# Environmental Review Checklist

Effective May 29, 2023

**The purpose of this Environmental Review Checklist (ERC) for the scoping, Pre-25% Over the Shoulder (OTS), and 25% project stages is to identify permitting requirements early in the design process and streamline environmental review.**

**The MassDOT Environmental Representative (ER) shall complete ERC items identified for MassDOT input, in consultation with the Subject Matter Expert (SME), in advance of the scoping session and Pre-25% OTS. The MassDOT ER will confirm findings with the consultant at the scoping session and Pre-25% OTS, update their responses, review with the SMEs, update ProjectInfo, and distribute the ERC to the PM and consultant. The consultant will complete and submit ERC items identified for their input with additional responses, actions, and supporting documentation with the 25% design submission.**

The MassDOT ER will populate the first two sections of the table below with project information. The consultant will populate, sign, and date the third section of the table certifying that the findings in this checklist have undergone a quality review. The consultant is responsible for ensuring compliance with regulatory updates in its findings.

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| **Project Details (MassDOT ER to populate)** |
| **Project Name:**  |
| **Project Number:**  | **MassDOT Project Manager:**  | **MassDOT District:**  |
| **Consultant:**  | **Consultant Project Manager:**  | **Consultant Environmental Preparer:**  |
| **Environmental Representative:**  | **Scoping Session Date:**  |  **Pre-25% OTS Date:**  |
| **ProjectInfo Populated/ Documentation Saved Date:**  | **ProjectInfo Updated/Documentation Saved Date:**  |
| **Certification (Consultant to populate)** |
|  | **Consultant Project Manager Certification (*sign and date*):**  | **Consultant Environmental Preparer Certification (*sign and date):***  |

The MassDOT ER will populate the second column, titled “**MassDOT ER Response – Scoping/Pre-25% OTS**,” of the Environmental Permits and Review Summary on the next page with assistance from the SME. The consultant will populate additional responses and actions in the third column, titled “**Consultant Response/Action – 25%**,” and provide supporting documentation at 25%, indicating when draft permit applications will be provided. Some boxes labeled “No action required” indicate that no action is required by that party.

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| **Environmental Permits and Review Summary**Identify if permits/approvals below are required. Ensure each permit/approval type is considered. Consultant is responsible for submitting draft permit applications/documents to MassDOT ENV by the 75% design submittal, unless otherwise noted; per the 75% submittal checklist, failure to do so will result in the 75% design submittal being rejected or put on hold. If applicable, describe impacts. |
|  | **MassDOT ER Response - Scoping/Pre-25% OTS** | **Consultant Response/Action – 25%** |
| 1. **Bridge Exempt** (Y/N):

If applicable, this exempts the replacement of bridges and culverts and its approach work with functionally equivalent structures from review under the Massachusetts Wetlands Protection Act (WPA), Chapter 91 of the Massachusetts Public Waterfront Act, and the Massachusetts Environmental Policy Act (MEPA). |  |  |
| 1. **WPA** (Request for Determination of Applicability [RDA], Notice of Intent [NOI], Variance)

If yes, scope consultant to prepare draft application using WPA checklist.\* |  |  |
| 1. **Chapter 91** (Minor Modification, Permit, License or Amendment)

If yes, scope consultant to prepare draft application. |  |  |
| 1. **Directly within or within 1 mile of environmental justice (EJ) community?**

If yes, inform consultant to consider if subject to MEPA review. If directly within, scope consultant to prepare EJ analysis for National Environmental Policy (NEPA) documentation if substantial right of way or displacements are required. |  |  |
| 1. **MEPA** (Environmental Notification Form [ENF], Expanded ENF [EENF]/Rollover Environmental Impact Report [EIR], EENF/Single EIR)

If yes, scope consultant to prepare draft filing. Discuss schedule. Ensure the consultant considers EJ populations in filing approach. |  |  |
| 1. **NEPA** (Programmatic or Individual Categorical Exclusion [CE])

If yes, inform consultant that MassDOT Environmental will prepare NEPA documentation, unless otherwise noted. See [NEPA Classes of Action](https://www.environment.fhwa.dot.gov/nepa/classes_of_action.aspx) and MassDOT’s [Programmatic Agreement](https://www.mass.gov/doc/programmatic-agreement-for-determinations-and-approvals-of-categorical-exclusions-under-the-national-environmental-policy-act/download) with the Federal Highway Administration [FHWA] for guidance. |  |  |
| 1. **Section 401** (Individual Water Quality Certification [WQC] for Fill, Individual WQC for Dredge, WQC Variance)

If yes, scope consultant to prepare draft application using 401/404 checklist.\*  |  |  |
| 1. **Section 404** (Self Verification Notification [SVN], Pre-Construction Notification [PCN], Individual Permit)

If yes, scope consultant to prepare draft application using 401/404 checklist.\* |  |  |
| 1. **U.S. Coast Guard Bridge Permit** (Y/N) If yes, scope consultant to prepare draft application and potentially a navigation impact report.
 |  |  |
|  | **MassDOT ER Response - Scoping/Pre-25% OTS** | **Consultant Response/Action – 25%** |
| 1. **Coastal Zone Management (CZM) Federal Consistency Review** (Y/N)

If yes, scope consultant to prepare and submit a federal consistency review determination letter to CZM at 25%. |  |  |
| 1. **Essential Fish Habitat (EFH)** (Y/N)If yes, confirm if consultant has fisheries biologist/environmental scientist experienced in EFH Assessment (EFHA). If yes, scope consultant for EFHA; if no, MassDOT Environmental will hire open services consultant. If Federal Aid (FA), use the FHWA Programmatic Agreement. If no FA, use the EFH and Fish and [EFH and Fish and Wildlife Coordination Act Worksheet.](https://www.fisheries.noaa.gov/new-england-mid-atlantic/habitat-conservation/essential-fish-habitat-assessment-consultations)
 |  |  |
| 1. **Section 7 Endangered Species Act** (Y/N; U.S. Fish & Wildlife Service [USFWS] and/or National Marine Fisheries [NMFS Service])

If yes, write USFWS and/or NMFS to designate which consultation is required. Refer to “Notes” in Question 51 for guidance on scoping the consultant. |  |  |
| 1. **Natural Heritage & Endangered Species Program (NHESP) Estimated or Priority Habitat**

If yes, inform consultant that Environmental Section will coordinate directly with NHESP, unless otherwise noted (if CMP is required). |  |  |
| 1. **Section 106** (In-House, No Adverse Effect, Adverse Effect)

MassDOT Environmental will complete Section 106 documentation, unless otherwise noted by its Cultural Resources Unit (CRU). |  | No action required. |
| 1. **Adjacent Parkland or Wildlife Refuges for Section 4(f)** (Y/N)

If yes, Environmental Section will handle Section 4(f) documentation and consultation. |  | No action required. |
| 1. **Adjacent Section 6(f) Properties** (Y/N)

If yes, Environmental Section will handle Section 6(f) documentation and consultation. |  | No action required. |
| 1. **Article 97** (Y/N)

If yes, inform consultant that this project may be subject to MEPA review. Coordinate with ROW to confirm Article 97 applicability. Note that on rare occasions, temporary easements may be subject to Article 97. |  |  |
| 1. **Other** (Section 408, Chapter 253, etc.)

Use this [USACE Recreation Areas](https://www.nae.usace.army.mil/Missions/Recreation/) and [USACE Navigation Projects](https://www.nae.usace.army.mil/Missions/Navigation/Massachusetts-Projects/) reference to inform Section 408 review process. If applicable, scope consultant to conduct these consultations in coordination with the Project Manager. These are engineering level reviews and not the responsibility of MassDOT Environmental. |  |  |

The MassDOT ER will populate the second column, titled “**MassDOT ER Response – Scoping/Pre-25% OTS**,” of the Detailed Questions below with assistance from the SME. The consultant will populate additional responses and actions in the third column, titled “**Consultant Response/Action – 25%**,” and provide supporting documentation at 25%, indicating when draft permit applications will be provided. Some boxes labeled “No action required” indicate that no action is required by that party.

| **Detailed Questions** |
| --- |
|  | **MassDOT ER Response - Scoping/Pre-25% OTS**  | **Consultant Response/Action –** **25%** |
| **Outreach and Coordination**Provide supporting outreach and coordination documentation in Attachment D. |
| 1. **Is there known public opposition or controversy to date? If yes, explain.**
 |  |  |
| 1. **Provide all written correspondence of coordination that has occurred to date with local boards, commissions, and officials to identify specific issues or concerns regarding the project purpose and need and general scope of work.**
 | No action required. |  |
| 1. **If the proponent has presented the project in a public meeting setting, summarize findings and attach information regarding the meeting including the name of the public board/commission, the date and location, public comments, and any formal meeting minutes.**
 | No action required. |  |
| 1. **Identify who will send a letter to the Local Historical Commission (LHC) with a project description and locus map, seeking comments, at 25%. Provide a hard copy (with a scope of work and locus) to the State Historic Preservation Officer (SHPO).**

Notes: MassDOT Cultural Resources Unit (CRU) staff will submit a letter to the LHC if there are historical issues or inform the consultant to submit the LHC letter if no historical issues are apparent. If the consultant is preparing the LHC letter, a signed and dated electronic copy shall be sent to MassDOT CRU with the 25% ERC submission in Attachment D. MassDOT CRU staff will submit early notification letters and accompanying materials to the three federally recognized tribes in Massachusetts for all projects. |  |  |
| 1. **Is the project within a local historic district? Provide documentation of coordination with the Local Historic District Commission (LHDC).**

Notes: This only applies to projects where the Municipality is the project proponent. A LHD is under the purview of a Local Historic District Commission (LHDC). The LHDC regulates proposed physical or aesthetic changes within the LHD. An LHDC is a regulatory body and is different from an LHC, which is advisory. If a municipal project is within an LHD, the proponent must contact the LHDC early in the design process to determine if a Certificate of Appropriateness (COA) is required. The COA or any other correspondence to or from the LHDC shall be submitted to MassDOT CRU before the Section 106 consultation can be completed.   |  |  |
| 1. **Will work occur on bridges over U.S. Coast Guard (USCG) regulated navigable waterways?**

Notes: If yes, MassDOT Wetlands Unit will coordinate with USCG during scoping to determine level of coordination required (e.g., Bridge Work Inspection & Repair Notification Form; Navigability Survey; Navigational Impact Report; Surface Transportation & Uniform Relocation Assistance Act of 1987 (STURRA) exemption; and/or Bridge Permit). |  |  |
| 1. **Will work occur within a designated** [**Wild & Scenic River (WSR)**](https://www.rivers.gov/massachusetts.php)**, or within 0.25 miles upstream or downstream of a WSR and its tributaries?**

Notes: If yes, scope consultant to submit a letter to the National Park Service with a project description and locus map by 25%. The consultant shall attach a copy of the letter with the 25% ERC. |  |  |
| 1. **Will the project occur within coastal zone?**

Notes: If yes, scope consultant to provide a draft early outreach letter to the Office of Coastal Zone Management (CZM) summarizing the project if subject to MEPA, or for a federal consistency review determination if not subject to MEPA, with the 25% ERC. |  |  |
| **SKIP QUESTIONS 27-29 IF BRIDGE EXEMPT** |
| **Massachusetts Environmental Policy Act (MEPA)** |
| 1. **Identify, describe, and provide a screenshot/map of environmental justice (EJ) populations within 1 mile of project site using the Executive Office of Energy and Environmental Affairs (**[**EEA) EJ Maps Viewer**](https://mass-eoeea.maps.arcgis.com/apps/MapSeries/index.html?appid=535e4419dc0545be980545a0eeaf9b53) **(or most recent map). Identify English isolation languages within 1 mile.**

Notes: Measure from center of limit of work. For linear projects, measure from start and end points, and representative locations along the corridor using GIS or CAD. If an EJ neighborhood is close, err on the side of including it. If the project limits are still in development, include a buffer line to accommodate expansion of the limit. Consultant to inform if 5-mile radius applies. |  |  |
| 1. **Identify any** [**MEPA Review Thresholds**](https://www.mass.gov/doc/mepa-regulations-301-cmr-11-effective-1-6-23/download) **anticipated to be met or exceeded and why.**
* **Land**
* **State Listed Species**
* **Wetlands, Waterways, and Tidelands**
* **Transportation**
* **Air**
* **Solid and Hazardous Waste**
* **Areas of Critical Environmental Concern**

Notes: If present, scope consultant to prepare editable (MS Word format .doc or other) MEPA documentation to complete the MEPA process. If within 1 mile of an EJ population (or 5 miles in unusual circumstances), discuss the MEPA filing approach, schedule, and documentation with the consultant, ensuring compliance with MEPA’s EJ analysis and outreach protocols. |  |  |
| **Chapter 91** |
| 1. **Does the project propose work below the Mean High Water (MHW) Mark, below Historic Mean High-Water Mark, within a Great Pond, or within or over a navigable waterway?**

Notes: Consult MassGIS MassMapper, wetlands delineation data, and survey basemapping to determine if any portion of the project is within Chapter 91 jurisdiction, which is below the MHW of a tideland, below the Historic MHW and within the more seaward of the following: a) 250 feet of the MHW or b) between MHW and the first public way; within a Great Pond (defined as any Pond that is larger than 10 acres); or within or any non-tidal navigable waterway (any waterway large enough to navigate with a kayak or canoe). If a Chapter 91 license or permit is required, notify the consultant that a draft application should be submitted to MassDOT Environmental as early as possible. [The list of Great Ponds in MA is provided here](https://www.mass.gov/doc/massachusetts-great-ponds-list). See more information on the [Chapter 91 process](https://www.mass.gov/guides/chapter-91-the-massachusetts-public-waterfront-act). Coordinate with the consultant to determine if the project requires a license, permit, amendment, or minor modification to an existing license under Chapter 91 of the Massachusetts Public Waterfront Act. |  |  |
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| **Stormwater** |
| 1. **Confirm a Water Quality Data Form (WQDF) is included in 25% submittal.**

Notes: A WQDF is required with the 25% submission for all MassDOT projects. Provide in Attachment E.  | No action required. |  |
| 1. **Which watershed(s) is the project located within?**

Notes: Reference the WQDF (with instructions) to identify the project specific Stormwater Control Measure (SCM) requirements. Consultant to confirm through the WQDF process. In the WQDF, consultant to provide information on preliminary Low Impact Development (LID) approaches and structural SCMs (also known as best management practices [BMPs]). Structural SCMs are required to meet impaired waters and [TMDL](https://www.mass.gov/info-details/total-maximum-daily-load-tmdl-viewer) requirements. If SCMs are required, SCM design information should be included in the 25% design plans and the WQDF. Consultant shall gather information on feasibility and constraints (e.g., test pits, utility identification, etc.) prior to the 25% submission. |  |  |
| 1. **Does the project require structural SCMs based on the watershed’s requirements? If yes, include specific water quality requirements here.**
 | No action required. |  |
| 1. **Does the project require structural SCMs based on the proposed increase in impervious cover compared to existing conditions? If yes, include specific water quality requirements here.**
 | No action required. |  |
| 1. **Based on aerial imagery, site visits, and/or anecdotal information, are there current drainage-related issues (e.g., flooding, erosion)? If yes, are structural SCMs required to mitigate those issues?**
 | No action required. |  |
| 1. **Does drainage discharge within or to a Critical Area, as specified in Standard 6 of the Massachusetts Stormwater Standards?**

Notes: Stormwater "critical areas" are defined as: Coldwater fisheries, Zone Is, Zone IIs, public swimming beaches, shellfish growing areas, drinking water reservoir watersheds, certified vernal pools, and Interim Wellhead Protection Areas (IWPAs). Minimizing water quality and thermal impacts are important to the protection of cold-water fisheries, therefore, the consultant shall prioritize infiltration BMPs, maintain vegetative cover to the maximum extent practicable, and minimize tree clearing. For certified vernal pools, stormwater BMPs must be set back 100’ from the edge of the pool. |  |  |
| **Wetlands** |
| 1. **Is the project under jurisdiction of the Wetlands Protection Act (WPA) or 401 Water Quality Certification (WQC) and require compliance with the Massachusetts Stormwater Standards?**
 |  |  |
| 1. **Does the project qualify for limited project status under the Wetlands Protection Act (WPA)?**
 |  |  |
| 1. **Does the project trigger a WPA variance for non-limited bordering vegetated wetland (BVW) impacts >5,000 sf or BVW fill within an area of critical environmental concern (ACEC)?**

Notes: Consultant to provide estimated quantities. |  |  |
| 1. **Does the project exceed 100 cy of dredging/excavation from below the mean hightide line for coastal waters and below the high-water mark for inland waters, triggering a Dredge WQC?**

Notes: Consultant to provide estimated quantities. |  |  |
| 1. **Will work occur within Outstanding Resource Waters?**

Notes: If yes, an individual WQC is required for fill within wetland resource areas (OOC cannot serve). |  |  |
| 1. **Does the project exceed 50 lf of bank impact, or 5,000 sf of land under water (LUW), BVW, bordering land subject to flooding (BLSF), and riverfront area (RFA) impact, triggering a Wildlife Habitat Evaluation?**

Notes: Consultant to provide estimated quantities. |  |  |
| 1. **Does the project exceed 200 permanent lf of bank impact, triggering a U.S. Army Corps of Engineers (USACE) Mitigation/Stream Visual Assessment Protocol Form?**
 |  |  |
| 1. **Does the project exceed 1/10 acre of vegetated wetland (VW) impact, triggering a USACE Mitigation Plan?**

Notes: Consultant to provide estimated quantities. |  |  |
| 1. **Is the project within any USACE Special Aquatic Sites (salt marsh, tidal flats, vegetated shallows, etc.)?**

Notes: Review USACE Massachusetts General Permit (MGP) for applicable thresholds. |  |  |
| **Public Properties** |
| 1. **Identify any publicly owned open space within the project area.**

Notes: Consult with MassGIS MassMapper (Openspace by level of protection layer) to conduct an initial screen of properties that may be protected under Section 4(f) of the US DOT Act or Article 97 of the Massachusetts Legislature. Section 4(f) property is any publicly owned park, recreation area, wildlife, or waterfowl refuge, or public or private historic site (on the National Register of Historic Places). [Learn more on Section 4(f)](https://www.environment.fhwa.dot.gov/env_topics/4f_tutorial/default.aspx). Article 97 property is any property held in accordance with natural resources protection and is subject to EEA’s Article 97 Land Disposition Policy and a 2/3 in favor vote from State Legislature. Refer to [MassGIS metadata](https://www.mass.gov/files/documents/2016/07/ne/os-schema.pdf) to determine if a property is subject to Article 97, however a more in depth analysis of a property deed may be required to make a final determination. Confirm applicability with MassDOT Right of Way. Consult with the Section 6(f) master list for reference of properties protected under Section 6(f). |  |  |
| **Rare Species, Fish & Wildlife** |
| 1. **Is the project within Natural Heritage & Endangered Species Program (NHESP) Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife?**

Notes: If yes, notify the consultant that MassDOT will coordinate with NHESP. The consultant shall prepare a locus map (USGS topo 1:24,000 scale) clearly showing the project limits, with stationing, against NHESP Priority and Estimated Habitats, and certified and potential vernal pools data layers within the 25% ERC in Attachment B. MassDOT ER shall coordinate with MassDOT Wildlife & Endangered Species Unit on projects within Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife. |  |  |
| 1. **Are there any vernal pools (e.g., certified or potential vernal pools) within or adjacent to the project limits?**

Notes: Strive to avoid impacts to the vernal pool and its surrounding habitat. |  |  |
| 1. **Is the project within or adjacent to conservation planning datasets/ resources (e.g., latest NHESP BioMap or Critical Natural Landscape; State Forest or Wildlife Management Areas; municipal or Non-Governmental Organization (NGO) conservation land; MassWildlife Priority Areas; Critical Linkages; etc.)?**

Notes: Strive to provide terrestrial wildlife passage and aquatic connectivity through the design of culvert and bridge replacements. If within rare turtle habitat, MassDOT to coordinate with the NHESP on potential turtle roadway mortality reduction best management practices. If within MassWildlife Priority Areas, MassDOT Wildlife & Endangered Species Unit to coordinate with the NHESP’s MassDOT liaison and/or other MassWildlife biologists. Consider Best Managements Practices such as natural stream bed, bank, wildlife benches, vegetated rockfill, and fluvial geomorphology considerations. wildlife fencing, etc. |  |  |
| 1. **State whether any federally listed species or critical habitat is potentially known within the project area using the U.S. Fish and Wildlife Service’s** [**Information for Planning and Conservation (IPaC) Tool**](https://ecos.fws.gov/ipac/)**. State the species or critical habitat.**
 |  |  |
| 1. **Was the Northern Long-eared Bat identified through IPaC as potentially within the project limits?**

Notes: If yes, consultant shall prepare the attached Northern long-eared bat form and submit with the 25% ERC in Attachment F. |  |  |
| 1. **State what federally listed aquatic species or critical habitat are known to potentially occur within the project limits using the National Marine Fisheries Service (NMFS) Greater Atlantic Region Fisheries Office (GARFO)** [**Section 7 Species/Critical Habitat Information & Maps**](https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-species-critical-habitat-information-maps-greater)**.**

Notes: If applicable, confirm if consultant has a qualified biologist / environmental scientist experienced in Section 7 of the Endangered Species Act. If yes, scope consultant for Section 7; if no, MassDOT Environmental will hire open services consultant. If Federal Aid, scope consultant to complete the [NMFS Programmatic Form](https://s3.amazonaws.com/media.fisheries.noaa.gov/2020-12/FHWA%20GARFO%20NLAA%20Program%20VF_final%20version%202.0_WB_508_12102020.pdf?null) and provide at 25%; If no Federal Aid, the USACE will be the lead federal agency for Section 7 consultation, and the consultant shall prepare an affects analysis and recommended determination under the Endangered Species Act (ESA) to be included in the USACE permit application. |  |  |
| 1. **Does the project occur within designated Essential Fish Habitat (EFH) using National Marine Fisheries Service’s** [**EFH Mapper**](https://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper)**?**

Notes: If yes, confirm if consultant has a qualified fisheries biologist / environmental scientist experienced in EFH Assessment (EFHA). If yes, scope consultant for EFHA; if no, MassDOT Environmental will hire open services consultant. If Federal Aid, use the Federal Highway Administration ([FHWA) Programmatic Agreement](https://media.fisheries.noaa.gov/dam-migration/fhwa_programmatic_efh_consultation_april_2018_%282%29.pdf). If no Federal Aid, use the [EFH and Fish and Wildlife Coordination Act Worksheet.](https://www.fisheries.noaa.gov/new-england-mid-atlantic/habitat-conservation/essential-fish-habitat-assessment-consultations) If the project requires work within wetlands or will result in temporary or permanent water quality impacts (e.g., more than minor increase in impervious area/stormwater runoff; turbidity; etc.) associated with EFH, complete the [EFH and Fish and Wildlife Coordination Act Worksheet](https://www.fisheries.noaa.gov/new-england-mid-atlantic/habitat-conservation/essential-fish-habitat-assessment-consultations) and submit to MassDOT Environmental with the 25% submission. Consider activities such as noise, fish passage, and turbidity when determining consultation requirements and restrictions. |  |  |
| 1. **Is the project within any coldwater fisheries or within the MA Division of Marine Fisheries** [**Priority Projects Datalayer**](https://www.mass.gov/info-details/massgis-data-diadromous-fish)**?**

Notes: Consider fish passage, appropriate BMPs such as natural stream bed and bank, wildlife benches, vegetated rockfill, fluvial geomorphology considerations, and minimizing tree clearing/maximize shading near streams. MassDOT ER shall coordinate with MassDOT Wildlife & Endangered Species Unit on projects within coldwater fisheries or the Division of Marine Fisheries (DMF) Priority Projects Datalayer. |  |  |
| 1. **Does the project include new, or replacement or extension (for culverts) of existing, culverts and bridges over rivers and streams?**

Notes: If yes, notify the consultant that the [Massachusetts Stream Crossing Standards](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.nae.usace.army.mil%2FPortals%2F74%2Fdocs%2Fregulatory%2FStreamRiverContinuity%2FMA_RiverStreamCrossingStandards.pdf&data=04%7C01%7Csdolabany%40vhb.com%7C32195c47f3ef41d3bd2e08d9d46c4caf%7C365c5e99f68f4beb89d9abecb41b1a1b%7C0%7C0%7C637774384009472176%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=XqObviHr%2FUEIl1H7x4cZueVrJbXr4zdDuSB3Jl%2FvwrM%3D&reserved=0) are applicable to non-tidal stream crossings, must be met to the maximum extent practicable (MEP), and an alternatives analysis for each structure shall be provided within the applicable permit applications. In addition, new non-tidal stream crossings must fully meet the Stream Crossing Standards and the consultant shall provide a narrative description of how the standards have been fully met within the applicable permit applications. |  |  |
| **Cultural Resources** |
| 1. **Identify known cultural and historical resources in the project area using the Massachusetts Historical Commission’s Massachusetts Cultural Resource Information System (**[**MACRIS) database**](http://maps.mhc-macris.net/)**.**

Notes: These include properties or structures listed on the National/State Register(s) of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth. If the project area is within a historic district, the MassDOT ER will inform the consultant. |  | No action required. |
| 1. **Ensure all areas of potential earth disturbance outside of the Highway Layout are identified so MassDOT CRU can determine if an archaeological survey is warranted.**

Notes: Limits of earth disturbance is generally the limit of slope work, but it will be necessary to identify other aspects of the project such as landscape improvements, wetland replication areas, Stormwater SCMs, climate change resiliency measures, etc. | No action required. |  |
| **Hazmat** |
| 1. **Provide a summary of historic and current land use within the project area utilizing online resources such as the Massachusetts Department of Environmental Protection (MassDEP) Boston Water and Sewer Commission (BWSC) online site database, ESRI Imagery, Aerial Photographs, Historic Fill Maps, and Sanborn Maps.**
 | No action required. |  |
| 1. **Provide a summary of local potential sources and adjacent release sites and sources of contamination (e.g., dry cleaners, tannery, dump ground, former landfill, active landfill, auto shredding, etc.) using MassDEP Online Search Tools, Sanborn Maps, Aerial Photographs, and Historic Fill Maps.**
 | No action required. |  |
| 1. **Are there any known/suspect contaminated sites within and/or adjacent to project limits?**

Notes: If yes, on the site locus and existing conditions plan in Attachment G, identify boundaries of any MassDEP Release Tracking Numbers (RTNs), TSCA, superfund sites, and/or brownfield sites that abut or cross into project limits. Provide a statement of determination on whether there is any residual contamination in these known/suspect contaminated sites that could potentially impact the project limits. | No action required. |  |
| 1. **Are there any Activity Use Limitations (AULs) and/or Conditions associated with a Permanent Solution?**

Notes: If yes, Attachment G should include a figure depicting an outline of AUL/Conditions area and details of key regulatory obligations and cover requirements. | No action required. |  |
| 1. **For projects involving excavation work, provide sample location plans, data tables comparing data to applicable regulatory thresholds, and laboratory reports of any existing soil, sediment, and/or groundwater sampling data. Also provide available geotech boring data and historic topo maps.**
 | No action required. |  |
| 1. **Will the project generate excess soil?**

Notes: If yes, consultant to evaluate and provide a summary of onsite (e.g., raising grades, etc.) and/or offsite (at nearby offsite locations within the right-of-way (ROW), such as ramps/interchange lobes etc.) reuse opportunities and disposal options. On-site soil disposal should be prioritized; review Policy Directive P-22-001 for additional guidance. | No action required. |  |
| 1. **For rail trail projects, consider the** [**MassDEP Best Management Practices**](https://www.mass.gov/doc/best-management-practices-for-controlling-exposure-to-soil-during-the-development-of-rail-0/download) **for Controlling Exposure to Soil During the Development of Rail Trails.**
 | No action required. |  |
| 1. **For projects that involve asbestos (either in building materials and/or soil), review MassDEP asbestos regulations and guidance.**
 | No action required. |  |
| 1. **For projects that anticipate Polychlorinated biphenyls (PCBs) in soil, sediment and/or groundwater, review the Environmental Protection Agency (EPA) Toxic Substances Control Act (TSCA) regulations and guidance for potential need of additional assessment and EPA involvement.**
 | No action required. |  |
| 1. **Will the project require dewatering of contaminated or potentially contaminated groundwater?**

Notes: If yes, consultant to indicate whether onsite recharge is feasible or if offsite discharge under a National Pollutant Discharge Elimination System (NPDES)/Massachusetts Water Resources Authority (MWRA) permit is required.  | No action required. |  |
| 1. **Identify all existing building materials within the project limits which may require handling as hazardous waste or be subject to other environmental handling regulations upon disposal.**

Notes: Materials include suspected treated timber, asbestos, lead-based paint, mercury switches, PCB-containing materials, etc. | No action required. |  |
| **National Environmental Policy Act (NEPA)/General** |
| 1. **Will the project require any building demolition or substantial ROW?**

Notes: If yes, scope consultant to prepare and submit an EJ analysis with the 25% ERC submission in Attachment C if the project is directly within an EJ population. If building demolition is anticipated (either in full or as part of renovations), notify MassDOT PM upon submittal of the 25% design, so the Right-of-Way section can secure access to the property. Notify the hazmat review group to initiate a hazardous materials building survey if needed. Notify MassDOT CRU if demolition includes a historic structure identified in Question 55. |  |  |
| 1. **Provide justification for proposed easements that are associated with environmental mitigation, BMPs, regulatory requirements, etc. Consider context of the area when identifying and proposing easements.**
 | No action required. |  |
| 1. **Is this project a Type I Action necessitating a Type I Noise Assessment in accordance with MassDOT’s Type I and Type II Noise Abatement Policies and Procedures?**

Notes: A project is a Type I Project if it involves the following activities: 1. The construction of a highway on new location;
2. The physical alteration of an existing highway where there is either a substantial horizontal alteration or a substantial vertical alteration (\*Note that a substantial horizontal alteration is defined as when the distance is halved between a sensitive noise receptor- such as a building or park- and the through travel lane, and a substantial vertical alteration is defined as when the existing shielding is removed between the new roadway elevation and a sensitive noise receptor.);
3. The addition of a through traffic lane(s);
4. The addition of an auxiliary lane (greater than 2500 feet in length), except for when the auxiliary lane is a turn lane;
5. The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange;
6. Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or,
7. The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.

If yes, coordinate with the consultant to have the required Type I Noise Assessment completed. The outcome and recommendations of the Type I Noise Assessment will be communicated with the Design Engineer. Please see the Type I and Type II Noise Program Guidebook for more information about Type I projects. |  |  |
| **Resiliency** |
| 1. **Are there any transportation assets that may be subjected to flooding, failure, damage or clogging from extreme weather events, storm surges, and/or projected sea-level rise? If yes, should future climate change conditions be considered and should aspects of the project be designed to increase resilience? Explain.**

Notes: Due to the evolving nature of resiliency related information, consult the best available sources at the time this section is completed. State or provide the dataset, study, analysis, or research (such as the Resilient MA Action Team (RMAT) Tool, Sea level rise maps, MassDOT/FHWA Asset Management, Extreme Weather and Proxy Indicators Pilot Project, [Deerfield River Watershed Vulnerability Assessment](https://sce.ecosheds.org/), etc.) that was used to aid in the assessment and design of the resiliency actions. |  |  |
| 1. **Provide analyses, if any, in Attachment H that informed the 25% design (e.g., hydraulic & hydrologic (H&H) analyses; fluvial geomorphology assessment; etc.).**

Notes: H&H analyses and/or fluvial geomorphology assessment are typically required for bridges or culverts greater than 10 feet. |  |  |
| 1. **Is the project area in an effective Federal Emergency Management Agency (FEMA) Flood Zone? If yes, what flood zone or zones cover all or part of the project area (e.g. Zone A, AE, V, VE, etc.)?**

Notes: Scope consultant to identify base flood elevation. Include the applicable Flood Insurance Rate Map (FIRM) panel(s). Graphically identify the project location on the FIRM panel(s). |  |  |
| 1. **Is a FEMA designated Floodway present?**

Notes: Use [FEMA’s Map Service Center](https://msc.fema.gov/portal/home) to find effective, preliminary, pending, and historical products for a given map quadrant. Indicate the project location on the FIRM panel by outlining the project area in red. If the scale of the FIRM is too small to easily discern the project area, create and submit a more zoomed in FIRMette. Placing fill or a new or revised structure within a FEMA designated Floodway requires a **no rise analysis** to determine if the project will require a Letter of Map Revision (LOMR). The consultant must coordinate with MassDOT Hydraulics Section if fill or a new or revised structure is proposed to a FEMA designated Floodway and provide the no rise analysis with the 25% submission, if required. |  |  |

\*Check MassDOT Environmental’s website for latest version.

## ATTACHMENTS FOR CONSULTANT TO PROVIDE WITH 25% SUBMISSION

(If not applicable, note)

Attachment A: Project Description

Attachment B: Figures

* Figure 1: USGS Locus
* Figure 2: Aerial Locus
* Figure 3: NHESP Locus
* Figure 4: FEMA FIRM
* Figure 5: Critical Resources Locus
* Figure 7: Openspace Resources Locus
* Figure 8: EJ Map
* Figure 9: Preliminary Environmental / Landscape Site Assessment *(Aerial image figure(s) to identify suitable areas for wetland mitigation, potential areas and BMPs for stormwater treatment, invasive species found on site, etc.)*

Attachment C: MEPA/NEPA Supporting Documentation

* EJ Analysis *(if MEPA EJ EIR or ROW implications under NEPA)*
* Proposed Outreach Plan *(if MEPA EJ EIR)*
* Draft EJ Screening Form *(if MEPA EJ EIR)*
* MEPA Review and Filing Schedule with Advanced Notification Milestones *(if MEPA EJ EIR)*
* RMAT Tool Output Preview Report *(for all MEPA filing types)*

Attachment D: Additional Outreach/Early Coordination Supporting Documentation

Attachment E: Water Quality Data Form

Attachment F: Wildlife Supporting Documentation

Attachment G: Hazardous Materials Supporting Documentation

Attachment H: Resiliency Supporting Documentation

Attachment I: Photographic documentation of field conditions and features (e.g., drainage features, wetland replication areas, wetlands to be altered, roadway conditions, intersection conditions, bicycle/pedestrian facilities, historic features, open space)

Attachment J: Environmental Design Requirements Checklist\*

\*Check MassDOT Environmental’s website for latest version.

## MEPA EJ ANALYSIS AND OUTREACH INSTRUCTIONS

**If MEPA documentation is required and the project is subject to MEPA’s EJ Protocols and amended regulations, effective January 2022, include an EJ analysis and outreach plan in Attachment C in compliance with MEPA’s** [**Public Involvement Protocol on EJ Populations**](https://www.mass.gov/doc/final-mepa-public-involvement-protocol-for-environmental-justice-populations-effective-date-of-january-1-2022/download) **and** [**Protocol for Analysis of Project Impacts on EJ Populations**](https://www.mass.gov/doc/final-mepa-interim-protocol-for-analysis-of-project-impacts-on-environmental-justice-populations-effective-date-of-january-1-2022/download)**. This information must be included as part of the MEPA filing.**

Below summarizes the main requirements of the EJ analysis. The consultant should use this for guidance; however, the protocol above, or latest MEPA guidance, must be consulted for detailed instructions.

1. Identification and locus map of EJ populations within 1 mile and 5 miles of the project site using MEPA’s [EJ Map Viewer](https://mass-eoeea.maps.arcgis.com/apps/MapSeries/index.html?appid=535e4419dc0545be980545a0eeaf9b53).
	1. Measure from center of limit of work – for linear projects, measure from start and end points, and representative locations along the corridor. If EJ neighborhood is close, err on the side of including it. Additionally, if the project limits are still in development, include an additional buffer line to accommodate expansion of the limits.
2. Narrative describing characteristics of the EJ populations within 1 mile of the project (e.g., the census block group identification number and EJ characteristics of “Minority”, “Minority and Income”, etc.).
	1. If an EJ population has been identified within 5 miles of the project site, confirm that the project will not: meet or exceed thresholds under 301 CMR 1.03(8)(a)-(b); or generate 150 or more new average daily trips (ADT) of diesel vehicle traffic over a duration of 1 year or more.
3. All languages in the 1 or 5 mile radius using the “Languages Spoken in Massachusetts” tab of the [EJ Map Viewer](https://mass-eoeea.maps.arcgis.com/apps/MapSeries/index.html?appid=535e4419dc0545be980545a0eeaf9b53). Identify which of these census tracts overlap with an EJ block group.
4. Assessment of existing unfair or inequitable environmental burden. Consider the following:
	1. Massachusetts Department of Public Health (MassDPH) EJ Tool, RMAT Tool, U.S. EPA’s EJ Screen
	2. Feedback from outreach
5. Analysis of project impacts to determine disproportionate adverse effect. Consider the following:
	1. The nature and severity of the project environmental and public health impacts
	2. The comparative impact on EJ populations versus non-EJ populations within the project site or other comparable area
	3. Construction period and permanent impacts
	4. Project benefits
6. Analysis of project impacts to determine change effects
7. Mitigation and Section 61 Findings
8. If these populations are reasonably found to be negatively affected by project, description of measures to promote public involvement with these EJ populations prior to filing ENF and during ENF review.

## NORTHERN LONG-EARED BAT INSTRUCTIONS

If the Northern Long-eared Bat is determined through IPaC to potentially occur with the project limits, please complete a) through j):

* 1. Does the project include any activities that are greater than 300 feet from existing, actively used road/rail surfaces?
	2. Review the following map: [NHESP No. Long-eared Bat Locations (arcgis.com)](https://mass-eoeea.maps.arcgis.com/apps/Viewer/index.html?appid=de59364ebbb348a9b0de55f6febdfd52). Does the project include any activities within 0.5 miles of a known NLEB hibernaculum or within 0.25 miles of a maternity roost tree?
	3. Is the project located within a karst area ([map](https://pubs.usgs.gov/of/2014/1156/))?
	4. Tree Trimming / Removal
	Include an estimate, in acres, of all proposed clearing, grubbing, tree trimming, and tree removal for the areas listed in the table below. If number of trees is described, multiply by 0.09 to convert to acreage and add that number into the total.

|  |  |
| --- | --- |
| **Tree Removal Location** | **Total (acres)** |
| 0-100 feet of existing road/rail surfaces  |  |
| 100-300 feet of existing road/rail surfaces  |  |
| Over 300 feet from existing road/rail surfaces |  |

* 1. Does the project include any bridge removal, replacement, and/or maintenance? If yes:
		+ 1. Describe the proposed bridge work and timing of the work (month/season/year).
	2. Does the project include the removal, replacement, and/or maintenance of any structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.). If yes:
		+ 1. Describe the proposed structure work and timing of the work (month/season/year).
	3. Will the project involve the use of any *temporary* lighting?
	4. Will the project install new or replace existing *permanent* lighting? If yes:
		+ 1. If replacing, have you considered using downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or when using the BUG system, the goal is to be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable.
			2. If proposing new, are lights increasing existing ambient lighting conditions?
	5. Does the project include percussive or other activities (not including tree, bridge, or structure work) that will increase noise levels above existing traffic/background levels? [Examples: *temporary* use of pile drivers, rock drills, jackhammers, hoe rams, chainsaws, or blasting.]
	6. Will the project raise the road profile above the tree canopy?