoulder as acceleration and decelerations lane.**

**B.3.2 Assess driveway access and egress management. Evaluate opportunities for safe curb-cut access and egress improvements.**

### **4 Preliminary Design**

- Develop Proposed Typical Section(s).
- Perform geometric design for the proposed improvements with specific attention to proper lane transitions for acceleration and deceleration. Review modifications required at driveways. Assess options.
- Assess impacts to private properties associated with the modifications to Route 1 including driveway openings, impacts to parking areas, signs building entrances, utilities and the like. Determine measures to mitigate impacts.
- Apply proposed alignment to cross sections and assess vertical and horizontal impacts.
- Perform grading. Set proposed grades for the bottom and top of curb, back of sidewalk and review the transitions onto adjacent properties. Identify resulting changes to current runoff flows, as well as provisions required to accommodate these changes. (Additional basins.)
- Review drainage collection along the new gutter line of the northbound roadway. It is anticipated that drainage work will be limited to the relocation of basins from the current



curb line to the new curblane with new basins tied into the existing basins and the existing basins converted.

- Review relocations requirements for utility poles.

**5 Preliminary Design Submission**

- Prepare preliminary design plans. Construction, Traffic, and Grading.
- If required, prepare Preliminary Right of Way plans depicting approximate limits of right of way impacts: permanent and/or temporary easements.
- Prepare Item List and perform Quantity take off and Preliminary construction cost estimate.
- Submit Plan Package to MassDOT and attend a design review meeting to receive comments.

**6 Environmental**

- Perform Initial Environmental Screening to identify likely regulatory requirements. Effort will include contacting local Conservation Commissions and consulting DEP files on contaminated sites adjacent to the corridor.

**7 Project Coordination & Community Outreach**

- Attend Project Meetings (say 3) with the involved communities/MassDOT.
- Attend District Utility Coordination Meeting and coordination with the Gas company.
- Attend two (2) Public Meetings to present the Project and receive public input. Effort will include rendered plans to help present the Project's proposed improvements to the public.
- Allow for up to three (3) meetings with private property owners to discuss changes at their properties.

**8 Final Design**

- Finalize design including lane transitions, geometry, horizontal alignment, cross-sections, curb ramp design and layout. Also finalize sideline grading and required transitional work on private property in order to define the limits of required easements.
- Finalize Traffic Marking and signage to meet with the proposed design.
- Finalize modifications to drainage collection facilities for stormwater runoff to meet the proposed design. Effort will include the relocation of existing catch basins or provision of additional basins to meet with the proposed roadway grading.
- Finalize design plans for the Project, including General Plans, Grading & Tie Plans and Traffic Plans. The effort will also include the preparation of miscellaneous drawings, including cover sheet, key plan, construction detail sheets, and traffic sign summary.
- Develop Construction Traffic Management Plan using standard overall phasing guidelines for construction implementation to minimize traffic disruption, it is anticipated that most of the work will be performed during night-time.
- Perform Itemized Quantity Take Off and prepare estimate of probable construction cost. Engineer's cost estimates will be based on recent available Weighted Average Bid Prices from MassDOT.
- Compile Final Design Submittal Package including Plans, Item List, Quantity Take Off and Engineer's Estimate.

**9 Final Right of Ways Plans**

- Update Right of Ways plans depicting approximate right of way impacts. The preparation of permanent easement plans for Registry Filings will be performed as an additional service if required.

**Design Services Assumptions**

The following assumptions form the basis of the Part 2 scope and the planned effort.

- It is anticipated that structural retaining walls are not required.
- Hazardous materials investigations or mitigations, if needed, will be performed as an additional service.
- Design of utilities other than drainage, if needed, will be performed as an additional service.

- MassDOT will be responsible for paying for police details as may be required by survey, and other field activity.
- It is anticipated that DEIR will not be required

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

Beta has prepared the following proposed budget for the two scope elements proposed in this joint transportation planning grant application.

**FEE BREAKDOWN**

The following is a general breakdown of the fee for Part 1 and 2 efforts.

**PART 1: (focus on Route 1 southbound)**

• Traffic Data Update & Review	\$ 5,000
• Traffic Analysis /Vissim Model	\$80,000
• Base Plan	\$ 10,000
• Corridor Audit	\$ 10,000
• Study & Conceptual Design	\$195,000
• Estimates `	\$ 10,000
• Technical Memorandum	\$10,000
• Meetings	\$ 30,000
<b>Sub Total for Part 1</b>	<b>\$350,000</b>

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### **PART 2: (design for construction of limited improvements on Route 1 northbound)**

• Start up	\$ 3,000
• Field Survey/Base Plan	\$10,000
• Traffic Analysis	\$ 7,000
• Preliminary Design	\$ 25,000
• Final Design	\$20,000
• Meetings/Coordination	\$ 10,000
Sub Total for Part 2	\$75,000

Grand total (Part 1 and 2) .....\$425,000

### **Timeline:**

#### **Part 1 (12 -18 months)**

July 2020 - start date

Dec 2020 - 50% completion of the scope of services.

July/Oct 2021 - 100% completion

#### **Part 2 (Design)**

July 2020 – start date

Nov 2020 – 25% Design submittal

June 2021 – 100%/ Final Submittal

August 2021 – Project Advertise

Oct 2021 to Sept 2022– Construction Duration.

### **3. CONNECTION TO GAMING FACILITY**

Please provide specificity/evidence that the requested funds will be used to address issues or impacts directly related to the gaming facility.

As described above, a 2020 Joint Transportation Planning Grant will provide the two communities with the means to carry forward their focus on achievable transportation improvement projects intended to mitigate anticipated traffic increases on the Route 1 – Route 99 corridor generated by the Encore Boston Harbor Casino. The anticipated end result is a definitive traffic improvement plan for the Route 1-Route 99 North corridor and a preliminary traffic improvement plan for the southbound side of this corridor. These improvements can reasonably be funded in the nearer term within the state Transportation Improvement Plan and constructed to better enable this key corridor to handle increased traffic projected for patrons of the Encore Boston Harbor Casino.

**4. INTERNAL CONTROLS/ADMINISTRATION OF FUNDS**

Please provide detail regarding the controls that will be used to ensure that funds will only be used to plan to address the impact. If non-governmental entities will receive any funds, please describe what reporting will be required and how the applicant will remedy any misuse of funds.

The City of Revere will again act as Administrative agent for this additional joint transportation planning effort with the Town of Saugus. The sole purpose of this joint transportation planning effort is aimed at mitigation of specific local/regional traffic impacts that have come with the opening of the Encore Boston Harbor Casino in 2019. The City of Revere will adhere to all applicable state and local procurement policies and administrative/fiscal controls. No non-governmental entities will receive any of these funds directly or indirectly.

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

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



The City of Revere and the Town of Saugus are in regular communication with the Metropolitan Area Planning Council (MAPC) as both communities are currently engaged in preparation of new Master Plans, both of which are being facilitated by MAPC. In the Master Plan development process traffic and transportation are a major area of study and include the goals and approaches of this continuing joint transportation planning effort by Saugus and Revere.

Throughout the course of these MGC funded Joint Transportation Planning projects, MassDOT has been apprised and consulted by Beta and the City and Town, even to the extent of MassDOT reviewing scopes of service before execution of grant agreements among MGC and the communities.

Additionally, Saugus and Revere have frequently consulted with the Cities of Malden and Chelsea as to the prospect of greater collaboration with them, and perhaps more surrounding communities, to advance regional transportation planning efforts on a number of fronts, but most specifically on mitigation of casino related traffic impacts. The communities expect to consult with others such as Melrose, Lynnfield and Peabody as the 2020 Joint Transportation Planning Grant effort proceeds.

#### **6. MATCHING FUNDS FROM GOVERNMENTAL OR OTHER ENTITY**

Please demonstrate that the governmental or other entity will provide significant funding to match or partially match the assistance required from the Community Mitigation Fund. Please provide detail on what your community will contribute to the planning projects such as in-kind services or planning funds.

As with the case of the 2017/2018 and 2019 Joint Transportation Planning Grants, both the City of Revere and Town of Saugus will provide significant in-kind services to support this initiative. This includes the provision of office space and supplies; administrative and fiscal support services. Of course the Mayor and Town Manager will make significant contributions in terms of public policy and guidance of the effort. Additionally, the effort will require substantive interrelationship with not only line planning personnel, but other municipal experts in the public safety, traffic, public works and engineering departments of both communities.

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

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

As neither Revere nor Saugus has been recognized as a Surrounding Community to the Encore Casino, the grant is sought in order to provide the means for these communities to continue jointly and cooperatively, to pursue measures to mitigate anticipated casino traffic impacts. In the process, some negative conditions that pre-date the casino may be alleviated

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

N/A

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

N/A

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

N/A

- e) If transportation planning funds are sought for mitigation not required under MEPA, please provide justification why funding should be utilized to plan for such mitigation. For example, a community could provide information on the significance of potential impacts if trip generation totals exceed projected estimates.

The Encore Boston Harbor Casino contains some 2,914 parking spaces on-site and 800 parking spaces off-site for employees. The complex has been projected to generate the following daily and peak hour vehicle trips:

- Friday Daily = 36,846
- Friday Daily Net New: 20, 130
- Friday PM Peak Hour Net New: 1,358
- Saturday Daily = 43,930
- Saturday Daily Net New = 23,982
- Saturday Peak Hour Net New: 1,810

The Route 1/Route 99 interchange is located to the northeast in Saugus, less than 5 miles from the casino site. The weekday average daily traffic near the interchange is over 120,000 vehicles on Route 1 and almost 27,000 vehicles on Route 99. The interchange is noted regionally as experiencing mobility and safety issues (Long Range Transportation Plan of Boston MPO, July 2015). The casino is expected to increase traffic through the Route 1/Route 99 interchange. If the Transportation Demand Management (TDM) program proposed as part of the proposed project underperforms and does not meet estimates, the traffic impact to this critical interchange may increase significantly.

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

**2020 TRANSPORTATION PLANNING GRANT APPLICATION**

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**CERTIFICATION BY MUNICIPALITY/GOVERNMENTAL ENTITY**

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



Scott Crabtree, Town Manager – Town of Saugus, MA

Signature(s) of Responsible Municipal  
Official(s)/Governmental Entity(ies)

Date - January 27, 2020

**CERTIFICATION BY MUNICIPALITY/GOVERNMENTAL ENTITY**

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



Brian Arrigo, Mayor – City of Revere, MA

Signature(s) of Responsible Municipal  
Official(s)/Governmental Entity(ies)

Date – January 27, 2020