US 202 / NH 124 / NH 137 Intersection Improvements

Jaffrey, New Hampshire

PREPARED FOR



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August 2020

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Part I. Categorical Exclusion

1.1 Introduction

The New Hampshire Department of Transportation (NHDOT) and the US Department of Transportation (USDOT) Federal Highway Administration (FHWA) have prepared this Categorical Exclusion (CE) in accordance with the National Environmental Policy Act (NEPA) of 1969, [42 United States Code (USC) 4332(2)(c)] as implemented in 23 Code of Federal Regulations (CFR) 771.117(d).

The Jaffrey NH 202 Traffic Intersection Improvement Project (or "Project") involves improvements to the five-way intersection of US 202 (Main Street/Peterborough Street) with NH 124 (Turnpike Road), Stratton Road, and Blake Street in the Town of Jaffrey, New Hampshire (refer to **Figure 1.1-1**, USGS Site Location Map). This CE provides a description of the Purpose and Need of the Project, the Proposed Action, and the alternative actions considered during project planning. This document also describes the existing environmental conditions and evaluates the environmental effects of the Proposed Action. The discussion of the environmental effects of the Project demonstrate the conditions and criteria for a CE are satisfied.

1.1.1 Background

The five-way signalized intersection of US 202 (Main Street/Peterborough Street) with Turnpike Road, Blake Street, and Stratton Road is located in the center of downtown Jaffrey. US 202 approaches the intersection from the north via Peterborough Street and from the west via Main Street. The Peterborough Street approach consists of a shared left/through and an exclusive right-turn lane, which accommodates vehicles continuing

on US 202. The Main Street approach consists of an exclusive left-turn lane, which accommodates vehicles continuing on US 202 and a shared through/right turn lane. NH 124 approaches the intersection from the northeast and consists of a shared left/through and an exclusive right-turn lane. The southeast approach of Stratton Road consists of a multipurpose lane and a right-turn slip lane, which accesses Turnpike Road. Blake Street from the south consists of a single multi-purpose lane.

Approximately 280 feet to the west along Main Street is the four-way signalized intersection of North Street (NH 137) with River Street (US 202) and Main Street (US 202/NH 124). US 202 approaches the intersection from both the south on River Street and the east on Main Street. The Main Street (US 202) approach from the east consists of an exclusive left-turn lane, which accommodates vehicles continuing onto River Street (US 202) and a shared through/right-turn lane. The River Street (US 202) approach consists of a shared left/through and an exclusive right-turn lane, which accommodates vehicles continuing on Main Street (US 202). Both the Main Street (NH 124) approach from the west and the North Street (NH 137) approach from the north consists of a single multi-purpose lane.

The main land use within the vicinity of the US 202/NH 124 intersections is mix of commercial and residential. The Town of Jaffrey is most densely populated within the vicinity of the Project with little undeveloped space. The Contoocook River flows under Main Street between the two US 202/NH 124 intersections. A dam is located within the Contoocook River directly south of Main Street, which impounds the river in the southern portion of the Study Area.

Both sections of Main Street provide on-street parking with a two-hour time limit. Additionally, curbed sidewalks are present on both sides of the street with crosswalks on all legs of both signalized intersections and crossing Main Street at the School Street intersection west of North Street. An exclusive pedestrian phase is present at the intersection of Main Street and River Street while concurrent pedestrian phases are present at the main Street/Peterborough Street intersection. Pedestrian accommodations are important as there are several schools nearby, including the Jaffrey Grade School on School Street to the west and the Jaffrey Rindge Middle School and Conant High School on Conant Way to the east.

1.1.2 Study Area

The Study Area for the proposed Project was defined to encompass the general area where new or improved roadway infrastructure may be located, including reasonable alternatives. The Study Area for the proposed Project (as shown in to **Figure 1.1-2**) begins to the north along US 202 near Cross Street and continues southwest along US 202 to Tyler Hill Road. The Study Area also extends across the five-way intersection from US 202 onto Blake Street, and encompasses the Contoocook River between Blake Street and River Street. Site photographs of the Study Area are provided in **Appendix A**. The phrase "Project Footprint" is used to denote the direct impact resulting from the Proposed Action, including the limits of grading and the proposed right-of-way.

1.2 Purpose and Need

The purpose of this Project is to address the traffic congestion and safety deficiencies associated with the current configuration of the US 202 "dog-leg" intersections of Main Street with Peterborough Street and Main Street with River Street. It is important to the community that the purpose of the Project be considered within the context of the community's desire to enhance pedestrian mobility while supporting the quality of life and economic vitality of Jaffrey's downtown.

The Project Need relates to the high-volume US 202 movement (Peterborough Street to River Street, and River Street to Peterborough Street) that must travel through both intersections – first with a right-turn movement followed by a left-turn movement. Because the two traffic signal controlled intersections are separated by only about 300 feet, there is not enough storage length to accommodate the left-turn movements. As a result, vehicles in the left-turn lanes queue back into the adjacent signalized intersection creating a gridlock condition, which is further described in **Section 1.4.2**. This gridlock condition, which occurs sporadically – at least eight to ten times during the peak hour – produces an unstable flow that is frustrating to both motorists and pedestrians. The condition is also potentially hazardous as motorists move from one lane to another in an effort to maneuver around blocked vehicles. This queueing problem was confirmed with a Sim Traffic simulation model as well as with actual observations including monitoring the interaction between the intersections with a drone.

Additionally, large trucks (WB-50 or longer) traveling along US 202 have difficulty turning right onto Main Street from both Peterborough Street and River Street. Large trucks have been observed crossing into the opposing travel lane to complete the turn.

1.3 Proposed Action and Alternatives

1.3.1 Description of the Proposed Action

The Proposed Action calls for the existing five-way traffic signal controlled Main Street/Peterborough Street/Turnpike Road/Stratton Road/Blake Street intersection to be reconstructed to form a five-way single-lane roundabout. The proposed roundabout would have an inscribed diameter (approximate outside curb-to-curb edge) of approximately 125 feet. Each approach to the roundabout would consist of only a single lane except for the northbound approach from the New Connector Roadway¹ that would also provide a channelized right-turn lane to accommodate buses, large trucks, fire engines, and similar large vehicle turns onto Stratton Road.

Along with reconstructing the five-way intersection at Main Street, the Proposed Action calls for US 202 to be realigned by constructing a new 140-foot long bridge crossing the Contoocook River approximately 375 feet south of the Main Street bridge. The new

This term is used to describe the new US 202 alignment from the existing five-way Main Street/Peterborough Street/Turnpike Road/Stratton Road/Blake Street intersection to River Street. The Proposed Action includes the river crossing closest to Downtown Jaffrey, as endorsed by the Jaffrey Select Board in a letter dated March 27, 2018. (See **Appendix D**).

segment of US 202 would extend south and west from the five-way roundabout using portions of the current Blake Street alignment to cross the river to River Street. The new segment of US 202 would intersect River Street at a second proposed roundabout. The River Street roundabout would be a three-way single-lane roundabout with an inscribed diameter (approximate outside curb-to-curb edge) of approximately 125 feet.

The Proposed Action also removes the traffic signal at the Main Street/River Street/ North Street intersection, replacing it with stop-sign control on the River Street and North Street approaches to the intersection.² This revised stop-controlled intersection would allow continuous traffic flow along Main Street, with stop signs at River Street and North Street.

In addition to the proposed improvements to traffic flow through the five-way intersection and along US 202, the proposed improvements include new accommodations for pedestrians. The proposed connector roadway and bridge crossing the Contoocook River would provide a 5.5-foot-wide sidewalk and a 5- to 7-foot-wide shoulder/bike lane on each side of the roadway. The two roundabouts would provide pedestrian crosswalks and pedestrian refuge islands on each approach to the roundabout, which would accommodate pedestrians crossing only one lane and one direction of traffic at a time. Access to the Monadnock Recreational Rail Trail located to the north and south of the intersection would be maintained.

The Proposed Action also includes implementation of stormwater treatment measures to minimize water quality impacts. This would include the construction of a stormwater basin to treat the increased impervious area. This basin would be constructed on the east side of the Contoocook River in the vicinity of the new proposed bridge structure and a reconfigured public parking lot and would drain to the Contoocook River. As the project design progresses, the potential use of porous pavers or asphalt in appropriate locations as a means of reducing the amount of impervious area may also need to be evaluated.

An overview of the Proposed Action is provided in **Figure 1.3-1**. General Plans for the Proposed Action are provided in **Appendix B**.

1.3.2 Description of Alternatives Evaluated

In addition to the No-Build Alternative, three alignment alternatives and four intersection alternatives were considered to address the Project Purpose and Need. Once these alternatives were developed, a screening process was used to evaluate each alternative. The alternatives and the results of the evaluation were then presented to the Technical Advisory Committee and the public. The screening criteria included traffic operational criteria, as well as environmental considerations such as impacts to wetlands, water quality, floodplains, groundwater resources, threatened and endangered species, public parks and recreation, right-of-way, cultural resources, and construction costs. The

There are other intersection control alternatives at the Main Street/River Street/North Street intersection that would result in acceptable operations. Thus, the final design plans for this intersection may include retention of the existing signal or implementation of another stop-controlled configuration.

screening analysis resulted in the elimination of alternatives with substantial impacts and helped in the identification of the Proposed Action. The screening matrix used to evaluate the alternatives and an associated memorandum are included in **Appendix C**.

Alignment Alternatives:

- Alternative 1
- Alternative 2
- Alternative 3

Intersection Alternatives:

- > Downtown Intersection
 - Four-Way Traffic Signal Controlled
 - Five-Way Traffic Signal Controlled
 - Four-Way Roundabout
 - Five-Way Roundabout
- River Street Intersection
 - T-Intersection
 - Three-Way Roundabout

No-Build Alternative

This alternative would retain the current configuration and traffic movements of the five-way intersection of Main Street, Peterborough Street, Turnpike Road, Stratton Road, and Blake Street and the four-way intersection of North Street (NH 137) and River Street (US 202). The No-Build Alternative was rejected because it does not address the traffic congestion and safety concerns identified in the Project's Purpose and Need. Under the existing configuration, the two traffic signal controlled intersections are spaced only 300 feet apart, which results in left-turn vehicles queuing from one intersection into and through another. Additionally, the five-way traffic signal controlled intersection is not pedestrian friendly under the current configuration due to the expansive pavement area and long crosswalks.

1.3.2.1 Alignment Alternatives

Through an extensive public and abutter outreach effort, a series of alternatives for the proposed new route of US 202 were developed and evaluated. Three alignment alternatives were considered prior to selecting Alternative 1. The location of these three alignment alternatives are provided in **Figure 1.3-2**.

Alternative 1 (Proposed Alignment)

This alternative proposes to re-route US 202 along what is currently Blake Street and then cross the Contoocook River approximately 375 feet upstream from the Main Street bridge. US 202 would then intersect River Street approximately 400 feet southwest of Main Street. Alternative 1 is the shortest of the three proposed alignment alternatives,

with a total length of approximately 1,050 feet, beginning south of Main Street and extending just north of School Street along River Street. This alignment is located within the Downtown Jaffrey Historic District (or "Historic District").

The newly aligned segment of US 202 extending along the new 140-foot long bridge between the two proposed roundabouts would have a design speed and speed limit of 20 miles per hour (mph). The US 202 Connector would be limited to a single 12-foot lane in each direction with 5- to 7-foot shoulders on each side of the roadway. A 5.5-foot wide sidewalk would be constructed on both sides of the roadway.

To further minimize impacts to properties and to introduce a southern "gateway" to the downtown, a roundabout would be introduced to control traffic flow at the intersection of River Street with the proposed realigned US 202. The roundabout would serve to slow or "calm" traffic, thereby enhancing the pedestrian friendly character of the downtown area. The proposed roundabout would have a design circulatory speed of 15 mph.

Alignment Alternative 1 was selected as the Proposed Action because it was determined to have the least overall impacts. Alternative 1 has substantially less impact on natural resources than Alternative 2 or Alternative 3, including impacts to wetlands, floodplain, water quality, groundwater resources, and tree clearing. All three alternatives would involve right-of-way impacts; however, Alternative 1 would require acquisition and demolition of fewer buildings, as demonstrated during the screening process (refer to **Appendix C**). All three alignment alternatives would impact areas identified as being archaeologically sensitive; however, Alternative 1 was determined to have the least amount of potential impact.³

Alternative 2

Alternative 2 would re-align US 202 along what is currently Blake Street, extending the roadway southwest and turning to cross the Contoocook River approximately 600 feet upstream from the Main Street bridge, just prior to 21 Blake Street. The proposed alignment would include a new roadway segment to the rear of the properties along the east side of River Street between 21 River Street to the north and 49 River Street to the south. This alternative would require the reconfiguration of the intersection of River Street with Tyler Hill Road. Three properties would need to be acquired under this alternative: 69-71 River Street, 5 Tyler Hill Road, and 6 Tyler Hill Road. The total length of this realigned roadway is approximately 2,600 feet.

This newly aligned segment of roadway would have a design speed of 25 mph. The mainline would be limited to a single 12-foot lane in each direction with 5-foot shoulders on each side of the roadway. A 5.5-foot wide sidewalk would be constructed on both side of the roadway. Portions of this alternative are located within the Downtown Jaffrey Historic District.

Following selection of Alternative 1 as the Proposed Alignment, an additional Phase IB archaeological survey was conducted within the Project Footprint. The results of the survey determined that no intact archaeological deposits would be impacted by the Proposed Action. See **Section 1.4.13** for additional information on archaeological resources.

Upon evaluation, this alignment alternative was eliminated in favor of Alternative 1 due to a number of reasons. This alternative was determined to have substantial impacts to the Contoocook River, since a new bridge at this location would require a center pier or multiple piers. Floodplain impacts therefore would require floodplain compensatory mitigation and additional documentation. This alternative would also impact other natural resources such as wetlands, water quality, and groundwater resources, and would also require a large amount of tree clearing. This alternative poses a much greater impact to natural resources than Alternative 1. Additionally, this alternative would impact the largest number of parcels of all the alignment alternatives, many of which are parcels that are contributing to the existing Historic District and the Boundary Increase Area. ⁴ The new road would be constructed in the backyards of these properties, which would result in a visual impact within the Historic District.

Alternative 3

Alternative 3 would re-align US 202 along what is currently Blake Street, extending the roadway southwest and turning to cross the Contoocook River, approximately 1,200 feet upstream of the Main Street bridge, beyond the Downtown Jaffrey Historic District, connecting with Tyler Hill Road near the intersection of River Street and Tyler Hill Road. This alignment is the longest of the re-alignment alternatives with a length of approximately 3,100 feet.

This newly aligned segment of roadway would have a design speed of 25 mph. The mainline would be limited to a single 12-foot lane in each direction with 5-foot shoulders on each side of the roadway. A 5.5-foot wide sidewalk would be constructed on both sides of the roadway.

Upon evaluation, this alignment alternative was determined to have substantial natural resource impacts caused by a new bridge crossing at this location, and was eliminated in favor of Alternative 1. Since this alternative proposes to cross the Contoocook River at its widest point, this alternative would have the greatest amount of floodplain impacts. This alternative would also have the greatest amount of wetland impacts of all alternatives due to the bridge crossing and wetlands that run along the eastern side of the river south of Blake Street. This alternative would also impact a parcel owned by the Town of Jaffrey (Tax Map 239 Lot 225) that was acquired with Land and Water Conservation Funds (LWCF). Therefore, any impacts to this parcel would be regulated under Section 6(f) of the LWCF Act. This represents a critical constraint, since LWCF regulations require full replacement by a property of similar value.

1.3.2.2 Intersection Alternatives

Having determined that Alternative 1 was the alignment alternative that best meets the Project Purpose and Need and has community support, the remaining decisions considered the best configuration and traffic control for the Main Street/Peterborough Street/Turnpike Road/Stratton Road/Blake Street intersection and the revised US 202

⁴ The Boundary Increase Area of the Historic District is further described in **Section 1.4.13**.

alignment intersection with River Street. The alternatives that were considered for these two intersections are described below.

Downtown Intersection

To improve traffic operations and to enhance pedestrian mobility and safety, four intersection alternatives were evaluated for the existing five-way intersection of Main Street/Peterborough Street/Turnpike Road/Stratton Road/Blake Street. ⁵ The alternatives considered either maintaining traffic signal control or controlling traffic movement with a roundabout. All alternatives would maintain the Monadnock Recreational Rail Trail path through the intersection. In each case (traffic signal or roundabout) consideration was given to discontinuing the Stratton Road connection to the intersection and, as a result, converting the intersection from its current five-way configuration to a four-way intersection. The intersection alternatives included:

- > Four-Way Traffic Signal Controlled Intersection
- > Five-Way Traffic Signal Controlled Intersection
- > Four-Way Roundabout Intersection
- > Five-Way Roundabout Intersection

The results of the intersection alternatives evaluation revealed similar impacts under each of the alternatives and from an operational perspective, the traffic signal and the roundabout would each operate acceptably and result in a substantial improvement over the No Build. Although discontinuing Stratton Road and converting the five-way intersection to a four-way intersection would marginally improve the efficiency of the intersection, maintaining a five-way configuration would still result in a substantial improvement over the No-Build Alternative. For this reason, the Town of Jaffrey Select Board was asked if the Town had a preference as to the intersection alternatives. The Select Board unanimously voted in favor of the five-way roundabout alternative.

The four intersection alternatives including the Five-Way Roundabout (Proposed Intersection) are described as follows:

Four-Way Traffic Signal Controlled Intersection

This alternative maintains the existing traffic signal control while discontinuing the Stratton Road leg of the intersection. Eliminating the Stratton Road approach to the intersection would result in a redistribution of Stratton Road traffic to and from Turnpike Road, likely by way of Ellison Street. This in turn would necessitate the realignment and upgrade of Ellison Street where it intersects Turnpike Road.

All four approaches to the Main Street/Peterborough Street/Turnpike Road/New Connector Roadway intersection would have exclusive left-turn lanes, while the US 202 (Peterborough Street) southbound approach to the intersection would be shifted to the east to provide a wider turning radius for tractor trailer trucks. Additionally, the signal timing at the intersection would be improved to enhance the flow of traffic through the

⁵ The results of the traffic evaluation completed for this project is available upon request to NHDOT.

intersection. This alternative would include larger, more pedestrian-friendly sidewalks along Main Street and the roadway approaches to the intersection. Pedestrian crossings within the intersection would be shorter, which is aided by the elimination of the Stratton Road approach to the intersection.

While the four-way intersection alternative provides efficiency by converting the five-way intersection to a more standard four-way intersection, closing Stratton Road would result in additional impacts and costs. Closing Stratton Road would require another connection from Stratton Road to Turnpike Road, such as improving the intersection of Ellison Street with Turnpike Road.

Five-Way Traffic Signal Controlled Intersection

This alternative is similar to the four-way traffic signal controlled alternative in that it maintains traffic signal control, provides exclusive left-turn lanes on each intersection approach, and shifts the Peterborough Street leg of the intersection to the east to improve the truck turning radius. However, this alternative maintains full access/egress to/from Stratton Road.

Four-Way Roundabout

The alternative proposes to construct a modern four-way roundabout at the intersection of Main Street and Peterborough Street. The addition of the roundabout and new bridge crossing would serve to safely and efficiently accommodate both regional and local traffic while slowing traffic, enhancing pedestrian movement, and serving as a "gateway" to downtown Jaffrey. The roundabout would also allow the existing four-lane section of Main Street to be reduced to two lanes, thereby allowing either additional on-street parking or wider, more pedestrian-friendly sidewalks.

As designed, the proposed roundabout would accommodate WB-67 (53-foot trailer) trucks, which periodically pass through the downtown area. Therefore, the roundabout would not restrict vehicle use through the modified intersection and would accommodate the large vehicles that already use the existing signal-controlled intersection, such as school buses, fire trucks, and large commercial trucks. The roundabout, as designed, would have an outside curb to curb diameter distance of 125 feet.

Like the four-way traffic signal-controlled intersection alternative, the four-way roundabout would consist of closing Stratton Road, which would result in a redistribution of Stratton Road traffic to and from Tumpike Road, likely by way of Ellison Street. This, like the four-way traffic signal controlled alternative would require another connection from Stratton Road to Tumpike Road, such as improving the intersection of Ellison Street with Tumpike Road. Such a closure would therefore incur additional impact and cost.

Five-Way Roundabout (Proposed Intersection)

The five-way roundabout, a component of the Proposed Action, calls for the existing five-way traffic signal controlled Main Street/Peterborough Street/Tumpike

Road/Stratton Road/Blake Street intersection to be reconstructed to form a five-way single-lane roundabout. The proposed roundabout would have an inscribed diameter (approximate outside curb-to-curb edge) of approximately 125 feet. Each approach to the roundabout would consist of only a single lane except for the northbound approach from the New Connector Roadway that would also provide a channelized right-turn lane to accommodate bus buses, large trucks, fire engines, and similar large vehicle turns onto Stratton Road.

River Street Intersection

Two alternatives were evaluated with the three-way intersection of the revised US 202 alignment and River Street. These included a T-intersection and a three-way roundabout Neither intersection involves impacts to natural resources such as wetlands or floodplains. Both have implications for impacts to properties contributing to the Downtown Jaffrey Historic District.

T-Intersection

This alternative proposes to continue the new alignment of US 202 onto River Street and add a stop sign to the northern River Street approach to the intersection. Therefore, vehicles traveling north along the new US 202 alignment would have the option to continue straight through the intersection to the new bridge crossing over the Contoocook River, or to turn left onto River Street towards Downtown Jaffrey. Vehicles traveling south along the new US 202 alignment would be able to turn right onto River Street after the bridge structure or continue straight along US 202 south.

Since this alternative would provide a continuous traffic flow along the new US 202 alignment from the new bridge onto River Street, the road geometry would require a gradual curve required for vehicle speeds of 25 mph. Due to the orientation of the bridge and its close proximity to River Street, this intersection would require the full acquisition and demolition of three properties, as well as the partial acquisition of two properties. Therefore, property impacts for the T-intersection would be greater than the three-way roundabout intersection (described below).

Three-Way Roundabout (Proposed Intersection)⁶

The three-way roundabout at the intersection of River Street with the new alignment of US 202 would allow the continuous flow of traffic for both roadways through the intersection. Vehicles traveling south along US 202 would have the choice to bear right at the intersection and enter downtown Jaffrey or exit the roundabout at the second exit to continue onto US 202.

This roundabout intersection has a smaller footprint than the T-intersection since vehicles entering and exiting the bridge over the Contoocook River would be leaving and entering the roundabout, thus lowering traveling speeds and increasing the angle of

The Three-Way Roundabout at River Street was developed following selection of Alignment Alternative 1. It was developed in order to minimize property impacts at River Street. Since Alignment Alternatives 2 and 3 had already been rejected on the basis of impacts to natural and cultural resources, as well as lack of public support, the Three-Way Roundabout Alternative was developed for Alignment Alternative 1 only.

the curve between the bridge and the roundabout, as opposed to a gradual curve for the T-intersection alternative. The smaller footprint would only require the full acquisition of one property which contributes to the Historic District and the partial acquisition of two properties (one of which is contributing to the Historic District). The presence of a roundabout would also encourage reduced vehicle speeds through this populated section of Jaffrey, which would increase the safety of drivers and pedestrians within the downtown area. The posted speed limit would be 20 mph for vehicles approaching the intersection along the new US 202 alignment north and south of the intersection.

1.4 Evaluation of Environmental Effects

The following is a description of the environmental effects of the Proposed Action relative to social, economic, natural, and cultural resource issues.

1.4.1 Land Use and Socio-Economic Resources

The Project is within Jaffrey, New Hampshire (refer to **Figure 1.1-1**, USGS Site Location Map). The Town of Jaffrey is in Cheshire County within the south-central portion of the state in what is known as the Monadnock Region. The Contoocook River flows through the center of Jaffrey where the Project is located.

The primary land use within the Study Area is residential and commercial, and according to the 2016 Town Zoning Map is located within the General Business District. The General Business District begins near the intersection of US 202 with Ridgecrest Road to the north and extends south along the US 202 corridor until the intersection of US 202 with Lacy Road to the south. This area contains numerous apartment buildings, single and multi-family homes, as well as many businesses including Rite Aid, Reds of Jaffrey, Lab N' Lager, Jaffrey Pizza Barn, Jaffrey Chamber of Commerce, Country Bridals and Formal Wear, Cournoyer Funeral Home and Cremation Center, and the Jaffrey town offices, among several other businesses and institutions. A town-owned recreational ball-field is located along the southeastern portion of the Study Area. Additionally, a Welcome Center is located along US 202 across from Christian Court. This center supplies visitors with brochures and event information about the Town of Jaffrey. Parking is available next to the Welcome Center, which includes a grassy maintained area and gazebo with a large map of the town. 8

An evaluation of the existing socioeconomic conditions of the Study Area was completed by RKG Associates, Inc in March 2018 (refer to the *Market Conditions and Trends Analysis*⁹). The Study Area used for the socio-economic analysis included parcels on adjacent roadways in and around the center of Jaffrey, including US 202, Turnpike Road, Blake Street, School Street, Charlonne Street, Tyler Hill Road, Gilmore Pond Road,

Town of Jaffrey. 2018. *Town Zoning Map of Jaffrey, New Hampshire*. Accessed March 5, 2019, https://www.townofjaffrey.com/sites/jaffreynh/files/uploads/zoning_map_0.pdf.

⁸ Southwest Region Planning Commission. 2019. Town of Jaffrey Downtown Plan. Planning Board. P. 9.

The Market Conditions and Trends Analysis is available upon request at NHDOT.

and Stratton Road. The Study Area contains 134 parcels, equaling 112 acres of land, which are predominately residential (66 percent) and commercial (8 percent). Overall, the Study Area represents 0.5 percent of the town wide acreage, 3.3 percent of the town wide land assessment value (in dollars) and 5.1 percent of the town wide total assessed value (in dollars). The total population in Jaffrey declined slightly (0.4 percent), while the population of Cheshire County increased marginally (4.5 percent), from 2000 to 2010. The employment base in Jaffrey rose 6.6 percent from 2006 to 2016; this resulted in a decrease in unemployment for the Town of Jaffrey of 1.9 percent.

Current and future conditions of socioeconomic resources in the Study Area were obtained from several online databases, studies or reports and information gained from stakeholder interviews (February 13, 2018). Data was obtained from the 2010 American Community Survey – U.S. Census Bureau¹⁰ and the Town of Jaffrey Assessors database.¹¹ The socioeconomic section presents the findings of the analyses used to determine the existing and future economic conditions, and potential beneficial or adverse socioeconomic impacts that may result from the Project. Several studies have been completed for the Town of Jaffrey in preparation for the Project. These studies include the *Downtown Traffic Study* (June 2014), the *Downtown Traffic Study – Phase 2* (September 2008), the *Downtown Plan* (2009), and the *Jaffrey, New Hampshire Charrette* (November 2010).¹²

1.4.1.1 Impacts

Land use and property impacts were analyzed at the local and community scale. For example, analyses were completed for individual parcels within the Study Area while also evaluating the impacts to the Town of Jaffrey and Cheshire County. Socioeconomic resources are measured by metrics pertaining to population size, median household income, and employment and unemployment statistics. This section also focuses on the full and partial acquisitions necessary to safely construct the Project and ensure public safety.

Direct Land Use Impacts

Changes in land use were determined by assessing the overlap of the preliminary conceptual engineering design with parcel boundaries. Due to the proximity of the improvements to developed parcels, some land acquisition would be necessary. This would result in direct changes in current land use, which is predominantly residential on the western side of the Contoocook River, and predominantly commercial on the eastern side of the Contoocook River. The current land uses would be permanently changed to a transportation right-of-way (ROW). Current land uses impacted by the Project would

US Census Bureau. 2016. *Jaffrey town, Cheshire County, New Hampshire*. American Community Survey. Accessed March 6, 2019, https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml.

Vision Government Solutions. Jaffrey, NH. Accessed March 6, 2019, http://gis.vqsi.com/jaffreynh/.

NH Department of Transportation. "Jaffrey 16307." Project Specific Information. Accessed March 5, 2019, https://www.nh.gov/dot/projects/jaffrey 16307/ index.htm.

include residential, commercial, parking lots, and a private memorial and public parklands.

The proposed five-way single-lane roundabout would impact Bissell Alderman Park, which is located within the existing right-of-way along the east side of US 202. Bissell Alderman Park consists of landscaped green space, a set of granite benches, and an octagonal granite watering trough that incorporates a memorial plaque honoring Bissell Alderman. In coordination with the Town of Jaffrey, these features would be relocated to a town-owned property. Connection of the Monadnock Recreational Rail Trail will be maintained along US 202 after the removal of Bissell Alderman Park. Minor amounts of realignment will occur to the Monadnock Recreational Rail Trail at its crossings of Turnpike Road and Stratton Road; however, the Rail Trail will maintain connectivity through downtown Jaffrey with improved crossings through the roundabout. Access to the Rail Trail at the intersection may be temporarily impacted during construction, therefore construction impacts will be coordinated with the NH Bureau of Trails. Overall, the Proposed Action will improve traffic, pedestrian and bicycle safety, and will not require more than minor changes to the Rail Trail.

Based on the preliminary conceptual design, the total area of potential acquisitions to complete the Proposed Action is approximately 1.01 acres. The parcels identified for acquisition represent a small portion of the overall Study Area (0.90 percent). The land use changes are consistent with the built environment of downtown Jaffrey where the Project is located (i.e., mixed development and light residential or commercial density). Regionally, these land use changes are not anticipated to negatively affect sensitive land uses, most notably wildlife habitat areas, conservation parcels, or widely used public areas. Partial acquisitions would not substantially change the current land use of the impacted parcels; they would still support current land uses.

Indirect Land Use Impacts

Due to the frequency and abundance of residential, commercial and industrial land uses in the Study Area, it is not likely that land use changes would result in adverse impacts outside of the specific parcels identified. The acquisition of these parcels and socioeconomic impacts are discussed further below. The realignment of US 202 is not anticipated to cause indirect effects on land use, nor meaningfully induce population growth or development potential that would adversely impact the residents of Jaffrey.

Proposed Property Impacts

Full and partial acquisitions were determined by comparing the preliminary conceptual engineering plans with parcel boundaries. The total property value and land value were obtained from the Town of Jaffrey Assessor's Online Database. ¹³ The value of acquired land needed to complete the Proposed Action was determined by comparing the amount of land necessary for acquisitions (in square feet) and calculating the value of land (price per square foot). The Uniform Relocation Assistance and Real Property

Vision Government Solutions. Jaffrey, NH. Accessed March 6, 2019, http://gis.vgsi.com/jaffreynh/.

Acquisition Policies Act of 1970¹⁴ establishes minimum standards for the acquisition of properties for federally-funded programs and projects. All properties impacted by the Project or proposed for acquisition would be acquired per standards outlined in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

Preliminary conceptual designs of the improved US 202 in Jaffrey identified three full and seven partial acquisitions totaling 1.01 acres of land (refer to **Figure 1.4-1**). This equals less than 1 percent of the Study Area (112 acres total), or approximately 0.90 percent. The 2018 total assessed value of the impacted properties is \$1,789,000, of which two are tax exempt. The total assessed value of the Study Area is approximately \$24.3 million.

The current land uses of these properties where acquisitions are proposed are: two residential, four commercial, one parking lot, one vacant parcel, a private memorial park, and one vacant lot/parking lot.

A summary of the full and partial acquisitions identified during the preliminary conceptual design phase is provided in **Table 1-1**. Included in this table is the current land use, 2018 Total Valuation, preliminary percentage of land necessary for acquisition, and value of potentially acquired lands. It is important to note that these acquisitions were identified as part of the preliminary conceptual engineering design and are not final.

Full Acquisitions

Conceptual engineering and design plans identified three parcels which would be fully acquired. Full acquisitions are concentrated at areas adjacent to the proposed roundabouts (on either side of the Contoocook River). Parcel 26 is a 0.17 acre commercial property on Blake Street, Parcel 11 is a 0.31 acre residential property on US 202 (River Street), and Parcel 30 is a 0.05 acre vacant lot on Stratton Road. Full acquisitions equal approximately 0.53 acre, or 52 percent of the total land identified for acquisition, and equals less than 1 percent of the Study Area (approximately 0.47 percent). The total valuation of these properties from the 2018 assessment equals \$326,500.

Partial Acquisitions

Preliminary conceptual designs also identified seven partial acquisitions, which are strips of land or portions of parcels necessary for project completion. Partial acquisitions allow the property to function at or near current capacities. Partial acquisitions occur on US 202 (River Street and Peterborough Street) and Blake Street. Current land uses of parcels to be partially acquired include three commercial, one residential, one memorial park, one parking lot, and one vacant lot/parking lot. The areas identified for partial acquisition equal 0.48 acres. The total value of land identified for partial acquisition is

Uniform Relocation Assistance and Real Property Acquisition Act of 1970. Accessed September 10, 2018, Error! Hyperlink reference not valid.http://uscode.house.gov/view.xhtml?path=/prelim@title42/chapter61&edition=prelim.

Parcel numbers were assigned by NHDOT and are depicted on the project plans in **Appendix B**.

\$29,535 according to the 2018 valuation. The area identified for partial acquisitions is equal to 48 percent of the land identified for acquisition and equals less than 1 percent of the Study Area (approximately 0.43 percent).

Partial acquisition will occur on the northern edge of the Town property (Parcel 32) which is one of two parcels that make up the town-owned Community Field and parking lot; the minor acquisition occurs on the northern edge of the parcel 455 feet from the ball field. The northern parcel encompasses the vacant land, parking lot, and northern most extent of the ball field. The minor amount of taking for construction will not impact the parcel used as parking for the Community Field. The partial acquisition is currently estimated to be approximately 230 square feet and occurs directly adjacent to Stratton Road.

Table 1-1 Right-of-Way Acquisitions, Including Partial and Full Acquisitions

| NHDOT Parcel Number | Tax Map Number | Acquisition Type (Full/Partial) | Land Use | 2018 Total Parcel Value ¹ | Percent of Parcel Acquired | Value of Acquisition ² |
|---------------------------|-------------------|------------------------------------|---|---|----------------------------------|-----------------------------------|
| Full Acquis | sitions | | | | | |
| 26 | 239-222 | Full | Commercial | \$ 123,800 | 100% | \$ 123,800 |
| 30 | 239-226 | Full | Vacant Land | \$ 900 | 100% | \$ 900 |
| 11 | 238-7 | Full | Residential | \$ 201,800 | 100% | \$ 201,800 |
| Partial Acc | quisitions | | | | | |
| 29 | 239-223 | Partial | Commercial | \$ 117,500 | 6% | \$ 2,343 |
| 7 | 239-229 | Partial | Residential | \$ 156,100 | 38% | \$ 14,808 |
| 27 | 239-228 | Partial | Parking Lot | \$ 23,100 | 43% | \$ 9,318 |
| 12 | 238-6 | Partial | Memorial/Park ³ | \$ 11,700 | 13% | \$ 1,569 |
| 6 | 239-231 | Partial | Commercial | \$ 159,000 | 0.3% | \$ 76 |
| 21 | 238-312 | Partial | Commercial | \$ 959,000 | 2% | \$ 1,225 |
| 32 | 239-213 | Partial | Vacant Land/Parking Lot ⁴ | \$ 36,100 | 1% | \$ 197 |
| Total ⁵ | | | | \$ 1,789,000 | | \$ 356,036 |

Notes:

- Analysis by VHB using project right-of-way plans as of June 19, 2019 and data from the Town of Jaffrey, NH.
- 2 2018 Total Parcel Value from Vision Government Solutions. Jaffrey, NH.
- 3 Jaffrey War Memorial parcel.
- 4 Town of Jaffrey Community Field northernmost parcel.
- Parcels that require acquisition by the State of New Hampshire are included in this table. Parcels already owned by the State (i.e., the parking lot on Blake Street, Bissell Alderman Park, and Monadnock Recreational Rail Trail) are not included in this table.

The Project would impact approximately 400 square feet of the Monadnock Rail Trail, however, these changes would not require acquisition due to the parcel being state-owned and would not result in a loss in tax revenue. The changes to the Rail Trail will beneficially impact pedestrians and bicyclists using the Rail Trail, as well as motorists driving in Jaffrey. The roundabout crossing would be more pedestrian friendly than the existing intersection since crosswalks and pedestrian refuge islands are located on each approach to the roundabout, and pedestrians would need to cross only one lane and

one direction of traffic at a time. The final design of the reconfigured Rail Trail crossing will address the comments received by the NH Bureau of Trails. (See **Appendix D**).

Additional Considerations

Additional considerations are the costs associated with maintaining US 202 on Main Street through the center of town, as well as a potential decrease in 'drive-by' traffic for businesses along the US 202 (Main Street) and relocation of the municipal parking lot on Blake Street.

The re-alignment of the US 202, NH 124, and NH 137 intersections would change the current traffic pattern in downtown Jaffrey. Traffic would flow primarily through a new transportation corridor via traffic circles south of the current US 202, NH 124, NH 137 intersection. Although drive-by traffic may decrease for businesses between River Street and the Main Street, the properties located on Main Street would be more accessible. Since the Proposed Action would alleviate congestion and improve traffic and pedestrian safety, these changes are anticipated to sustain or improve customer activity in downtown Jaffrey.

During stakeholder interviews, participants expressed concerns over the potential impacts decreased public parking options may have on customer activity. The preliminary conceptual design plans would change the current municipal lot on Blake Street to a transportation corridor; however, public parking would be maintained to the greatest extent possible, with the relocation of the municipal lot on Blake Street along with nine new on-street parking spots on the relocated US 202 and Main Street. The Proposed Action would alleviate congestion and safety concerns in downtown Jaffrey, facilitating better access while maintaining parking to the greatest extent possible.

1.4.1.2 Mitigation

Properties requiring acquisition would be appraised utilizing techniques recognized and accepted by the appraising profession and in conformity with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, ¹⁶ as amended, and applicable to New Hampshire State Law. These standards ensure fair compensation and assistance for persons whose property is acquired, either full or partial, for public use. Specifically, the owners of the affected properties would be compensated for the impacts and eligible for relocation benefits which could include:

- Fair market value for acquired property;
- > Relocation advisory assistance services;
- > Payments for moving and relocation costs; and/or
- > Residential mortgage interest differential payments and closing costs.

Relocation resources would be made available to all relocated residents and/or businesses without discrimination.

Uniform Relocation Assistance and Real Property Acquisition Act of 1970. Accessed March 6, 2019, http://uscode.house.gov/view.xhtml?path=/prelim@title42/chapter61&edition=prelim.

1.4.2 Safety and Transportation

1.4.2.1 Existing Traffic Conditions

To determine the existing traffic volume demands and flow patterns, traffic volume counts were conducted in April 2017. The traffic count program included weekday morning and weekday evening peak period manual turning movement counts at the following intersections:

- Main Street/Peterborough Street/Turnpike Road/Stratton Road/Blake Street
- Main Street/River Street/North Street
- Main Street/School Street/Goodnow Street
- Main Street/Charlonne Street
- > River Street/School Street
- > River Street/Charlonne Street

In addition to the manual turning movement counts, multi-day automatic traffic recorder counts were conducted along Main Street, Peterborough Street, and River Street.

To establish an appropriate analysis condition, the weekday AM and PM April 2017 traffic volumes were increased by 7 percent and 6 percent, respectively to reflect a peak month condition. The adjustment factor was determined by reviewing historical count data available at the NHDOT's permanent count station on US 202 located approximately 2.5 miles south of downtown Jaffrey in the Town of Rindge.

To assess the quality of traffic flow, operational analyses were conducted at each of the downtown intersections. The traffic performance measures and the evaluation criteria used in the operational analyses are based on the methodologies presented in the 2000 Highway Capacity Manual.

A primary result of capacity analysis is the assignment of level of service (LOS), which is a qualitative measure describing operational conditions. LOS generally describes these conditions in terms of such factors as speed and travel time, density or freedom to maneuver, traffic interruptions, comfort, and convenience, thereby providing an index to quality of traffic flow. Six levels of service are defined that range in letter designation from LOS A to LOS F, with LOS A representing the best operating condition and LOS F representing the worst. LOS C describes a stable flow condition and is considered desirable for design hour traffic flow. LOS D is generally considered acceptable, particularly when the cost and impacts of making the additional improvements needed to achieve LOS C are deemed unjustifiable. LOS E reflects a capacity condition, but under certain circumstances may be considered acceptable, such as in urban areas or where there is a desire to encourage multi-modal use and discourage single-occupant vehicles.

The results of the operational analyses show an overall LOS C operation during both the AM and PM peak hours at the two dog-leg signal-controlled intersections. This analysis, however, does not reflect the actual conditions at the intersections. The reason for this is that the resulting level of service assumes the intersections are isolated and the queues or back-ups from one intersection do not affect operations at the other intersection. The

reality is that because the two intersections are only 300 feet apart and the heavy US 202 through traffic passes through the two intersections making right and left turns, vehicle queues routinely back into the adjacent intersection. When this occurs, the operations at these intersections effectively deteriorate to an LOS F operation. The queuing problem was confirmed with a Sim Traffic simulation model as well as with actual observations including the monitoring of the interaction between the two intersections by drone video. The poor operations at the intersection is also exacerbated by the large tractor-trailer trucks that currently maneuver through the two closely spaced intersections.

1.4.2.2 Future Traffic Conditions

To evaluate the future travel demands within the Study Area, the base year traffic volumes were projected to a 2040 design year condition. Based on a review of historical growth trends, regional growth projections prepared by the Southwest Region Planning Commission, and discussions with town planning staff regarding any planned development projects, there is little expectation for growth in the Jaffrey area. In fact, a review of historical traffic data shows that growth has been minimal over the last 10 years. Additionally, there are no substantial development projects currently planned in Jaffrey. For this reason, a modest 1.25 percent annual growth rate was applied to the base volumes to establish the 2040 No Build condition.

An operational analysis, similar to those conducted for the existing conditions, were performed for the future 2040 No Build.¹⁷ The 2040 No Build reflects the continuation and perpetuation of the existing configuration of the dog-leg intersections. The results of the evaluation show that the unstable LOS F operation caused by the queuing between the two dog-leg intersections that occurs under the existing condition continues to worsen as traffic growth occurs.

As for the three alignment alternatives, each of which eliminates the US 202 dog-leg intersection configuration by realigning US 202 with a new bridge over the Contoocook River, from a traffic flow and operations perspective they all operate similarly in that the bridge would accommodate the future travel demand with a single lane in each direction.

Similarly, from a traffic operations perspective, each of the four Main Street/Peterborough Street/Turnpike Road/Stratton Road intersection alternatives (i.e., the Four-Way Traffic Signal Controlled, Five-Way Traffic Signal Controlled, Four-Way Roundabout, and Five-Way Roundabout) would have acceptable levels of service and in all cases would meet the Project's Purpose and Need. In other words, traffic operations were not the determining factor in the selection of the Proposed Action.

The Proposed Action includes a five-way roundabout at the Main Street/Peterborough Street/Turnpike Road/Stratton Road/New Connector Road intersection, a three-way roundabout at River Street/New Connector Road intersection, and a new two-lane median divided (one lane per direction) bridge over the Contoocook River connecting the two roundabouts. The Proposed Action also removes the traffic signal at the Main

¹⁷ The traffic technical analysis is available for review upon request to NHDOT.

Street/River Street/ North Street intersection replacing it with Stop-sign control on the River Street and North Street approaches to the intersection.¹⁸

The results of the operational analysis show that both roundabouts would operate well for the 2040 Build condition. The five-way Main Street/Peterborough Street/Turnpike Road/Stratton Road/New Connector Road roundabout would operate at LOS B during the AM peak hour and LOS C during the PM peak hour. The three-way River Street/New Connector Road roundabout would operate at LOS A during both the AM and PM peak hours. At the stop-sign controlled Main Street/River Street/North Street intersection, the River Street approach would operate at LOS B during the AM peak hour and LOS C during the PM peak hour. The North Street approach would operate at LOC C during the AM peak hour and LOS D during the PM peak hour. The Main Street eastbound and westbound approaches to the intersection would operate at LOS A during both the AM and PM peak hour hours.

1.4.3 Air Quality

Air quality is regulated by the US Environmental Protection Agency (USEPA) pursuant to the Clean Air Act (CAA). The potential air quality impacts related to the Project are discussed, including the methodology for determining existing conditions and assessing impacts are discussed below. The air quality assessment reviews the National Ambient Air Quality Standards (NAAQS) criteria pollutants and hazardous air pollutants emissions resulting from the construction, operation of the Proposed Action and the corresponding effect on ambient air.

Air pollution is a general term that refers to one or more substances determined to degrade the quality of the atmosphere. Seven main air pollutants have been identified by the USEPA as being of nationwide concern, based on their potential effect on human health. From a transportation perspective, the primary pollutants of concern are carbon monoxide (CO), volatile organic compounds, and oxides of nitrogen, which are emitted from gasoline and diesel engines. Highway agencies are required to consider the impacts of their projects on air quality at a local and regional level.

The FHWA has established procedures for the Transportation Conformity requirements of the CAA, as amended in 1990. The Transportation Conformity provisions of the CAA are intended to integrate transportation and air quality planning in areas that are designated by the USEPA as not meeting the NAAQS. Roadway projects that increase efficiency are an important part of improving air quality since they improve transportation flow and reducing vehicle delay.

Regulatory Context

There are other intersection control alternatives at the Main Street/River Street/North Street intersection that would result in acceptable operations. Thus, the final design plans for this intersection may include retention of the existing signal or implementation of another stop-controlled configuration.

The CAA is the primary statute that drives regulating air quality and sets the nation's air quality standards for pollutants. The CAA, as amended (CAAA), protects the quality of the nation's air resources at both the federal and state level. The CAA authorizes the USEPA to "protect public health by regulating emissions of harmful pollutants." NEPA and the Conformity Rule also require the analysis of potential impacts in terms of the Project's context, intensity, and duration. It established NAAQS for various criteria pollutants to protect the health and welfare of the general public.

The local evaluation considers CO concentrations and the regional evaluation discusses the Proposed Action's compliance with Transportation Conformity. NAAQS violations are delineated on a county basis and are documented in the USEPA's Greenbook. ¹⁹ Cheshire County is currently in attainment for all pollutants.

1.4.3.1 Impacts

The following is a summary of the anticipated impacts of the Proposed Action on air quality at a regional and local level, as well as air quality impacts anticipated during construction.

Regional Impacts

Regional emissions are not projected to change as the Proposed Action would not introduce any additional emission sources. The State of New Hampshire, through the Southwest Regional Planning Commission, has determined that the Proposed Action is not regionally significant as part of the NHDOT 2017-2020 Statewide Transportation Improvement Program (approved February 6, 2017, amended February 5, 2018). The Project reference is #16307 "Reconfigure 'Dog-Leg' Intersection of US 202, NH 124 and NH 137." ²⁰ The Statewide Transportation Improvement Program, which includes this Project, was approved by the FHWA and Federal Transit Administration in February 2017 as satisfying the transportation conformity requirements. Since the regional air quality impacts of the Proposed Action were addressed in the transportation conformity analysis pursuant to *23 CFR 770*, this Project conforms to the State Implementation Plan and no additional analysis of regional emissions is required.

In addition, the Project has been determined to generate minimal air quality impacts for CAA criteria pollutants and has not been linked with any special mobile source air toxics (MSAT) concerns. Therefore, the Project is not anticipated to change traffic volumes, vehicle mix, basic project location, or any other factor that would cause a meaningful increase in MSAT impacts than that of the No-Build Alternative. The USEPA regulations for vehicle emissions and fuels are expected to result in a decline in MSAT emissions over the next several decades, thus reducing background levels of MSAT and the possibility of minor MSAT emissions from the Project Based on regulations now in effect, an analysis of national trends with USEPA's MOVES2014 model forecasts a combined

US Environmental Protection Agency. 2010. National Ambient Air Quality Standards. Accessed December 20, 2018, https://www.epa.gov/green-book.

New Hampshire Department of Transportation. "Jaffrey (16307)." 2017-2020 Statewide Transportation Improvement Program.

Accessed December 2018, https://www.nh.gov/dot/org/projectdevelopment/planning/stip/documents/FinalAmendment2Report.pdf.

reduction of over 90 percent in the total annual emissions rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 45 percent. ²¹ This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

Local Impacts

At a local level, the Proposed Action is not expected to increase/contribute to the emissions of CO or particulate matter (PM), with negligible changes in traffic including truck traffic projected with the implementation of the proposed intersection improvements. The Proposed Action would address the traffic congestion and safety deficiencies associated with the current configuration of the US 202 intersection with Main Street, Peterborough Street, Turnpike Road, and Stratton Road, as well as Main Street with River Street and North Road, while enhancing pedestrian mobility. With the intersection/roadway improvements, the Proposed Action is projected to improve traffic delays at the intersections and therefore reduce overall transportation-related emissions, specifically PM and CO. Violation of the CO standard set by the NAAQS has become increasingly infrequent. This is due to a number of factors. Primarily, the vehicular emission rates of CO have decreased and will continue to decrease with the passage of time due to newer, more controlled vehicles entering the fleet. Additionally, the CO background concentrations in New Hampshire has decreased with time.

Under consideration of these three controlling factors for the determination of CO impact (project traffic, background concentration, and emission rates), it is highly unlikely for CO impacts to exist or to be created with the introduction of the Proposed Action. The Proposed Action would lead to only minimal changes in vehicular activity in the surrounding network. The CO emission rates of the fleet would decrease over time, and the background CO concentration is currently relatively small at 12 percent and 4 percent of the respective 1-hour and 8-hour NAAQS.

The proposed improvements and related reduction in emissions meet the requirements of the CAAA since the Proposed Action is not projected to cause any new violation of the NAAQS, increase the frequency or severity of any existing violations, or delay attainment of any NAAQS. As discussed earlier, the Proposed Action is located in attainment areas for both CO and PM, therefore, the Categorical Hotspot Finding is not required.

Construction Impacts

The Proposed Action may result in a temporary increase of emissions during construction. Impacts include fugitive dust emissions, direct emissions from construction equipment and truck exhausts, and increased emissions from motor vehicles on local streets due to traffic disruption. These types of impacts could occur during various

Federal Highway Administration. 2016. *Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents*. Accessed June 6, 2019, https://www.fhwa.dot.gov/environment/air quality/air toxics/policy and quidance/msat/index.cfm.

Federal Highway Administration. 2006. "Transportation Air Quality Facts and Figures." *Vehicle Emissions*. Accessed January 2, 2019, https://www.fhwa.dot.gov/environment/air quality/publications/fact_book/page15.cfm.

stages of highway construction. Emissions from the operation of construction equipment would include nitrogen oxides, sulfur oxides, CO, and PM. These emissions would be temporary and the locations at which they occur would change over time.

1.4.3.2 Mitigation

Although no significant adverse impacts are anticipated during construction, measures would be taken to reduce pollutant emissions in accordance with applicable laws and regulations. These include but are not limited to: dust suppression measures, idling restrictions, the use of Ultra Low Sulfur Diesel (ULSD) fuel, proper maintenance of all motor vehicles, machinery, and equipment, and proper fitting of equipment with mufflers or other regulatory-required emissions control devices. Excessive idling of construction equipment engines would be prohibited.

Construction contractors would be required to implement measures to protect local residents, visitors, passengers, and passers-by from off-site exposure to dust and debris. Appropriate methods of dust control would be determined according to the surfaces concerned (roadways or disturbed areas) and would include, as applicable: wetting or chemically treating, stone surfacing of construction roads, covering dust-producing materials during transport, and limiting construction activities during high wind conditions, seeding of areas of exposed or stock-piled soils, wheel washing, and regular sweeping of paved roadways. These measures should minimize the dust impacts. Recycling construction waste and demolition materials may also reduce dust emissions.

Compared with emissions from other motor vehicle sources in the Project's defined Study Area, emissions from construction equipment and trucks are generally quite low with respect to compliance with the ambient air quality standards. When this equipment is properly operated and maintained, no adverse impacts on ambient air quality standards are expected.

1.4.4 Noise

A limited noise analysis was conducted to evaluate the potential noise impacts associated with the Project. ²³ The noise assessment was conducted in accordance with FHWA noise regulations, 23 CFR 772 (Procedures for Abatement of Highway Traffic and Construction Noise), and the NHDOT Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I & Type II Highway Projects, approved November 2016. The Proposed Action meets the definition of a Type I highway project due to the addition of through-traffic lanes and the modification of the roadway's horizontal and vertical alignment. NHDOT's procedures require that roadway noise levels associated with Type I projects be calculated, the results be compared to the Noise Abatement Criteria (NAC), and, if noise impacts are identified, noise mitigation measures must be evaluated to reduce sound level impacts in the Study Area.

²³ The Highway Noise Technical Report (VHB, January 2019) is available upon request at NHDOT.

1.4.4.1 Methodology

The methodology for evaluating noise includes identifying noise-sensitive land use, conducting measurements at key receptor locations, and modeling noise at all receptors within the Study Area. The main land use within the Study Area is a mix of commercial and residential. Receptors and their associated land use were identified using statewide parcel and land use code data, aerial photography, and field visits.

Noise receptors are primarily located at ground-level outdoor areas of frequent human use near residences (Activity Category B) or public spaces, parks, places of worship, or institutional facilities with outdoor use (Activity Category C). If an upper-floor multifamily residence has exterior areas such as balconies or roof decks, then receptors will be located at these upper elevations. For some institutional facilities, such as hospitals, schools, libraries, places of worship and recording studios, receptors may be located inside the building if there are no areas of frequent outdoor human use (Activity Category D). The study area also includes Activity Category F receptors which are assessed for informational purposes but are not considered to be noise-sensitive.

Table 1-2 shows the FHWA Activity Categories, the description of the type of land use within the category, and the NAC based on loudest-hour L_{eq} noise levels.

Table 1-2 FHWA Noise Abatement Criteria (NAC)

| Activity Category | Loudest-Hour Noise Level (L_{eq}) | Description of Activity Category |
|----------------------|--|--|
| A | 57 (Exterior) | Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purposes. |
| B* | 67 (Exterior) | Residential. |
| C* | 67 (Exterior) | Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings. |
| D | 52 (Interior) | Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios. |
| E* | 72 (Exterior) | Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in Categories A-D or F. |
| F | | Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing. |
| G | | Undeveloped lands that are not permitted. |

^{*}Includes undeveloped lands permitted for this Activity Category

Source: 23 CFR 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise.

Common Noise Environments (CNE) have been identified to represent noise sensitive areas. CNEs are groups of receptors within the same NAC category that are exposed to similar noise sources and levels, have similar traffic volumes, mix and speed, and have similar topographic features. The Study Area has been subdivided into seven CNEs containing receptor locations that are sensitive to roadway noise.

Existing (2017), design-year (2040) No-Build Alternative, and design-year Build Alternative predictions were made using the FHWA's Traffic Noise Model (TNM) Version 2.5.

Noise abatement must be considered for all receptors where Build Alternative noise levels would exceed the NAC even if the proposed Project would reduce future noise conditions. Potential noise abatement measures that have been evaluated include traffic management measures, traffic control devices, vehicle-type restrictions, nighttime-use restrictions, reducing speeds, designated lanes, alteration of the horizontal or vertical alignment, construction of sound walls or berms, or noise insulation of public-use or non-profit institutional structures.

Noise monitoring was conducted at specific locations where measurements can be used to validate noise predictions from TNM. It is typically not possible to conduct noise monitoring at all receptor locations in a study area due to limited resources or access. As such, FHWA and NHDOT have developed a process for creating a validated noise model which demonstrates that the TNM results are accurate. The measurements validate the accuracy of the TNM when the results are within 3 dBA. ²⁴ If the measurements and modeling are not within 3 dBA, the model may need to be adjusted (i.e., including terrain lines or intervening buildings) to validate the model.

1.4.4.2 Existing Conditions

Table 1-3 presents the CNE areas and the numbers of dwelling units represented by each area. The CNE areas, which predominately include outdoor ground level areas between the roadways and the buildings, are shown in **Figure 1.4-2**, Common Noise Environments, Noise Measurement Locations, and Receptor Locations. Most of the receptor locations fall into the FHWA's Activity Category B, which has a NAC of 67 dBA (L_{eo}) . ²⁵

Noise monitoring was conducted to characterize existing sound levels in the Study Area at five receptor locations on October 23, 2017 in conformance with FHWA noise monitoring guidelines. ²⁶ The sound level meter used (Larson Davis LxT) met the Type 1 American National Standards Institute standards and was calibrated by a laboratory traceable to the National Institute of Standards and Technology and in the field prior to and after the measurements. Traffic counts were conducted during the measurements

The decibel notation "dBA" is used to express sound levels measured using the A-weighting system. The A-weighting system is commonly used when measuring environmental noise to provide a single number descriptor that correlates with human subjective response. The A-weighted sound level is widely accepted by acousticians as a proper unit for describing environmental noise.

²⁵ L_{eq} is the energy-average sound level. The L_{eq} is a single value that is equivalent in sound energy to the fluctuating levels over a period of time. Leq is commonly used to describe environmental noise and relates well to human annoyance.

Federal Highway Administration. (1996). *Measurement of Highway-Related Noise*. US Department of Transportation. FHWA-PD-96-046.

including volumes, vehicle mix (automobiles, medium trucks, and heavy trucks), and operating speeds were measured.

Table 1-3 Common Noise Environments, Activity Categories, and Dwelling Units

| Common Noise Environment (CNE) | Activity Category | Areas | Activity Category B Dwelling Units | Activity Category C Receptors |
|---|----------------------|---|---|-------------------------------------|
| Α | B/C/D/F | River Street (US 202) South of Main Street (US 202) | 30 | 2 ¹ |
| В | B/C/F | Main Street (NH 124) West of River Street (US 202) | 5 | 6 |
| _C | B/C/F | North Street (NH 137) North of Main Street (US 202) | 30 | 1 |
| D | В | Peterborough Street (US 202) | 30 | 0 |
| Е | B/F | North Side of Turnpike Road (NH 124) | 8 | 0 |
| F | В | South Side of Turnpike Road (NH 124) and Stratton Road | 29 | 0 |
| G | B/C/F | Main Street, Blake Street and Stratton Road | 2 | 1 |

¹ The Cournoyer Funeral Home is considered an Activity Category D facility and is included in this column.

Existing (2017) traffic data was incorporated into a validated TNM model and was used to calculate the existing noise levels for at all receptor locations in the Study Area.²⁷ The results presented in **Table 1-4** summarize the range of existing noise-sensitive land use and the range of existing noise levels within each CNE.

Table 1-4 Existing Noise Level Summary

| CNE | Activity Category | Location | Existing Noise Levels (dBA, Leq) |
|-----|----------------------|---|-------------------------------------|
| Α | B/C/D/F | River Street (US 202) South of Main Street (US 202) | 52-71 |
| В | B/C/F | Main Street (NH 124) West of River Street (US 202) | 56-71 |
| С | B/C/F | North Street (NH 137) North of Main Street (US 202) |) 58-70 |
| D | В | Peterborough Street (US 202) | 55-69 |
| Е | B/F | North Side of Turnpike Road (NH 124) | 58-64 |
| F | В | South Side of Turnpike Rd (NH 124) and Stratton Rd | 57-69 |
| G | B/C/F | Main Street, Blake Street and Stratton Road | 52-70 |
| _ | V/LID 2010 | | |

Source: VHB, 2019.

1.4.4.3 Noise Analysis

No-Build Alternative

Noise levels for the design-year No-Build (2040) condition would be slightly greater than existing conditions ranging from 54 to 72 dBA Leq at all receptors. General background growth in traffic volumes would result in a small increase in noise of approximately one dBA. **Table 1-5** summarizes the range of No-Build noise levels at each CNE.

See the Highway Noise Tehnical Report (VHB, January 2019), available upon request at NHDOT, for more detail on model validation.

Table 1-5 No-Build Noise Level Summary¹

| Activity Category | yLocation | No-Build Noise Levels (dBA, Leq) |
|----------------------|---|--|
| B/C/D/F | River Street (US 202) South of Main Street (US 202) | 54-72 |
| B/C/F | Main Street (NH 124) West of River Street (US 202) | 57-72 |
| B/C/F | North Street (NH 137) North of Main Street (US 202) | 59-72 |
| В | Peterborough Street (US 202) | 56-70 |
| B/F | North Side of Tumpike Road (NH 124) | 60-65 |
| В | South Side of Turnpike Rd (NH 124) and Stratton Rd | 58-70 |
| B/C/F | Main Street, Blake Street and Stratton Road | 53-71 |
| | B/C/D/F B/C/F B/C/F B B/F B | B/C/D/F River Street (US 202) South of Main Street (US 202) B/C/F Main Street (NH 124) West of River Street (US 202) B/C/F North Street (NH 137) North of Main Street (US 202) B Peterborough Street (US 202) B/F North Side of Turnpike Road (NH 124) B South Side of Turnpike Rd (NH 124) and Stratton Rd |

Notes:

Proposed Action

This section presents the results of the highway noise analysis for the design-year Build (2040) traffic volumes. Design-year noise levels for the Proposed Action in each CNE have been assessed according to the NAC. **Table 1-6** presents the range of design-year build noise levels, the applicable threshold to approach or exceed the NAC, and an assessment of whether noise levels would exceed the NAC.

Table 1-6 Design-Year Build Noise Level Summary¹

| | | | Noise Levels (Leq, dBA) | | Approach | Impacted | |
|-----|----------------------|---|-------------------------|--------------------|--------------------------------|-----------------------------|--|
| CNE | Activity Category | Location | Design-Year Build | NAC | or Exceeds NAC ³ | Dwelling Units/Receptors | |
| Α | B/C/D/F | River Street (US 202) South of Main Street (US 202) | 52-67 | 67/52 ² | No | | |
| В | B/C/F | Main Street (NH 124) West of River Street (US 202) | 56-70 | 67 | Yes | 1 (Category C) | |
| С | B/C/F | North Street (NH 137) North of Main Street (US 202) | 58-68 | 67 | Yes | 30 (Category B) | |
| D | В | Peterborough Street (US 202) | 54-68 | 67 | Yes | 15 (Category B) | |
| Е | B/F | North Side of Turnpike Road (NH 124) | 54-64 | 67 | No | | |
| F | В | South Side of Turnpike Road (NH 124) and Stratton Road | 56-66 | 67 | Yes | 4 (Category B) | |
| G | B/C/F | Main Street, Blake Street and Stratton Road | 54-68 | 67 | No | | |

Notes:

- 1 Data from VHB, 2019.
- 2 Activity Category D receptors are assessed for an interior noise criterion of 52 dBA.
- Although noise levels would exceed the NAC at four locations, projected noise levels under the Build Alternative are reduced relative to the No-Action alternative.

Based on this model, design-year noise levels would approach or exceed the NAC at the following four addresses (receptor numbers):

> 26 Main Street (B19) – Town Common & Gazebo

¹ Data from VHB, 2019.

- > 18 Peterborough Street (D2-1, D2-2, D2-3) Residential
- > 4 Christian Court (D3-1, D3-2, D3-3) Residential
- > 13 Stratton Road (F9) Residential

Refer to **Figure 1.4-3**, Design Year Noise Impacts, for the locations where noise impacts would occur.

1.4.4.4 Noise Abatement Analysis and Construction Noise

Noise Abatement Analysis

As designed, the Proposed Action would reduce noise levels by 2 to 4 dBA at many receptors compared to the No-Build Alternative due to the reconfiguration of the roads and traffic control devices to be implemented. It would not be feasible to provide substantial further noise reduction through reducing speed limits or altering the roadway alignments. To be effective, sound walls must be continuous, as any openings would allow noise to enter the community. Sound walls would not be feasible for the receptors that approach or exceed the NAC because sound walls would prohibit vehicular and pedestrian access and would require additional space for maintenance and snow storage. As such, noise abatement would not be feasible and reasonable for the receptors that approach or exceed the NAC. Therefore, no noise mitigation measures are proposed for these impacted receptors.²⁸

One of the most effective means to prevent future traffic noise impacts is to promote noise-compatible land use planning for new developments. The compatibility of highways and neighboring local areas is essential for continued growth and can be achieved if local governments and developers require and practice noise-sensitive land-use planning.

Construction Noise

There are no statewide noise regulations that relate to construction activities in New Hampshire. NHDOT is not subject to local restrictions related to construction noise. However, the Town of Jaffrey Noise Ordinance (Chapter 153) was adopted to promote an environment free from excessive noise that unnecessarily jeopardizes the health and welfare of the residents of Jaffrey and degrades the quality of life. The Town of Jaffrey Noise Ordinance prohibits disturbances created by the operation of use of construction vehicles including bulldozers, graders, dump trucks, backhoes, earth moving equipment, front-end loaders, and log skidders on the job site; and the operation or use of tools or construction equipment including cement mixers, hammers, staple or nail guns, power tools, lawnmowers, and jack hammers between the hours of 10:00 PM and 7:00 AM (Monday through Saturday) and 10:00 PM and 9:00 AM (Sunday). The Town Noise

The noise assessment was conducted in accordance with FHWA noise regulations, 23 CFR 772 (Procedures for Abatement of Highway Traffic and Construction Noise), and the NHDOT Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I & Type II Highway Projects, approved November 2016. FHWA regulations (23 CFR 772) and the NHDOT Noise Policy do not require that the NHDOT notify property owners individually of potential noise impacts. The disclosure of potential noise impacts is, like other resources, done through the environmental review process and making the CE public.

Ordinance specifically exempts municipal or state maintenance work on any public right-of-way.

Ground clearing and earthwork phases of construction are typically the loudest. Construction practices could be used to minimize construction noise as feasible and reasonable including the following:

- Assuring that equipment is functioning properly and is equipped with mufflers and other noise-reducing features.
- > Locating especially noisy equipment as far from sensitive receptors as possible.
- Using quieter construction equipment and methods, as feasible.
- > Maintaining strong communication and public outreach with adjacent neighbors is a critical step in minimizing impact.

1.4.5 Farmlands

The Natural Resources Conservation (NRCS) Service Web Soil Survey was used to identify important farmland soil within the Study Area. The four categories of farmland in Part 523 of the Farmland Protection Policy Act of 1981, Subpart C – *Important Farmland Soils*, ²⁹ include prime farmland, unique farmland, farmland of statewide importance, and farmland of local importance.

- Prime Farmland: Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and moisture supply needed to economically produce a sustained high yield of crops when the land is treated and managed using acceptable farming methods.
- Unique Farmland: Land other than prime farmland that is used for the production of specific high value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods. Examples of such crops in New Hampshire include apple orchards, lowbush blueberries, vegetable truck gardens, and maple sugar groves.
- Farmland of Statewide Importance: Land, in addition to prime and unique farmlands, that is of statewide importance for the production of food, feed, fiber, forage, and oilseed crops. Generally, these farmlands include those areas that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.
- > **Farmland of Local Importance**: Certain additional farmlands for the production of food, feed, fiber, forage, and oilseed crops.

A map of the Project Footprint overlaying these farmland soil categories was used to estimate the potential impacts to these farmland types (refer to **Figure 1.4-4**, Farmland

Natural Resources Conservation Service. 2012. *Farmland Protection Policy Act Manual*. US Department of Agriculture. Accessed on June 20, 2019, https://www.nrcs.usda.gov/Internet/FSE DOCUMENTS/ stelprdb1049284.pdf.

Soils). Additionally, these areas were reviewed through desktop and field surveys to confirm the presence or absence of these farmland types.

Important farmland soils located in the Study Area include Farmland of Local Importance and Farmland of Statewide Importance. The Farmland of Local Importance was identified along River Street in a residential area, where ground disturbing impacts are limited to the roadway right-of-way. Additionally, the Farmland of Statewide Importance is identified as overlapping with the Project Footprint south of the public parking lot adjacent to the Contoocook River. No farm fields or agricultural land use overlaps with or is located near the Project Footprint.

A very small amount of permanent and temporary impact would occur to identified farmland soils in **Figure 1.4-4**, however these identified areas of farmland are located in previously-disturbed or currently developed areas; therefore, no impacts to farmlands are anticipated as a result of the Proposed Action.

1.4.6 Groundwater Resources

1.4.6.1 Existing Groundwater Resources

Groundwater resources located in the Study Area include a stratified drift aquifer and a wellhead protection area along the easternmost portion of the Study Area (refer to **Figure 1.4-5**, Groundwater Resources). No private wells are located within the Study Area. The wellhead protection area within the easternmost portion of the Study Area is associated with two Jaffrey Water Works public supply wells located along Turnpike Road. These wells are 46 and 58 feet deep and supply water to a population of approximately 3,612 within the Town of Jaffrey (**Table 1-7**). The wells can function at a rate of 275 gallons per minute.

Table 1-7 Public Water Supply Wells

| Public Water Supply ID | Name | Address | Well Depth | Yield (Gallons per minute) |
|------------------------|------------------------|---------------------------------|---------------|----------------------------|
| 1221010-001 | Jaffrey Water Works | 104 Turnpike Road, Route 124 | 46 | 275 |
| 1221010-005 | Jaffrey Water Works | 104 Turnpike Road, Route 124 | 58 | 275 |

Source: NHDES, 2015.

The private wells located closest to the Project Footprint are near Webster Street and along Tyler Hill Road south of Piper Lane. These wells are located outside of the Project Footprint and are not anticipated to be negatively impacted by the Proposed Action.

Two Groundwater Management Zones (GMZ) are located within the Project Footprint. The first is associated with 12 River Street, where a Groundwater Management Permit (GMP) was issued to the property owner in October 2003 to allow remedial actions for the removal of two underground storage tanks (USTs). Subsequently a GMZ was placed on the property and groundwater monitoring is ongoing. The GMZ boundaries

encompass the property at 12 River Street and the Jaffrey War Memorial Park across River Street.

The second GMZ within the Project Footprint is associated with a former dry-cleaning facility located along Laundry Road. The dry-cleaning operations at the property resulted in extensive chlorinated volatile organic compounds impacts to soil and groundwater at the property and nearby properties. A GMP was issued in October 2013 and a GMZ was established, which encompasses a portion of the Project Footprint. Further information about these GMZs is provided in **Section 1.4.14**.

1.4.6.2 Proposed Groundwater Impacts

Stratified Drift Aquifer

The Proposed Action is located almost entirely over the stratified drift aquifer (refer to **Figure 1.4-5**, Groundwater Resources). The aquifer located within the Study Area is part of a large aquifer complex that extends to the north and south along the Contoocook River. The estimated transmissivity of the aquifer within the Project Footprint is less than 2,000 feet square per day.

According to preliminary calculations based on the current design, the Proposed Action would result in a net increase of approximately 0.31 acres of new impervious area, almost entirely located over the stratified drift aquifer. **Table 1-8** compares the impervious areas proposed to be added and the impervious areas proposed to be removed under the Proposed Action within the vicinity of the stratified drift aquifer.

Table 1-8 Net Change in Pavement Area within Aquifer Boundaries (Acres)

| | Added Impervious | Removed Impervious | Net Increase in Impervious Area |
|------------------|------------------|--------------------|------------------------------------|
| Aquifer Type | Area (Acres) | Area (Acres) | (Acres) |
| Stratified Drift | 0.78 | 0.47 | 0.31 |

Given the permeable nature of the existing soils and to be consistent with the NH Department of Environmental Services' (NHDES) Alteration of Terrain (AoT) regulations, the Project design should include measures to sufficiently maintain pre-development groundwater recharge volumes (GRV), to the extent practical. As discussed further in **Section 1.4.7**, below, the extent to which groundwater recharge can be provided to compensate for the new impervious area will depend on the final selection and design of the stormwater treatment Best Management Practice (BMP) that is most appropriate for the site conditions. NHDOT's general preference is to construct a wet extended detention pond, however, it is unclear as to whether there is sufficient depth to groundwater to meet the design guidelines and/or whether a bioretention basin, which tends to be shallower and have greater groundwater recharge capabilities would be more feasible. Regardless of the final BMP selection, since much of the new pavement area will be relatively close to the Contoocook River (i.e., within 500 feet), the potential loss of recharge this close to the river is not likely to have a meaningful impact to the groundwater within the overall stratified-drift aquifer, and is likely to be outside the

groundwater contributing area that supports the Jaffrey Works public wells located in the easternmost portion of the project area.

The soils within the Project Footprint are primarily classified as hydrological soil group 'A,' indicating well-drained soils (non-hydric). The required GRV for the proposed pavement addition is estimated to be approximately 450 cubic feet based on the weighted average of the existing soil types and impervious cover. The proposed stormwater treatment BMP constructed would need to be designed to provide sufficient storage volumes to enable the total GRV to infiltrate into the underlying groundwater based on the soil infiltration rates.

Wellhead Protection Area

The Town of Jaffrey's municipal well's wellhead protection area located within the eastern portion of the Study Area is not anticipated to be impacted by the proposed work. The Proposed Action would involve repaving and sidewalk improvements where the Project Footprint overlaps with the wellhead protection area. This proposed work is not anticipated to have any negative impacts on the wellhead protection area.

Construction BMPs

No temporary impacts to groundwater are anticipated to occur from the Proposed Action or during construction. Contractors would use general BMPs to contain any mechanical fluid spills that may occur from construction equipment. In the unlikely event that a spill would occur, spill prevention plans would be developed prior to construction.

If areas of known groundwater contamination are disturbed during construction, or if previously undiscovered spills of oil and/or hazardous materials are discovered, these materials would be handled appropriately and managed in accordance with local and state regulations. Proper handling, management, and disposal procedures would be developed for both soil and groundwater prior to construction.

1.4.7 Surface Water Resources

A description of the surface waters found within the Study Area is provided below. These surface waters include the Contoocook River and an unnamed perennial stream. Also provided below is a review of the anticipated regulatory requirements for impacts to surface waters as well as a description of proposed stormwater management measures due to the increase of impervious area under the Proposed Action. **Figure 1.4-6**, Wetlands and Surface Water Resources, shows the location of these surface water resources.

1.4.7.1 Existing Stream Resources

Contoocook River

The Contoocook River begins at Pool Pond in Rindge and flows north through Jaffrey and then northeast, entering the Merrimack River along the Concord and Boscawen town line. Several archaeological sites have been found along the river. A number of

agricultural fields are located within the rich floodplain of the Contoocook River. The river also provides habitat to several rare, threatened, and endangered species. The Contoocook River is also popular for boating and fishing. The entire watershed of the Contoocook River is approximately 766 square miles. The watershed at the location of the proposed bridge is approximately 30 square miles.

The portion of the Contoocook River within the Study Area is influenced by the Contoocook River Dam (#124.03), owned by the Town of Jaffrey. The dam is located just south of the Main Street (US 202) bridge over the Contoocook River. The impounded area of the Contoocook River behind the dam is approximately 5 acres. The dam's height is approximately 15 feet and length is approximately 98 feet, with a drainage area of 21.2 square miles. Some beaver activity was observed along the banks of the river within the Study Area during the time of field review.

The classification of the Contoocook River within the Study Area is Riverine, Lower Perennial, Unconsolidated, Mud, dike/impounded (R2UB3h). The average bank height within this portion of the river is approximately four to eight feet high and well vegetated. The composition of the bank of the Contoocook River varies within the Study Area due to the level of disturbance and human influence. The most human disturbance along the river occurs within the northern portion of the Study Area near where a concrete retaining wall and sidewalk is constructed around the dam impoundment near the Main Street (US 202) crossing. The retaining wall runs approximately 80 feet along the eastern side of the river and 300 feet along the western side, then transitions to a more natural bank that is bordered by maintained lawns and grassy areas. The eastern bank of the river then transitions to a forested area, while the western bank is bordered by maintained lawn and backyards of residential houses.

The nearest US Geological Survey (USGS) stream gauge to the proposed Project for the Contoocook River (USGS 01082000) is approximately six miles north, located along Grove Street in Peterborough, NH. This gauge is influenced by the Noone Falls Mill Dam in Peterborough. Stream flow records at this dam began in 1945. Throughout the year, the highest discharge rate occurs in April at an average of 324 cubic feet per second and the lowest occurs in August at an average of 46 cubic feet per second. The months of July through September typically have the lowest recorded rate of discharge throughout the year.

Table 1-9 Contoocook River Av. Monthly Discharge, 1945-2018 (USGS 01082000)

| DES ID | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEPT | OCT | NOV | DEC |
|--|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| Average Monthly Discharge ¹ | 121 | 122 | 209 | 324 | 160 | 100 | 53 | 46 | 47 | 75 | 109 | 134 |

^{1 –} Cubic feet/second (Mean)

Source: US Geological Survey. "USGS 01082000 Contoocook River at Peterborough, NH." USGS Surface-Water Monthly Statistics for the Nation.

There are two reaches of the Contoocook River within the study area separated by the Contoocook River Dam. The impounded reach of the river is identified as Assessment Unit ID NHIMP700030101-02 and the reach downstream of the dam is identified as

Assessment Unit ID NHRIV700030101-11. According to the 2016 NHDES 303(d) list of impaired waterbodies, both reaches are listed as impaired as not fully supporting water quality standards for aquatic life due to low dissolved oxygen levels indicated by previous sampling results. According to the 2016 NHDES 303(d) list of impaired waterbodies, both reaches are listed as impaired as not fully supporting water quality standards for aquatic life due to low dissolved oxygen levels indicated by previous sampling results. The source or cause of the low dissolved oxygen levels is listed as unknown.

The Contoocook River is designated under RSA 483, the Rivers Management & Protection Act, due to the outstanding natural and cultural resources it provides including a source of drinking water for surrounding communities, wildlife habitat, forestry, agriculture, and recreational opportunities, as well as numerous archaeological sites and a focal point of glacial geology research. Due to its designated status, the river is managed by the Contoocook River & North Branch Rivers Local Advisory Committee. The Advisory Committee provided comments on the proposed project in an email dated April 1, 2019. The Advisory Committee requested that stormwater management principles be incorporated into the project as much as possible. The Advisory Committee also requested that the new bridge structure be designed to include wildlife corridors on both banks, and sidewalks incorporated along the bridge for views of the Contoocook River from the bridge. Appropriate sediment and erosion control BMPs will also be implemented during construction as recommended by the Advisory Committee.

Unnamed Perennial Stream (Stream #1)

An unnamed perennial stream flows west to east (Stream #1), becoming a more natural channel as it approaches the Contoocook River through the palustrine forested (PFO) portion of Wetland #3. The stream enters the Study Area through an outlet under River Street (US 202) and runs adjacent to River Street for approximately 100 feet before crossing under Tyler Hill Road. After Tyler Hill Road the stream passes through a maintained residential area and then runs through forestland before entering the Contoocook River near a meander bend. The average bank height of the perennial stream is 2 to 4 feet, with an average bank height of 1 to 2 feet. Common substrate of the perennial stream is cobble and sand.

1.4.7.2 Proposed Surface Water Impact

The Proposed Action would cross the Contoocook River approximately 375 feet south of Main Street between Blake Street and River Street. Construction of the bridge is anticipated to temporarily and permanently impact the Contoocook River during construction activities, which would require the placement of stone protection along the banks of the river for the new bridge abutments. Installation of the stone protection would require grading along the bank of the river, including portions below ordinary high water. Appropriate BMPs would be implemented during any in-water work. Further description of these impacts and approximate impact area calculations are provided in **Section 1.4.8.2**, below.

As explained in **Section 1.4.7.3**, a new stormwater BMP would be constructed adjacent to and would outlet to the Contoocook River near the existing Blake Street parking lot. The BMP would improve the water quality of the Contoocook River since it would be designed to treat twice the amount of impervious area created by the project.

The Proposed Action would occur within the 250-foot Protected Shoreland of the Contoocook River, which is jurisdictional under *RSA 483-B*, the *Shoreland Water Quality Protection Act*. Therefore, construction of the Proposed Action would require a NHDES Shoreland Permit to be obtained before work commences. Additionally, since the Proposed Action would disturb more than 50,000 square feet, some of which would occur within the protected shoreland of the Contoocook River, meeting the NHDES Alteration of Terrain regulations would be a principal design goal for stormwater treatment. Finally, because the Proposed Action would disturb more than 1 acre, a Notice of Intent (NOI) and Stormwater Pollution Prevention Plan (SWPPP) would be developed as part of the requirements of the NPDES (CGP) to address water quality concerns related to the Contoocook River during Project construction.

Another potential water quality impact relates to the possibility of increased use of road salt due to the added lane mileage. As discussed above, the Contoocook River is not currently listed as chloride impaired according to the 2016 303(d) list. The amount of lane-mileage in the project area maintained by the NHDOT is estimated to increase from approximately 2.2 to 2.6 lane miles as a result of the proposed roadway improvements. Based on data provided by NHDOT, the average annual road salt usage over the last 10 years is District 4 has been estimated to be 15.5 tons per lane-mile. Thus, NHDOT's annual salt usage on roadways in the project area, which all drain to the Contoocook River, could increase by 6.2 tons or from 34.1 tons to 40.3 tons, on average. This represents a potential increase in road salt use of approximately 18% within the project area but would likely represent a much smaller percentage when compared to the total salt usage in the rest of the watershed.

Given the size of the Contoocook River watershed and the available dilution capacity as indicated by the average monthly flow rates, described above, the potential effect of the added chloride resulting from another 0.4 lane-miles is likely to be very small and essentially immeasurable or *de minimis* with respect to potential water quality impacts in the Contoocook River. As discussed more in **Section 1.4.7.3** below, NHDOT recently developed a statewide Salt Management Plan that identifies various equipment upgrades and other winter maintenance improvements to be implemented statewide over time, which have been shown to reduce annual salt use by more than 20 percent based on results from a previous roll-out of these measures along the southern I-93 corridor from Salem to Manchester.

1.4.7.3 Mitigation – Proposed Stormwater Treatment

The proposed intersection reconfiguration and roadway realignment would result in a net increase of 0.31 acre of impervious cover, potentially generating additional stormwater runoff volume and pollutant load. A preliminary stormwater analysis was conducted to evaluate potential opportunities to include stormwater treatment BMPs

into the proposed design.³⁰ As a general design goal, and to be consistent with the NHDES Alteration of Terrain (AoT) rules and regulations (Env-Wq 1500), the analysis focused on identifying potential BMP locations to sufficiently treat the water quality volume generated by the twice the amount of new impervious area created by the project (i.e., as much as 0.62 acre).

Due to the limited space within the project area, only one location near the existing Blake Street parking lot was identified as being large enough to accommodate a stormwater treatment BMP. Based on the preliminary drainage design layout and the available space next to the proposed reconfigured parking lot, the potential BMP area was estimated to be large enough to treat the WQV contributed from approximately 0.62 acre of impervious area, which would meet the design goal of treating twice the amount of estimated new impervious area created by the project. Determining which type of BMP is most appropriate for this particular site, such as either a Wet Extended Detention Basin or a filtration type bioretention basin, will be completed during final design once more information on potential site constraints such as depth to the seasonal high water table has been collected.

If it is determined during final design that either the proposed BMP cannot be sufficiently sized or that the targeted amount of impervious area cannot be directed to the BMP location due to site constraints, then the use of permeable pavers or asphalt in appropriate non-vehicle traffic locations (i.e., pedestrian walkways and bike paths) may be considered. Permeable pavers or asphalt would reduce the effective impervious area and associated stormwater volumes as an alternative means of water quality protection mitigation.

With respect to the potential increased use of road salt associated with the project, NHDOT recently developed a statewide Salt Management Plan that identifies various efficiency measures and equipment upgrades that are targeted for implementation primarily in southern New Hampshire. NHDOT has already utilized these measures and upgrades along the southern I-93 corridor from Manchester to Salem and has shown an average salt use reduction of more than 20 percent compared to previous annual usage while accounting for differences in winter weather conditions. As NHDOT incorporates the use of these measures into District 4, and specifically for Patrol Shed 413, the potential impact due to any increase in road salt related to the project would be mitigated or offset by the adoption of these measures.

1.4.8 Wetlands

Several jurisdictional wetlands were identified within the defined Study Area. A brief description of each wetland found within the Study Area is provided below. Refer to **Figure 1.4-6**, Wetlands and Surface Water Resources, for the location of these wetlands.

³⁰ The Pavement and Stormwater Analysis Technical Memorandum is available for review upon request to the NHDOT Bureau of Environment.

 $^{{\}tt See\ http://www.rebuildingi93.com/documents/DOT-TMDL-Chloride-Implementation-Plan-Sept-2009.pdf.}$

1.4.8.1 Existing Wetland Resources

A wetland delineation was performed on September 7, 2017 by Kristopher Wilkes (CWS #288), VHB Senior Environmental Scientist, and Lindsay Matras, VHB Environmental Scientist. The wetland delineation was performed in accordance with the procedures and standards outlined in the *Regional Supplement to the US Army Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0* (January 2012). Wetland delineation also relied upon the *Field Indicators for Identifying Hydric Soils in New England, Version 4.0*, published by the New England Interstate Water Pollution Control Commission. Dominant wetland vegetation was assessed using the Northcentral and Northeast Regional Wetland Plant List published by the US Army Corps of Engineers. Lastly, wetlands were classified using the US Fish and Wildlife Service (USFWS) methodology *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin *et al.* 1979, revised 1985). Site observations and field data collected during wetland delineation field work is further summarized below.

Wetland #1

A small circular wetland, Wetland #1, was delineated within the eastern portion of the Study Area south of a public parking lot off Blake Street. The wetland is classified as Palustrine, Scrub Shrub, Broad-Leaved Deciduous, Seasonally Flooded (PSS1Q). This small wetland receives water from a 24-inch concrete pipe with a flared end and drains toward the Contoocook River. Vegetation observed in this wetland include glossy buckthorn (*Rhamnus frangula*), multiflora rose (*Rosa multiflora*), red maple (*Acer rubrum*), deer tongue (*Dichanthelium clandestinum*), beggars tick (*Bidens frondosa*), meadowsweet (*Filipendula ulmaria*), reed canary grass (*Phalaris arundinaceae*), and speckled alder (*Alnus incana*). Hydrology indicators include highly saturated soils, evidence of standing water, drainage patterns, and geomorphic position. Muck soils were observed in this wetland.

Wetland #2

This is a large wetland complex, Wetland #2, which connects to the eastern side of the Connecticut River south of Blake Street. The wetland was delineated in the Study Area and connected to the NWI wetland mapping since the wetland extended outside of the Project's Study Area. The wetland is bounded by the Monadnock Recreational Rail Trail to the east, where the wetland hugs the toe of slope along the trail. The wetland is wedged between forested upland to the east, transitioning to higher levels of saturation as it turns west and drains toward the Contoocook River. This wetland has two Cowardin classifications. The portion of the wetland located to the north is classified as Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded/Saturated (PFO1E). The portion of the wetland located to the south that connects to the NWI wetland is classified as Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded (PFO1C).

Vegetation observed within the portion of the wetland classified as PFO1C include cinnamon fern (*Osmundastrum cinnamomeum*), sensitive fern (*Onoclea sensibilis*), ash (*Fraxinus* spp.), red maple, American beech (*Fagus grandifolia*), Eastern hemlock (*Tsuga canadensis*), white pine (*Pinus strobus*), starflower (*Trientalis borealis*), glossy buckthorn,

winterberry (*Ilex verticillata*), jewelweed (*Impatiens capensis*), oak (*Quercus* spp.), and hobblebush (*Viburnum lantanoides*). Hydrology indicators within the PFO1C wetland include standing water, saturation, and hummock/hollow microtopography.

Vegetation observed within the portion of the wetland classified as PFO1E include sensitive fern, hobblebush, jewelweed, red maple, hemlock, white pine, flat-topped white aster (*Doellingeria umbellate*), New England aster (*Symphyotrichum novae-angliae*), beggars tick, glyceria grasses, horsetail (*Equisetum* spp.), sphagnum (*Sphagnum* spp.), jack-in-the-pulpit (*Arisaema triphyllum*), dogwood (*Cornus* spp.), goldenrod (*Solidago* spp.), meadowsweet, meadowrue (*Thalictrum dioicum*), Joe-Pye weed (*Eutrochium purpureum*), reed canary grass, multiflora rose, honeysuckle, as well as grasses associated with a mowed lawn south of the public parking lot and apartment building.

Wetland #3

A large Palustrine Scrub-Shrub / Palustrine, Emergent, Persistent, Seasonally Flooded/Saturated / Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded/Saturated (PSS/PEM1E/PFO1E) wetland complex, Wetland #3, is located on outside of the meander bend of the Contoocook River. This wetland is associated with a perennial stream (see **Section 1.4.7**) which runs through the center of the wetland. Portions of the wetland complex are mowed and maintained as residential lawn by abutting landowners. Raised garden beds have also been placed over portions of the wetland complex. Hydrology indicators of this wetland include highly saturated soils, cut wetland vegetation, and evidence of standing water or flooding.

Vegetation observed within this wetland include jewelweed, Joe-Pye weed, red maple, flat-topped white aster, New England aster, blue vervain (*Verbena hastata*), silky dogwood (*Cornus amomum*), glossy buckthorn, common buckthorn (*Rhamnus cathartica*), Virginia creeper (*Parthenocissus quinquefolia*), cattail (*Typha* spp.), sedges (*Cyperaceae* spp.), sensitive fern, beggars ticks, goldenrod, arrow-leaved tearthumb (*Persicaria sagittata*), multiflora rose, meadowsweet, button bush (*Cephalanthus occidentalis*), hobblebush, boneset (*Eupatorium perfoliatum*), grape (*Vitis* spp.), cinnamon fern, meadowrue, honeysuckle (*Lonicera* spp.), purple loosestrife (*Lythrum salicaria*), and bittersweet (*Celastrus orbiculatus*).

1.4.8.2 Proposed Wetland Impact

Based on the current design, the Proposed Action would result in 440 square feet of impact to the small PSS1C wetland located off Blake Street from the relocation of the public parking lot area. Additional wetland impacts along the bank and bed of the Contoocook River would occur for the construction of the new bridge, consisting of stone protection for the new abutments. This stone protection would require minor grading and shaping along the river bank to accommodate the bridge structure, including areas below the ordinary high water line. Appropriate BMPs would be implemented during any in-water work. Refer to **Figure 1.4-7**, Wetlands and Surface Water Impacts, for the approximate locations of impacts to wetlands and the bank/bed of the Contoocook River. No other streams or wetlands would be impacted by the Proposed Action. These wetland impacts, provided in **Table 1-10** below, are estimated

based on the current design and will continue to be adjusted until the final design of the Project. Since impacts to wetlands jurisdictional under RSA-482-A, Water Management and Protection, are anticipated, construction of the Proposed Action would require a NHDES Wetlands Permit prior to the start of work and would likely qualify under the US Army Corps of Engineers (USACE) General Permit for the State of New Hampshire.

Table 1-10 Estimated Wetland Impact for Proposed Action

| Impact Type | Impact Area (square feet) | Impact Length (linear feet) |
|--------------------------------|---------------------------|-----------------------------|
| Wetland #1 (PSS1C) | 440 | N/A |
| Contoocook River Bed (R2UB3h) | 1,690 | 200 |
| Contoocook River Bank (R2UB3h) | 210 | 210 |
| Total | 2,340 | 410 |

1.4.9 Floodplains

The Project Footprint intersects the floodplain of the Contoocook River at the location of the new proposed bridge crossing (refer to **Figure 1.4-8**, Floodplain). The Contoocook River floodplain is narrow near the Contoocook River Dam and widens to the south. This area of the floodplain is within the Special Flood Hazard Area Zone AE of the Contoocook River, as shown on the effective Flood Insurance Rate Map, Panel No. 33005C0459E. Zone AE is defined as a one-percent annual chance floodplain that is determined in the Flood Insurance Study by detailed methods of hydraulic analysis. According to the Flood Insurance Study completed for Cheshire County, New Hampshire, no floodway was computed for the Contoocook River.

Portions of the Study Area are located within the Floodplain Development District designated by the Town of Jaffrey under the town's *Zoning Ordinance, Section 12.20.*³² This ordinance regulates floodplain impacts within the Federal Emergency Management Agency's (FEMA) special flood hazard areas, which includes Zone AE.

Under the Proposed Action, US 202 would be relocated to cross the Contoocook River 375 feet upstream of the dam at the floodplain's narrowest point. The proposed work would directly impact delineated floodplains through the addition of fill materials. Based on the current Project design, the total amount of direct impacts to the 100-year floodplain within the Project Footprint would be approximately 834 cubic yards or 0.52 acre-feet. See **Table 1-11** and the Floodplain Memo in **Appendix E**.

The Proposed Action would encroach on the Contoocook River floodplain in the following locations:

- > River Street (Sta. 802+50 to Sta. 804+00)
- NH 124 / Main Street (Sta. 502+25 to Sta. 504+00)
- > US 202 Connector (Sta. 201+50 to Sta. 202+50)
- Blake Street Parking Lot (Sta. 91+40 to Sta. 92+90)

Town of Jaffrey. 2017. *Land Use Code, Town of Jaffrey, NH*. Accessed March 5, 2019, https://www.townofjaffrey.com/sites/jaffreynh/files/uploads/land_use_code.pdf.

Table 1-11 Total Impacts of the Proposed Action to the 100-Year Floodplain

| Location | Impact Area (Acres) | Floodplain Impacts (Cubic Yards) | Floodplain Impacts (Acre-Feet) |
|----------------------------|---------------------|-------------------------------------|-----------------------------------|
| > A – River Street | 0.13 | 105.4 | 0.07 |
| → B – NH 124 / Main Street | 0.05 | 38.3 | 0.02 |
| C – US 202 Connector | 0.10 | 190.7 | 0.12 |
| → D – Blake Street | 0.10 | 499.6 | 0.31 |
| Total (Rounded) | 0.4 | 834.0 | 0.52 |

The Proposed Action would introduce a new bridge connector over the Contoocook River upstream of the Contoocook River Dam. The current design of the bridge structure and approaches would impact the floodplain of the Contoocook River, as shown in **Figure 1.4-8**. However, to minimize hydraulic impacts, the proposed bridge will be designed according to NHDES Wetlands Bureau stream crossing rules and will comply with the University of New Hampshire stream crossing guidelines to the maximum extent possible.³³

Under the Proposed Action, the floodplain storage volume may be reduced by approximately 0.52 acre-feet. Consistent with Executive Order 11988, the Proposed Action avoids, to the extent possible, long and short-term adverse impacts to the floodplain. The proposed impact to the floodplain is not expected to substantially increase the base flood elevation nor cause the loss of property due to increased flooding. It should be noted that the Proposed Action design may be subject to change, therefore altering the potential floodplain impacts. As the design progresses, adjustments to the impacts will be made accordingly.

1.4.10 Wildlife Habitat/Fisheries

The NH Fish & Game Department (NHF&G) has developed the New Hampshire Wildlife Action Plan (WAP) to assist with conserving and protecting wildlife species and habitat types throughout the State. The locations of these habitat types within the Study Area are shown in **Figure 1.4-9**, Wildlife Action Plan Habitats. A large portion of the Study Area has not been given designated habitat types since the Project is within an urbanized area. The only habitat type identified within the Study Area is wet meadow/shrub wetlands along the Contoocook River corridor.

Upon field review it was determined that wet meadow/shrub wetlands are limited to the wetland areas identified in **Figure 1.4-6**, Wetlands and Surface Water Resources. Within the Project Footprint, these wetlands are limited to the small wetland located east of the Contoocook River near the end of Blake Street. Additional wetlands along the Contoocook River were mapped to the southern limits of the Study Area to the east and west of the Contoocook River. Limited areas of hemlock/hardwood/pine forested habitat exist adjacent to the wet meadow/shrub wetland areas along the Contoocook River northeast of the Study Area. Therefore, only a very small habitat, the small wet

University of New Hampshire. 2009. New Hampshire Stream Crossing Guidelines. Accessed April 24, 2018, https://www.des.nh.gov/organization/divisions/water/wetlands/documents/nh-stream-crossings.pdf.

meadow/shrub wetland near the end of Blake Street, is anticipated to be impacted by the Proposed Action. Due to the small size of this wetland and its location in an urbanized, previously disturbed area, this disturbance to this wetland is not anticipated to negatively impact wildlife habitats as a result of the Proposed Action.

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) established a requirement to describe and identify "essential fish habitat" (EFH) in each federal fishery management plan. The Magnuson-Stevens Act defines EFH as "those waters and substrates necessary for fish for spawning, breeding, feeding, or growth to maturity." ³⁴ The Magnuson-Stevens Act can be found in federal regulations under Wildlife and Fisheries (50 CFR 600.920). Under these regulations (Subpart K), FHWA is required to notify the National Oceanic and Atmospheric Administration (NOAA) of the Proposed Action.

The only EFH species that are known to occur within inland areas in New Hampshire is Atlantic salmon (*Salmo salar*). Atlantic salmon designated EFH in New Hampshire, other than coastal areas, includes the Merrimack River and Connecticut River as well as all rivers, streams, tributaries, and bays that are located within their watersheds. Information regarding the location of EFH for Atlantic salmon can be found on the NOAA EFH mapper within a document titled "*Atlantic salmon EFH*." Based on this document the Contoocook River is included in Atlantic salmon EFH, therefore consultation with NOAA is required. Consultation with NOAA was initiated through the completion of the EFH Worksheet (refer to **Appendix F**). This worksheet assesses potential impact to EFH habitat that may occur from the Proposed Action by assessing impacts to the habitat's benthic community, presence or absence of certain community types, change in flow or sedimentation rates, or anticipated impacts to water quality or noise levels, among other factors. NOAA concluded that while the Proposed Action would have an adverse effect to EFH, the adverse effect is not substantial (refer to the EFH Worksheet in **Appendix F**).

1.4.11 Threatened and Endangered Species

The following is a discussion of rare, threatened, and endangered species identified within the Study Area by the Natural Heritage Bureau's (NHNHB) online Data-Check tool and the USFWS Information for Planning and Consultation (IPaC) system. Additionally, information is provided about the Golden and Bald Eagle Protection Act.

1.4.11.1 NH Natural Heritage Bureau

A search for the occurrence of rare, plant, animal, or natural communities within the vicinity of the proposed Project was completed using the NHNHB online DataCheck tool. A report dated February 25, 2019 identified no recorded occurrences for sensitive

³⁴ US Department of Commerce. 2007. Magnuson-Stevens Fishery Conservation and Management Act. National Oceanic and Atmospheric Administration, National Marine Fisheries Service. Public Law 94-265.

National Marine Fisheries Service. *Atlantic salmon EFH*. National Oceanic and Atmospheric Administration. Accessed March 1, 2019, https://www.habitat.noaa.gov/protection/efh/efhmapper/.

species within the Project Footprint (refer to **Appendix G**, Threatened and Endangered Species Correspondence). No further coordination with NHNHB is required.

1.4.11.2 US Fish and Wildlife Service

The Study Area was reviewed for the presence of federally listed or proposed, threatened, or endangered species, designated critical habitat, or other natural resources concerning the USFWS's IPaC System. Results dated November 12, 2018 indicated the Northern long-eared bat (*Myotis septentrionalis*, NLEB) may occur in the Study Area (refer to **Appendix G**). Since the proposed traffic improvements would require tree clearing and structure removal, the Study Area was reviewed for the possible presence of NLEB.

No known hibernacula or roost trees currently exist in the Town of Jaffrey; however, the adjacent town of Peterborough has known NLEB sites. Tree clearing for the Project would occur entirely within 300 feet of existing road corridors, however it is currently unknown when this tree clearing would take place. Additional considerations regarding potential impacts the Project may have on NLEB species is the removal of two buildings (4 Stratton Road and 15 River Street). The owners of these buildings were contacted to determine the presence or absence of bat activity within or around the buildings. The owners indicated no bats have been observed within or around the buildings, to their knowledge.

Based on this information, a determination key was completed for this Project through the USFWS IPaC system. In response to the determination key, the USFWS provided a concurrence verification letter [Tracking and Integrated Logging System (TAILS) Code 05E1NE00-2018-F-0899], stating that the Project adheres to the criteria of the *Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat* (revised February 5, 2018), and therefore satisfies the requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (refer to **Appendix G**). The official effect determination of "may affect – likely to adversely affect" is valid as long as applicable Avoidance and Minimization Measures (provided in **Appendix G** and **Section 1.6**) are adopted into the final plans and are observed during construction.

1.4.11.3 Bald and Golden Eagle Protection Act

Bald and Golden Eagle Protection Act prohibits anyone from "taking" bald eagles including their nests or eggs. Additionally, this Act prohibits any activity that would disturb bald or golden eagles which would cause injury, decrease in productivity, or nest abandonment. The NHNHB DataCheck report identified no bald eagles within the vicinity of the Project Footprint. Vegetative clearing along the Contoocook River would be completed as part of the Proposed Action; however, this clearing is not anticipated to negatively impact bald eagles as none were identified within the Study Area. Therefore, negative impacts to bald or golden eagles are not anticipated to occur because of the Proposed Action.

1.4.12 Parks/Recreation/Conservation Lands

The following is a brief discussion of the publicly owned conservation, recreation lands, and parks found within the Study Area, as well as Section 4(f) and 6(f) properties. The locations of these areas are provided in **Figure 1.4-10**, Parks and Conservation Lands.

1.4.12.1 Publicly Owned Conservation and Recreation Lands

Five public parks are located within the Study Area. No conservation easements or conservation lands are located within the Study Area.

Jaffrey War Memorial Park

The Jaffrey War Memorial Park is a small riverside park that honors those who served in the Korea and Vietnam Wars. The park is privately owned, having been funded by citizens, businesses, and organizations from the local community, and is currently maintained by local citizens. The Jaffrey War Memorial Park was designed by Bissell Alderman, who was a local architect. This park was dedicated in 1984 and is open to the public, featuring a flag pole and benches along the Contoocook River. This park is located along US 202 (River Street) to the south of the Contoocook River Dam.³⁶

Memorial Square Town Common

The Memorial Square Town Common is located along the northwest corner of the intersection of NH 137 (North Street) and NH 124 (Main Street). The Town Common includes a gazebo, the Buddies Monument (a World War I memorial) and the World War II Gold Star Mothers memorial. Benches, shade trees, and nearby parking are also available for public use. ³⁷ The Town Common is located near the Jaffrey Police Department, local businesses, and the Jaffrey Mills Apartments.

Bissell Alderman Park

Bissell Alderman Park is an open maintained green space located along the east side of US 202 (Peterborough Street) in front of the Rite Aid parking lot.³⁸ As stated above, Bissell Alderman was a local architect who designed the Jaffrey War Memorial Park.³⁹ The park is approximately 5,663 square feet and the Monadnock Recreational Rail Trail runs along US 202 through the park.⁴⁰ The park is a maintained green space with some benches available for public use, as well as an octagonal granite watering trough with a memorial plaque. This parcel is owned by the State of New Hampshire.

Jaffrey Chamber of Commerce. "Jaffrey War Memorial Park." People and Places of Interest. Accessed March 2019, http://www.jaffreychamber.com/pages/PeoplePlacesofInterest.

Team Jaffrey. 2004. A Walk Around Downtown Jaffrey. Jaffrey Historical Society. Reformatted January 2011. http://www.jaffreyhistory.grg/09publications/JaffreyWalkingTour.pdf.

Town of Jaffrey. 2007. "Community Facilities and Services." *Master Plan Update*. Amended February 2016. P. 79. https://www.townofjaffrey.com/sites/jaffreynh/files/uploads/2016 master plan update 0.pdf.

Jaffrey Chamber of Commerce. "Jaffrey War Memorial Park." People and Places of Interest. Accessed March 2019, http://www.jaffreychamber.com/pages/PeoplePlacesofInterest.

Town of Jaffrey. 2009. *Downtown Plan*. Town of Jaffrey Planning Board. Accessed March 2019, https://www.townofjaffrey.com/sites/jaffreynh/files/uploads/downtown_plan.pdf.

Community Field

The Jaffrey Community Field, located on town-owned land, features a ball field and associated parking areas and facilities. Community Field can be accessed off Stratton Road or Blake Street and is within close proximity to the Conant High School. The Monadnock Recreational Rail Trail runs north to south parallel to the western side of the ball field. 41

Monadnock Recreational Rail Trail

The Monadnock Recreational Rail Trail runs 7.2 miles from Webster Street in Jaffrey south through the Town of Rindge to the Massachusetts-New Hampshire state line just above Winchendon, MA. The trail runs relatively parallel to US 202 and provides a connection between the town centers of Jaffrey and Rindge. The trail runs along the Contoocook River, Contoocook Lake, and Pool Pond in addition to several other scenic wetland areas.⁴²

1.4.12.2 Section 6(f), LCHIP and LCIP Resources

The New Hampshire Department of Natural and Cultural Resources (NHDNCR), Division of Parks and Recreation was contacted regarding Land and Water Conservation Fund (LWCF) properties acquired by this program within the vicinity of the proposed Project. In an email response dated February 26, 2018, NHDNCR indicated that one Section 6(f) property, Community Field owned by the Town of Jaffrey, is within the Study Area. Community Field comprises two parcels, only one of which (Tax Map 239 Lot 212) was acquired with LWCF funding. The LWCF response and a map showing the Section 6(f) property is included in **Appendix H**.

The NH Office of Strategic Initiatives (OSI) Conservation Land Stewardship (CLS) Program was contacted regarding properties or easements acquired by the Land Conservation Investment Program (LCIP) within the vicinity of the proposed Project. After consulting their files, the OSI indicated in an email response dated October 2, 2017 that there are no CLS or LCIP properties within the Study Area (**Appendix H**).

Additionally, the Land and Community Heritage Program (LCHIP) was also contacted regarding associated properties within the Study Area. In an email response dated February 22, 2018, LCHIP indicated that there are no nearby properties that would be affected by the Project (**Appendix H**).

Town of Jaffrey. "Community Park." Facilities. Town of Jaffrey Parks and Recreation. Accessed March 2019, https://jaffrey.recdesk.com/Community/Facility/Detail?facilityId=11.

⁴² TrailLink. *Monadnock Recreational Rail Trail, New Hampshire*. Accessed March 2019, https://www.traillink.com/trail/monadnock-recreational-rail-trail/.

1.4.12.3 Proposed Impacts

Below is a description of the proposed impacts to each park resulting from the Proposed Action.⁴³

Jaffrey War Memorial Park. The Jaffrey War Memorial Park located along River Street would be partially acquired to allow room to construct the three-way roundabout west of the Contoocook River. This acquisition of 0.04 acre would reduce the current 0.28-acre parcel by approximately 13 percent. Impacts to the park include both temporary and permanent impacts. These impacts include partial parcel acquisition, which would require the relocation of the existing sidewalk, granite fence with chains, and relocation of light posts. Additionally, several trees planted between the sidewalk along River Street and the park's sidewalk would need to be removed to accommodate the parcel acquisition, and the "Korea" and "Vietnam" plaques at the entrance to the park would likely need to be relocated. Temporary slope and grading impacts would occur along the southwest portion of the park adjacent to the proposed location of the three-way roundabout.

The Jaffrey War Memorial Committee (or "Committee") in charge of the park has met with the Town of Jaffrey and NHDOT regarding the proposed Project impacts. The Committee expressed support for the Project and agrees to the proposed impacts to the park under certain stipulations: that the park land used for the Project be replaced at no cost to the Committee, and that the park features be moved and landscaping elements be added to the new park location at no cost to the Committee. Refer to **Appendix D** for a statement letter from the Committee.

Memorial Square Town Common. No permanent or temporary impacts are proposed to occur to the Memorial Square Town Common as part of the Proposed Action.

Bissell Alderman Park. Bissell Alderman Park would also be impacted.⁴⁴ Under the Proposed Action, the park would be completely removed, and the existing Monadnock Recreational Rail Trail that currently runs adjacent to the park would be combined with the sidewalk crossing at the new five-way intersection and then split at the current location of the Bissell Alderman Park (refer to the General Plan in **Appendix B**). The existing features of the park could be relocated as part of the Project; discussion with the Town of Jaffrey regarding the relocation of these features would occur during final design of the Project.

Community Field. Community Field comprises two parcels, Tax Map 239 Lot 213 (NHDOT Parcel 32), which would be impacted by the Proposed Action, and Tax Map 239 Lot 212 (no NHDOT parcel number), which would not be impacted by the Proposed Action. The Proposed Action would require partial acquisition of a small portion of Parcel 32 (approximately 230 square feet) where the parcel meets Stratton Road. This acquisition would not have any effect on the use of Community Field, since it is away

⁴³ Because some of these impacted properties are protected under Section 4(f) of the USDOT Act, a Section 4(f) Evaluation is included in Part II of this document.

Bissell Alderman Park is located on land currently owned by the State of New Hampshire and is therefore not identified as a right-of-way acquisition even though the Proposed Action would use this land.

from the ball fields and parking area and not used for recreational purposes. The Proposed Action would also reconfigure the intersection of Blake Street and the driveway to Community Field, improving access to the field. Note that there would be no impacts to Section 6(f) resources as a result of the Proposed Action, since the partial acquisition is limited to Parcel 32, which was not acquired with LWCF funds and since there would be no adverse impacts to the recreational use of Community Field. ⁴⁵

Monadnock Recreational Rail Trail. The Monadnock Recreational Rail Trail would be modified by the Proposed Action where the trail crosses Stratton Road and Turnpike Road. The intersection of the Monadnock Recreational Rail Trail with Stratton Road would be improved as part of the Proposed Action since they would provide a more direct connection across Stratton Road and Turnpike Road to the trail and sidewalk system proposed north of the five-way roundabout. The roundabout crossings are more pedestrian friendly since crosswalks and pedestrian refuge islands are located on each approach to the roundabout, and pedestrians would need to cross only one lane and one direction of traffic at a time. As mentioned above, the sidewalk crossing and trail would be combined across Stratton Road and Turnpike Road but would split again near the existing Bissell Alderman Park. The reconfigured Rail Trail crossing design will consider the comments received by the NH Bureau of Trails, particularly regarding accommodating the existing snowmobile crossing (refer to Appendix D).

1.4.12.4 Mitigation

Coordination with the Jaffrey War Memorial Committee to compensate for the loss of land from the Jaffrey War Memorial Park is ongoing at this time (refer to **Appendix D**). Discussions include providing comparable land for the park north of the proposed location of the three-way roundabout on River Street. Additionally, compensation would be provided for relocating and reconfiguring the existing park's features to fit the new parcel footprint.

Additional coordination with the Town of Jaffrey regarding the proposed relocation of the existing features of the Bissell Alderman Park would occur during the final design phase of the Project.

To mitigate potential effects to the Monadnock Recreational Rail Trail, access shall be maintained where the trail crosses the Project throughout the duration of construction. A detour plan would be developed and implemented if necessary during certain phases of construction. Details of the project final design would be coordinated with the NH Bureau of Trails to ensure that the trail crossing of the Five-Way Roundabout minimizes impacts to snowmobile users.

1.4.13 Cultural Resources

The Proposed Action was reviewed for the presence of historic architectural or archaeological resources. The Proposed Action is located partially within the Downtown Jaffrey Historic District, which is a National Register-listed district. Additionally, since the

⁴⁵ A description and map of the Section 6(f) properties located within the Study Area are provided by Bill Gegas in **Appendix H**.

Proposed Action occurs adjacent to the Contoocook River, the Project is sensitive to areas that may contain Pre-Contact archaeological sites. The following is a discussion of these historic architectural and archaeological resources.

1.4.13.1 Historic Architectural Resources

A Request for Project Review (RPR) was submitted for the proposed Project on March 20, 2018. The NH Division of Historical Resources (NHDHR) responded on April 18, 2018 with the following requests:

- Complete an updated area form for the Downtown Jaffrey Historic District, which is currently listed on the National Register.
- > Update the Monadnock Railroad Area Form.
- Assess whether properties proposed to be taken need to be surveyed for possible individual eligibility for the National Register.
- > Complete a Phase IB Intensive Archaeological Investigation in archaeologically sensitive areas within the Project Footprint.
- > Proceed with consulting party coordination and public involvement.

The following is a summary of the historical and archaeological resources found in and adjacent to the Project Footprint that were discussed in the RPR. Also provided are responses to the requests for additional information made by NHDHR in the RPR response. The RPR response form is provided in **Appendix I**.

Previously Documented Properties

One National Register-Listed property, the Jaffrey Mills, and one National Register-Listed historic district, the Downtown Jaffrey Historic District (referred to as "Historic District"), are located within the Study Area. The Jaffrey Mills (Listed 2/8/1982) at the northeast corner of the intersection of Main Street (NH 124) and North Street (NH 137). The textile mills were established in 1868, with expansions in 1872 and 1897. The property was owned by several owners but remained in textile production until 1943. The mill was listed under Criteria A and C for its associations with the industrial and economic history of Jaffrey and for its architecture.

The Historic District (listed 6/13/2002) is approximately 75 acres and encompasses 134 contributing resources, including buildings, parks, monuments and sculptures, dams and bridges. The Historic District is listed under Criteria A and C at the local level for its associations with Community Planning and Development and Architecture with period of significance ranging from ca. 1800 to 1952.

Seven properties that contribute to the Downtown Jaffrey Historic District have individual NHDHR inventory forms. Two of these properties were determined to not be eligible for National Register-listing by NHDHR; the Alfred and Lizzie Butler House at 10 Stratton Road and the House at 15 River Street (formerly 44 River Street). The remaining five properties were not individually evaluated for National Register eligibility by NHDHR.

As recommended by NHDHR, an Area Form was completed for the Downtown Jaffrey Historic District Boundary Increase (referred to as the "Boundary Increase Area"), which proposed an expansion of the Historic District and to extend the period of significance of the Historic District to 1968, the 50-year cut-off period at the time. This Area Form was submitted to NHDHR on January 11, 2019. The Area Form proposed to increase the Historic District to include Charlonne Street, which runs roughly parallel to the southwest boundary of the existing Historic District, and a short portion of River Street terminating at Tyler Hill Road, as a directly related part of Downtown Jaffrey's development in the late nineteenth and early twentieth centuries. The form also included a re-evaluation of properties included in the original Historic District boundaries, including their contributing and non-contributing status based on current integrity and age. Field surveys were completed for development of the Area Form were conducted in January and September of 2018. A NHDHR determination of eligibility form dated January 30, 2019 (refer to **Appendix I**) indicated that NHDHR concurred that the increased boundary and extended period of significance of the Historic District is eligible for National Register listing, noting a number of new contributing resources to the eligible district. The increased boundary is located beyond the limits of the Proposed Action.

A Project Area Form was produced for the Monadnock Railroad in December 1998, which runs north-south near the east end of the Project Footprint. The railroad was established in 1871 and abandoned between 1972 and 1984. The state purchased approximately eight miles of the track between the New Hampshire-Massachusetts border in Rindge, NH and the Jaffrey-Peterborough town line for use as a recreational trail. The defined location of the trail that was included in the Project Area form passes through the Downtown Jaffrey Historic District but is not included in the 2002 National Register nomination as a contributing property. The Monadnock Railroad was included as a contributing property to the Downtown Jaffrey Historic District Boundary Increase.

The updated boundary of the Historic District and updated location of contributing properties is provided in **Figure 1.4-11**, Historical Resources and Proposed Impacts.

Properties Not Surveyed

The Study Area was reviewed to identify properties that are 50 years old and older. Preliminary dates of construction were acquired from available town assessor data, and historic maps and field observation were used to confirm or refine these dates. These non-surveyed properties primarily occur along River Street (US 202) and side streets including Gilmore Pond Road, Tyler Hill Road, and Charlonne Street. Development within these areas were largely influence by Jaffrey Mills, which began in the nineteenth century and continued into the early twentieth century. The non-surveyed residences along River Street south of Tyler Hill Road and Gilmore Pond Road are a mix of late nineteenth and early twentieth century residences in styles including Federal, Italianate, Craftsman, and Colonial Revival that represent the expansion of East Jaffrey through the early twentieth century. Almost all of these buildings have modern replacement materials. The oldest properties in this area appears to be the altered late Federal-style cape at 58 River Street (ca. 1840); however, the early twentieth century Craftsman and Colonial Revival styles are more prominent, like those at 70, 71, and 84 River Street. Some of these are included as

contributing resources in the National Register-eligible Downtown Jaffrey Historic District Boundary Increase Area.

Individually Listed Properties

One property within the Study Area is individually listed on the National Register; the Jaffrey Mills at the northeast corner of the intersection of Main Street (NH 124) and North Street. This property was listed in the National Register in 1982 under Criteria A and C for Community Planning and Development and Architecture for its associations with the nineteenth and early twentieth century prosperity of the Town of Jaffrey and for its construction and use of the Second Empire style for industrial buildings.

1.4.13.2 Archaeological Resources

A Phase IA Archaeological Sensitivity Assessment of the various alternatives of the proposed Project was completed by Independent Archaeological Consulting, LLC (IAC). The Phase IA Assessment, dated February 23, 2018, found archaeological sensitivity within all three alternatives (IAC Report No. 1345). Although a large extent of the investigated areas has experienced ground disturbance, is the Phase IA Assessment concluded that it was possible that intact archaeological resources exist below the modern areas of disturbance. Additionally, the Project's proximity to the Contoocook River indicates sensitivity for Pre-Contact archaeological sites.

Due to the potential for archaeological sites within the Project Footprint, IAC completed field work for a Phase IB Intensive Archaeological Investigation on November 30 and December 3, 2018 in areas identified as archaeologically sensitive during the Phase IA Assessment. The Phase IB Investigation revealed fill deposits within these areas with 19th- and 20th-century refuse. Some of the artifacts discovered during the investigation were consistent with a circa 1836-present timeframe, however the context of these artifacts was too poor to consider the area a site. IAC therefore recommended no additional archaeological investigation. NHDOT has reviewed the impacts of the Proposed Action in detail with the NHDHR (i.e., SHPO) during an extensive Section 106 consultation, resulting in the execution of an Adverse Effect Memo, executed on September 19, 2019, which states that the Proposed Action would have no effect on archaeological resources.

1.4.13.3 Proposed Impacts

The Proposed Action would have an adverse effect on the Downtown Jaffrey Historic District, but was determined to have no adverse effect on the Jaffrey Mills property or on archaeological resources. These effects were documented in an Adverse Effect Memo for the Proposed Action, executed on September 19, 2019 (provided in **Appendix I**), and discussed in more detail below.

Downtown Jaffrey Historic District

The Proposed Action would result in physical and visual effects to the Downtown Jaffrey Historic District and Boundary Increase Area. Proposed physical effects within the

Historic District includes construction of two new roundabouts, the US 202 realignment including the construction of a new bridge across the Contoocook River, and a stormwater basin. Two contributing properties (4 Stratton Road and 15 River Street) would be fully acquired and demolished to accommodate the two roundabouts under the Proposed Action. Two contributing properties (21 River Street and 23 River Street) would be partially acquired under the Proposed Action to accommodate the three-way roundabout, with greater physical property impacts proposed to the parcel at 21 River Street. The joint driveway to 19 and 21 River Street, both contributing properties, would be reconfigured to accommodate the new three-way roundabout. These impacts would result in physical destruction or damage to part of the Historic District resource [refer to 36 CFR Section 800.5(a)(2)(i)].

Visually, the Proposed Action would introduce multiple new transportation elements into the setting of the Historic District including two roundabouts and a new bridge located at a new river crossing. At a minimum, views from the Main Street bridge south along the Contoocook River would be partially obstructed by the introduction of the proposed bridge structure. Although a sensitive design of the new bridge structure could minimize these visual impacts, the bridge would introduce a modern element into a natural viewshed of the Historic District's setting [36 CFR Section 800.5(a)(2)(v)] and change the character of a physical feature (the Contoocook River) within the Historic District's setting [36 CFR 800.5(a)(2)(iv)].

The Adverse Effect Memo for the Project documents that the Proposed Action would have an adverse effect on the Downtown Jaffrey Historic District and Boundary Increase Area. 46

Jaffrey Mills

The Jaffrey Mills complex is located on the north side of Main Street at the intersection of North Street/NH 137. The National Register boundary for the Jaffrey Mills is defined as the property boundary of Jaffrey Tax Map 238 Lot 257.1 and Tax Map 238 Lot 257. The Proposed Action would not require acquisition of any permanent or temporary ROW or easement from either of these parcels.

The Proposed Action would reduce the number of travel lanes along Main Street and would reconfigure on-street parking in front of the Jaffrey Mills. Roadway work includes new sub-base and pavement to the east of the Contoocook River (Main Street) bridge, and simple mill and overlay of existing pavement to the west of the bridge. No work on the bridge is proposed other than pavement rehabilitation.

Additionally, the Proposed Action would reconstruct the existing sidewalk adjacent to the East Building and Mill Office. The East Building directly abuts the existing sidewalk, whereas landscaping and shrub plantings are located between the Mill Office and the existing sidewalk. The proposed sidewalk reconstruction would occur within the existing

The Proposed Action would fully, partially, or temporarily impact contributing properties to the Historic District including 4 Stratton Road, 15 River Street, 19 River Street, 21 River Street, and 23 River Street. When a project uses land from a property that is a contributing element to the Historic District, or results in a finding of an adverse effect, Section 4(f) is applicable. Since the Proposed Action would result in use of these Section 4(f) properties, an Individual Section 4(f) Evaluation is included in Part II of this document.

footprint and would not impact the Jaffrey Mills buildings; the existing distance between the sidewalk and the mill buildings would be maintained. The reconstructed sidewalk would be configured so as to direct water flow away from the buildings. Additionally, a weather tight expansion joint would be installed between the East Building and the reconstructed sidewalk to prevent damage to the mill building.

No direct impacts to the mill buildings are proposed to occur as a result of the Proposed Action. However, dust, noise, and vibrations from the sidewalk replacement construction could cause minimal temporary impacts to the mill buildings.

Based on the impacts and benefits proposed to the Jaffrey Mills complex, the Proposed Action would have No Adverse Effect on the Jaffrey Mills. Although limited construction within existing ROW would occur directly adjacent to the Mills, it would not affect the significance of the industrial history or architecture of the Mills, from which it derives its significance.

1.4.13.4 Mitigation

An Adverse Effect Memo executed in September 2019 documented that the Proposed Action would have an adverse effect on the Downtown Jaffrey Historic District. The Section 106 consultation with FHWA, NHDOT, NHDHR and a Consulting Party identified the specific measures to mitigate this adverse effect. These measures are described in a Memorandum of Agreement (MOA) for the project (see **Appendix I**). In summary, the MOA stipulations include the following measures:

- NHDHR, FHWA, and the Town will be provided the opportunity to review and comment on the bridge design developed by NHDOT during the design process.
- NHDOT, in coordination with the Town of Jaffrey, will prepare a Downtown Jaffrey National Register Historic District nomination update and boundary increase.
- To avoid impacts to the Jaffrey Mills during construction, the design of the reconstructed sidewalk along Main Street will be configured to direct water flow away from the East Building and Mill Office. Additionally, a weather tight expansion joint will be installed between the East Building and the reconstructed sidewalk to prevent damage to the mill building.
- During final design, NHDOT will determine the likely construction equipment and methods to be used for sidewalk and roadway work along Main Street directly adjacent to the Jaffrey Mills East Building and Mill Office. If warranted, NHDOT will develop a Construction Vibration Assessment. 47
- NHDOT will commission three outdoor interpretive signs/panels about the Downtown Jaffrey Historic District and its resources to be installed at a location or locations to be determined in consultation with the NHDOT and the Jaffrey

⁴⁷ Assessments will be made using the following guidance documents: "New Hampshire DOT Research Record: Ground Vibrations Emanating from Construction Equipment" (2012) and "NCHRP 25-25/Task 72: Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects" (2012).

Historic District Commission. The interpretive panels are anticipated to examine one or more of the following themes: Downtown Jaffrey Historic District; Monadnock Railroad; Jaffrey Mills; and Historic and Extant Contoocook River Crossings.

The Proposed Action may potentially impact stone retaining walls located along property boundaries within the Project Footprint, including 29 River Street and 10 and 19 Turnpike Road. NHDOT projects that impact stone walls must follow the guidance contained in the 2017 Stone Wall Policy Guidelines. As Should any of these stone walls be impacted by Project construction, the NHDOT would follow the 2017 Stone Wall Policy Guidelines prior to construction to determine the quality of the stone wall(s) proposed to be impacted and any mitigation measures that would be required. NHDOT would coordinate with NHDHR during this process.

1.4.14 Contamination/Hazardous Materials

The following sections describe potential sources of contamination that could be encountered during construction phases of the Proposed Action and may require special management in accordance with the applicable state regulations such as NHDES *Env-Or 600, Contaminated Site Management*.

1.4.14.1 Contaminated Properties

The Proposed Action is anticipated to encounter sites with known contamination during project construction. A review was completed of the NHDES One Stop Online Database and a database report provided by Environmental Data Resources. All listings within 500 feet of the Project Footprint were reviewed and listings that were deemed to have the potential to affect environmental conditions on properties located within the Study Area were identified. An exterior reconnaissance of the Study Area was conducted on March 6, 2019. Based on this review, it was determined that two active remediation sites have impacted environmental media within the Project Footprint, and seventeen additional environmental listings have the potential to have impacted environmental media within the Project Footprint. Refer to **Figure 1.4-12** for the locations of these sites.

The following two environmental listings were determined to impact environmental conditions within the Project Footprint:

Reds of Jaffrey, 12 River Street (NHDES Master ID 2367 and 2366). The property located at 12 River Street identified as Reds of Jaffrey is listed in the hazardous waste generator, above ground storage tank (AST), underground storage tank (UST), and leaking underground storage tank (LUST) databases associated with the property's use as a gasoline service station. One 500-gallon used oil AST is currently in use at the property. A total of 17 different USTs were formerly located on the property between 1966 and 2015. In 1989, one UST was

NH Department of Transportation. 2017 Stone Wall Policy Guidelines. Bureau of Environment. February 2017.

found to be leaking upon removal. Impacted soils were removed from the tank grave and no groundwater impacts were identified.

In October 1999, two 10,000-gallon and one 12,500-gallon #2 fuel oil USTs were removed from the property. Analytical results determined that concentrations of methyl tertiary-butyl ether (MTBE) and alkylbenzenes were above the applicable regulatory standards and NHDES required additional assessment at the property. Subsequent investigations identified MTBE in groundwater at the property that is believed to be attributed to the gasoline service station operations in addition to the former USTs. In October 2003, a Groundwater Management Plan (GMP) was issued to the owner of the property to allow remedial actions and establish a Groundwater Management Zone (GMZ). A GMZ was placed on the property and groundwater monitoring is ongoing. The approximate boundaries of the GMZ encompass the property located at 12 River Street as well as the park located across River Street and is provided in **Figure 1.4-12**.

Former Elite Laundry, 10 Laundry Road (NHDES Master ID 2347, 62709, 63710, and 71566). The former dry-deaning facility located along Laundry Road is listed in the Brownfields, state hazardous waste sites, and UST databases. There were previously two USTs located on the property that are listed by the NHDES as Permanently Closed as of June 1995. The former dry-cleaning operations conducted at the property resulted in extensive chlorinated volatile organic compounds impacts to soil and groundwater at the property and nearby properties. Approximately 1,000 tons of impacted soils were removed from the property under the direction of the USEPA, but it was deemed infeasible to remove all impacted media. Response actions at the property are ongoing consisting of groundwater and indoor air monitoring. The extent of groundwater impacts expands up to 1,000 feet from the original source area. In October 2013, a GMP was issued to the owner of the property to allow remedial actions and establish a GMZ. The approximate boundaries of the GMZ associated with the property is provided in Figure 1.4-12.

Further information regarding the two active remediation sites is provided in **Appendix J**. Due to the presence of the active remediation sites detailed above, construction monitoring and coordination with NHDES will occur as appropriate to facilitate construction activities that could potentially encounter contamination associated with documented sites.

Properties that have the potential to impact the Project based on regulatory listings, field observations, and/or regulatory status are noted in Table 1 in **Appendix J**. In cases where there was insufficient data to determine whether a property's historical uses or environmental listings had impacted environmental media within the Project Footprint, the property was conservatively assumed to have the potential to impact the Project. As also noted in Table 1 in **Appendix J**, a high volume of properties located near the Project Footprint use oil heat where AST and/or USTs may be present.

Since the Project would involve excavation and construction within an existing roadway right-of-way and adjacent properties, suspect excess soil proposed to be removed from

this area would be tested to determine the appropriate receiving facility and disposed of properly. Potential disposal options may include: use as daily cover or shaping material at a permitted landfill; recycling at an asphalt batching plant; or treatment and disposal. A Soil Management Plan (SMP) would be prepared to provide guidance for the identification, handling, storage, reuse, and disposal of contaminated soils generated during construction activities.

1.4.14.2 Additional Potential Sources of Contamination

Per-and Polyfluoroalkyl Substances (PFAS)

In addition to the sites listed above, per-and polyfluoroalkyl substances (PFAS) have been found to be present in groundwater adjacent to the Project Footprint at the former Elite Laundry Site. PFAS are a very large group of man-made chemicals that are prevalent in many commercial products, including stain- and water-repellent or nonstick products. They are also used in industrial and manufacturing processes, and certain types of fire-fighting foam. These chemicals do not break down in the environment and are persistent in the human body causing significant concern about potential adverse health effects.

In 2018, the NHDES identified PFAS as emerging contaminants and have developed AGQSs for four PFAS compounds identified as perfluorooctanoic acid, perfluorooctanesulfonic acid (PFOS), perfluorohexanesulphonic acid, and perfluorononanoic acid (PFOA).

Groundwater that has the potential to be impacted with PFAS above the AGQS may be subject to management through a Groundwater Management Plan. PFAS were monitored and found to be present at the former Elite Laundry Site in 2017 and have not been delineated within the GMZ. Based on the current conceptual design, only limited roadway rehabilitation would be required within this GMZ and dewatering of PFAS-impacted groundwater is not currently anticipated. However, if plans change during the final design phase, NHDOT would coordinate with NHDES to assess the risks from PFAS-impacted groundwater.

Limited Reuse Soils (LRS)

Limited Reuse Soils (LRS) are soils that are likely (based on "generator knowledge") and/or demonstrated (through laboratory analyses) to contain contaminant concentrations in the range of the NHDOT specific Acceptable Reuse Concentrations. Roadside LRS commonly encountered at NHDOT construction projects include:

- Soils with elevated concentrations of several polynuclear aromatic hydrocarbons (PAHs) and a few common metals;
- Soils with petroleum residue (total petroleum hydrocarbons) related to the normal operation of motor vehicles and asphalt pavement;
- Roadway reclaimed stabilized base materials (asphalt pavement surface being pulverized in place along with the underlying road base); and
- Millings.

The NHDOT has determined that roadside LRS may be encountered in all topsoil within the limits of the existing NHDOT right-of-way, regardless of its depth. In instances where topsoil is not present, soil from the top of ground to a depth of six inches is considered to be LRS. Soils excavated from beyond and/or below the specified LRS limits that do not exhibit visual or olfactory evidence of potential contamination shall not require handling as impacted material. Contractors will be advised that roadside LRS have been identified within the Project Footprint. LRS excavated from within the NHDOT operational right-of-way shall be addressed in accordance with applicable NHDES rules and/or waivers. Soils that are anticipated to meet the definition of LRS will be subject to management through an SMP.

Hazardous Building Materials

Asbestos-containing materials may be encountered if demolition disturbs building structures or unidentified conduits beneath the roadway. In addition, lead-based paint, mercury, polychlorinated biphenyls, and other special wastes may also be present in structures and conduits. Hazardous building materials (asbestos, lead-based paint, polychlorinated biphenyls, mercury, and others) would be inventoried prior to any structural demolition or renovation work. If these hazardous materials are found to be present in the structures, then they would be properly abated by a licensed contractor in accordance with state and local regulations and shipped to a receiving facility licensed to handle the specific type of solid waste under the appropriate shipping documents such as manifests.

Former Railroad Right-of-Way (ROW)

According to historical resources, railroad tracks formerly intersected portions of the Study Area located along Tumpike Road and Stratton Road. Railroad ROWs are often impacted with residual oil and/or hazardous material, including metals, pesticides, and petroleum constituents such as PAHs. Railroad related sources of oil and/or hazardous material may include creosote- or arsenic-laced railroad ties, herbicides, lubricating oils, diesel fuel, and diesel exhaust. In addition, fill of unknown origin used to bring tracks to grade may contain debris, coal, coal ash, coal slag, or other potential contaminants. As such, it is presumed that soil located on the rail trail and adjacent to the former railroad corridor may require special handling and management as Railroad Impacted Soils during construction. The appropriate handling measures for any excavated soils located within the limits of the rail trail will be included in the SMP.

1.4.15 Visual Resources

Visual resources make up the aesthetic quality of a community. These resources may include naturally occurring characteristics and man-made (built) resources. Transportation construction projects change the visual resources that are seen by roadway travelers, pedestrians, and properties adjacent to the roadway. FHWA's Guidelines for Visual Impact Assessments of Highway Projects states that "Roads...are extensions of a community's values and aesthetic preferences." The anticipated visual and

aesthetic impacts of the Project, both beneficial and adverse, are discussed in this section.

1.4.15.1 Existing Views

The following is a brief description of the three main areas located within the Study Area that would experience visual impacts from the Proposed Action.

Main Street Bridge

Within the Study Area, mixed-use buildings lining Main Street are visible when looking to the east and west from the bridge that carries Main Street (US 202) over the Contoocook River. Some of the buildings near the bridge are contributing properties to the Historic District, conveying a historic downtown charm within the town center. Some of the historical buildings near the bridge include the Jaffrey Mills building northeast of the intersection of Main Street and North Street, the Saunders House at 10 Turnpike Road, the Bernard Hardware Store at 4 Stratton Road, the Alfred and Lizzie Butler House at 10 Stratton Road. The buildings within this area have a variety of uses including businesses and residences.

From the bridge looking north, downstream of the Contoocook River, the river banks are lined with the Jaffrey Mill building to the west and another former mill building to the east. The Contoocook River along this side of the bridge is not visible to vehicles traveling along the roadway but is visible to pedestrians using the sidewalk along the northern side of the bridge.

Views of the operating Contoocook River Dam located immediately south of the bridge can also be seen from the bridge sidewalk, however vehicles traveling over the bridge have an obscured view of the dam. From the bridge looking south beyond the dam along the Contoocook River, the view portrays a quieter, lesser-developed portion of town due to the presence of large trees along the banks of the river and obscured views of residential houses along River Street and Blake Street that are set back from the river. A small number of backyards of the residential homes located adjacent to the river are completely clear of trees and shrubs; however, most of these cleared areas are not visible from the bridge. Additionally, the Jaffrey War Memorial Park which is located along the western bank of the Contoocook River south of Main Street can be seen from the bridge.

Eastern Bank of Contoocook River

A public walking path runs parallel to the eastern side of the Contoocook River and provides views of the river in between a buffer of vegetation along the bank. Continuing south, a buffer of trees remains between the river and the public parking area off Blake Street. Trees and shrubs have been cleared near 21 Blake Street which opens views of the Contoocook River for approximately 100 feet. Neighborhood backyards of properties off River Street are visible from this clearing. Views of the Contoocook River along Blake Street are obscured until the terminus of Blake Street by the clearing. Beyond the clearing further to the south is a tract of undeveloped riparian forest.

Western Bank of Contoocook River

While River Street runs parallel to the Contoocook River, travelers and pedestrians along the roadway cannot see the river since the road elevation is higher and set back from the river. A buffer of residential houses, backyards, and dense vegetation sit between River Street and the Contoocook River. Land use along River Street is a mix of businesses and residences, including apartment buildings and multi-family homes. A number of these houses are contributing properties to the Historic District.

1.4.15.2 Proposed Visual Impacts

The Proposed Action would result in many visual changes in Downtown Jaffrey since the Project would reconfigure the existing five-way intersection to a roundabout, create a three-way roundabout on River Street, and construct a new bridge. Additionally, completing this work would require removing two buildings, 4 Stratton Road and 15 River Street. A summary of the visual impacts to the surrounding community is provided below.

Several properties located on the outskirts of the Project Footprint would not be directly impacted by the proposed changes since these areas do not have direct visibility to the reconfigured five-way roundabout, the new three-way roundabout, or the new bridge structure. These properties include those located along River Street in the vicinity of the School Street intersection and south, the properties located along Main Street west of the four-way signal-controlled intersection and along North Street to the north of the intersection. Additionally, properties located along Peterborough Street north of Christian Court would not be visually impacted.

Reconfigured 5-Way Roundabout

The existing five-way signal-controlled intersection would be reconfigured to a five-way roundabout. Overall, the five-way roundabout is anticipated to serve as the gateway into downtown Jaffrey and the community's center. The roundabout would create a green space at the center of the intersection which could also provide visual appeal. Additionally, landscaping along the sidewalks in the vicinity of the intersection could be included in the final design for visual appeal and stormwater capture.

The reconfigured intersection to a roundabout would require realigning the Peterborough Street and existing Blake Street (to become US 202) roadway approaches to the intersection. The realignment of existing Blake Street for the new alignment of US 202 require the removal of the historic Bernard Hardware Store located at 4 Stratton Road, thus visually altering the appearance of the intersection. The building can currently be seen from Main Street, Blake Street, Peterborough Street, Stratton Road, and Turnpike Road. Removal of this building would extend the views of the surrounding buildings near 4 Stratton Road, therefore some structures not currently visible to the five-way intersection would then be visible, such as the property at 9 Blake Street.

The realignment of the Peterborough Street approach to the roundabout intersection would require the removal of the existing green space in front of Rite Aid. This green

space is known as the Bissell Alderman Park. The Monadnock Recreational Rail Trail would be realigned within this area.

Finally, some of the properties along Turnpike Road and Stratton Road would be visually impacted by the roundabout, however most of these properties have obscured views of the intersection and therefore the visual impact would not be significant.

New Bridge over the Contoocook River

The Proposed Action would realign US 202 along existing Blake Street and then turn to cross the Contoocook River via a new bridge structure before reconnecting to the existing alignment of US 202 along River Street. The new bridge would be located within the Downtown Jaffrey Historic District; therefore, coordination of the design of the bridge to be sympathetic to the rural and historic character of the surrounding area will occur with NHDHR, the Town of Jaffrey, and Section 106 Consulting Parties during the design of the bridge structure.

The new bridge would be visible to the north from the four-way intersection of River Street, Main Street, and North Street, including the Main Street Bridge, Memorial Square Town Common, town offices, and other businesses located within this area. To the south the bridge would not be readily visible to most residences located along the Contoocook River due to the presence of tree and shrub cover, with the exception of 21 Blake Street. To make room for the bridge, existing trees and vegetation would be removed along the Contoocook River within the immediate vicinity of the bridge, which would also change the visual quality of the area.

The new alignment of US 202 and bridge would require the reconfiguration of an existing public parking area along existing Blake Street and upgrading of the driveway entrance to the Community Field from the realigned US 202, which would contribute to the visual impacts of this area.

New 3-Way Roundabout

The Proposed Action would construct a three-way roundabout at a new proposed intersection where the new alignment of US 202 would reconnect to River Street immediately after the proposed bridge structure. River Street is currently a two-lane roadway within the area of the proposed intersection. The intersection would be located at a transition point in land use along River Street from areas where businesses are primarily located to the north, to primarily residential areas to the south. Therefore, the new intersection would visually impact both businesses and residential areas.

The new three-way roundabout would require the removal of two buildings, located at 15 River Street, which is where the new roundabout is proposed to be constructed. The replacement of the houses with a roundabout would visually change this area along River Street. Additionally, the side and back yard of 21 River Street would also be acquired for the three-way roundabout. Tree removal would be required within the areas proposed for full and partial acquisition to connect the new intersection to the new bridge structure. New driveway approaches to 16 and 19, and 21 River Street will be constructed immediately adjacent to the roundabout.

The approach of River Street to the three-way intersection would require taking property from the Jaffrey War Memorial Park. The Proposed Action would visually impact the park by removing green space and relocating walkways, lighting, and granite posts/fence line from the park and realigning River Street so that it is closer to the park's features.

Houses that would be directly visually impacted by the new three-way roundabout on the east side of River Street includes 19, 21, and 23 River Street, and to the west includes 12, 16, and 20 River Street.

1.4.15.3 Mitigation

Overall, the Proposed Action would have adverse visual impacts due to the degree of visual change that is proposed. However, these visual changes are anticipated to be mitigated by the following:

- Bridge design appropriate to its historic and natural setting;
- > The new Downtown and River Street roundabouts functioning as a visual gateway to downtown Jaffrey; and
- Minimize tree clearing/vegetation removal along the Contoocook River.

Details of these potential project elements would be determined during final design.

1.4.16 Environmental Justice

Executive Order 12898, enacted in 1994, requires an Environmental Justice evaluation be conducted to identify and address disproportionately high and adverse effects on the health or environment of minority and low-income populations to the greatest extent practicable for all transportation projects undertaken, funded, or approved by the FHWA Title VI of the Civil Rights Act of 1964 prohibits discrimination by recipients of federal financial assistance based on race, color, and national origin, including matters related to language access for those persons with limited English proficiency (LEP). Executive Order 13166 requires federal agencies examine a system to provide those services so LEP persons can have meaningful access to them. FHWA Order 6640.23A establishes policies and procedures for FHWA to use in complying with Executive Order 12898, while the Council on Environmental Quality (CEQ) provides guidance on NEPA and Environmental Justice analysis in their publication *Environmental Justice: Guidance Under the National Environmental Policy Act.* These regulations and associated guidance provide the foundation for the Environmental Justice analysis detailed below.

The Proposed Action was analyzed on January 21, 2016 to determine Environmental Justice groups (elderly, minority, and low-income populations) using US Census American FactFinder data. Drawing on the CEQ Guidance, the analysis identifies an Environmental Justice group where the proportion (percentage) of the elderly, minority, or below-poverty population in an area is "meaningfully greater" than the percentage in the broader, surrounding area.

For the Proposed Action, average population percentages for protected groups were determined within the impacted area and surrounding area for Cheshire County. The analysis determined that the average percentage of elderly population within the

impacted area is 15.28 percent, and within the surrounding area is 14.11 percent. The average percentage of minority populations within the impacted area is 5.04 percent and 4.20 percent within the surrounding area. The average percentage of low-income population is 6.45 percent within the impacted area and 9.41 percent in the surrounding area. The percentage of the LEP population is 0.23 percent for the impacted area, and 0.0% for the surrounding area.

NHDOT's analysis concluded that the impacted and surrounding area have a high percentage of elderly population. The analysis, however, did not determine that the percentage of any protected population is meaningfully greater than the surrounding area. The analysis made specific outreach recommendations to facilitate public comment from the identified elderly population group that might be impacted by the Proposed Action. Outreach efforts to solicit public participation from the following organizations were recommended: Town of Jaffrey, Jaffrey Library, and Jaffrey Chamber of Commerce.

Based on the limited demographic differences among the impacted and surrounding areas, and the determination that project impacts are relatively limited, the Proposed Action would not result in a disproportionately high and adverse impact to EJ populations.

Refer to **Appendix K** for the Environmental Justice Population Analysis from NHDOT.

1.5 Public Outreach

Meetings have periodically been held throughout the development of this Project, with various Federal, State and local agencies, as well as with the general public. Project meetings were held on the following dates:

Table 1-12 Project Meetings

| Date | Topic |
|------------|--|
| 05/09/2017 | Technical Advisory Committee Meeting |
| 06/27/2017 | Technical Advisory Committee Meeting |
| 09/12/2017 | Technical Advisory Committee Meeting |
| 10/17/2017 | Public Informational Meeting #1 |
| 10/24/2017 | Technical Advisory Committee Meeting |
| 02/13/2018 | Technical Advisory Committee Meeting |
| 02/20/2018 | Public Informational Meeting #2 – Public Workshop |
| 05/29/2018 | Technical Advisory Committee Meeting |
| 07/10/2018 | Technical Advisory Committee Meeting |
| 09/19/2018 | NHDOT Natural Resource Agency Coordination Meeting |
| 10/16/2018 | Technical Advisory Committee Meeting |
| 11/15/2018 | Public Informational Meeting #3 |
| 04/11/2019 | Cultural Resources Agency Meeting |
| 06/25/2019 | Technical Advisory Committee Meeting |
| 07/11/2019 | Cultural Resources Agency Meeting |

| 09/12/2019 | Cultural Resources Agency Meeting |
|------------|-----------------------------------|
| 10/02/2019 | Public Hearing |
| 07/16/2020 | Finding of Necessity |

Notes for most of these meetings can be accessed via the internet at https://www.nh.gov/dot/projects/jaffrey 16307/index.htm. Additionally, letters were sent to applicable Federal, State, and local agencies during preliminary planning of the Project to gain agency feedback. Copies of the responses received are provided in https://www.nh.gov/dot/projects/jaffrey 16307/index.htm. Additionally, letters were sent to applicable Federal, State, and local agencies during preliminary planning of the Project to gain agency feedback. Copies of the responses received are provided in https://www.nh.gov/dot/projects/jaffrey 16307/index.htm. Additionally, letters were sent to applicable Federal, State, and local agencies during preliminary planning of the Project to gain agency feedback. Copies of the responses received are provided in https://www.nh.gov/dot/projects/jaffrey 16307/index.htm.

Table 1-13 Agency Letters

| Agency/Organization | Contact | Date Sent | Reply Received |
|--|---|--------------------------|--|
| USACE | Col. William M. Conde | 10/02/2017 | |
| USDOI – Office of Environmental Policy and Compliance | Andrew Raddant | 10/10/2019 | 11/12/2019 |
| USEPA – Office of Environmental Stewardship | Susan Studlien | 10/02/2017 | |
| USEPA – Office of Ecosystem Protection | Ken Moraff | 10/02/2017 | |
| USFWS | Thomas Chapman Information for Planning and Consultation (IPaC) | 10/02/2017 | 11/17/2017 11/12/2018 03/06/2019 |
| USDA – NRCS | Richard Ellsmore | 10/02/2017 | |
| NOAA Fisheries – Greater Atlantic Region | John Bullard Mike Johnson | 10/02/2017 04/17/2019 | 06/21/2019 |
| FEMA | Paul Ford | 10/02/2017 | |
| NHDNCR | Michael York | 10/02/2017 | 10/16/2017 |
| NHDNCR – Division of Parks and Recreation | Bill Gegas | 10/02/2017 | 02/26/2018 |
| NHDNCR – Division of Historical Resources | Laura Black Christina St. Louis | 03/20/2018 01/11/2019 | 04/23/2018 01/30/2019 |
| NHDES | Robert Scott | 10/02/2017 | |
| NHF&G | Glenn Normandeau | 10/02/2017 | |
| NHNHB | Amy Lamb | | 02/12/2018 2/25/2019 |
| NH Department of Resources and Economic Development | Jeffrey Rose | 10/02/2017 | |
| NH Department of Agriculture, Markets, and Food | Lorraine Merrill | 10/02/2017 | |
| NH Office of Energy and Planning | Jared Chicoine | 10/02/2017 | |
| NH Office of Energy and Planning, Floodplain Management Program | Jennifer Gilbert | 10/02/2017 | |
| NH Office of Energy and Planning, Conservation Land Stewardship Program | Steve Walker | 10/02/2017 | 10/02/2017 |

| NH Land and Community Heritage Investment Program | Paula Bellemore | 10/02/2017 | 02/22/2018 |
|---|-------------------|------------|------------|
| Town of Jaffrey Planning | Jo Anne Carr | 10/02/2017 | |
| Town of Jaffrey Zoning Board of Adjustment | Lee Sawyer | 10/02/2017 | |
| Jaffrey Parks and Recreation Department | | 10/02/2017 | |
| Town of Jaffrey Conservation Commission | Carolyn Garretson | 10/02/2017 | |
| Southwest Region Planning Commission | Tim Murphy | 10/02/2017 | 01/24/2018 |
| | Janet Renaud | 10/02/2017 | |
| Contoocook & North Branch Rivers Local Advisory Committee | | 02/27/2019 | |
| Committee | Matt Lundstead | 03/14/2019 | 04/01/2019 |

A well-attended Public Hearing on the layout of the Proposed Action was held on October 2, 2019 at the Jaffrey VFW Post 5613 Function Hall, at 12 Hathorn Road, Jaffrey. ⁴⁹ The hearing was conducted in accordance with NH RSA 230:14 and the Surface Transportation and Uniform Relocation Assistance Act of 1987. A Commission of three persons appointed by the NH Governor and Executive Council presided over the hearing.

In addition to receiving public feedback on the layout, the purpose of the hearing was to receive public comments on the social, economic, environmental effects of the Proposed Action, as well as the consistency of the Proposed Action with the Town of Jaffrey's planning goals and objectives. Public comments were provided through verbal testimony, as well as letters, emails and in the form of signed petitions.

The comments received during the Public Hearing are discussed within the Report of the Commissioner, issued by the NHDOT Commissioner, dated July 15, 2020 (see **Appendix L**). The Report of the Commissioner categorizes comments received as either in support of the project or non-support of the project. A more detailed level of information on comments received is included in the report as a matrix, which further breaks down the comments, generally organized by comment topic. Comments received included, but were not limited to, topics regarding traffic flow, downtown pedestrian uses and safety, noise pollution, impacts to property, cost of the project, impacts and benefits to businesses, construction staging, parking, among others. The Report of the Commissioner also includes NHDOT's responses to concerns raised by the public.

At a Finding of Necessity Meeting held on July 16, 2020, following public notice, the Commission voted unanimously to approve the Proposed Action.

As stated above in **Section 1.4.16**, the NHDOT Environmental Justice Population Analysis (refer to **Appendix K**) demonstrates that special considerations for elderly populations must be incorporated into the planning and design of the Project. Outreach for the Proposed Action's public hearing occurred by posting this CE document at the following organizations as indicated in the Environmental Justice Population Analysis memo:

- > Jaffrey Town Offices; 10 Goodnow Street, Jaffrey, NH 03452
- Jaffrey Library; 38 Main Street, Jaffrey, NH 03452

⁴⁹ Public notice of the hearing was disseminated on August 20, 2019. A copy of the issued notice is included in **Appendix L**.

Jaffrey Chamber of Commerce; 7 Main Street, Jaffrey, NH 03452

1.6 Summary of Environmental Commitments

The following environmental commitments have been made for this project.

 Properties requiring acquisition shall be appraised utilizing techniques recognized and accepted by the appraising profession and in conformity with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and applicable to New Hampshire State Law.

(RIGHT-OF-WAY) Page 16

- 2. Relocation resources will be made available to relocated businesses or individual property owners without discrimination. Specifically, the owners of the affected properties would be compensated for the impacts and eligible for relocation benefits which could include:
 - > Fair market value for acquired property
 - > Relocated advisory assistance service
 - > Payments for moving and relocation costs
 - > Residential mortgage interest differential payments and closing costs

(RIGHT-OF-WAY) Page 16

3. Measures to reduce pollutant emissions would be taken during construction in accordance with applicable laws and regulations. These include but are not limited to: dust suppression measures, idling restrictions, the use of Ultra Low Sulfur Diesel (ULSD) fuel, proper maintenance of all motor vehicles, machinery, and equipment, and proper fitting of equipment with mufflers or other regulatory-required emissions control devices.

(CONSTRUCTION) Page 22

- 4. Construction practices could be used to minimize construction noise as feasible and reasonable, if necessary, and may include the following:
 - Assuring that equipment is functioning properly and is equipped with mufflers and other noise-reducing features.
 - > Locating especially noisy equipment as far from sensitive receptors as possible
 - > Using quieter construction equipment and methods, as feasible.
 - Maintaining strong communication and public outreach with adjacent neighbors is a critical step in minimizing impact.

(CONSTRUCTION) Page 28

5. Contractors working within the Project Footprint would use general BMPs to contain any mechanical fluid spills that may occur from construction equipment. In the unlikely event that a spill would occur, spill prevention plans would be developed prior to construction.

(ENVIRONMENT/CONSTRUCTION) Page 31

- 6. If areas of known groundwater or soils contamination are disturbed during construction, or if previously undiscovered spills of oil and/or hazardous materials are discovered, these materials would be handled appropriately and managed in accordance with local and state regulations. Proper handling, management, and disposal procedures would be developed for both soil and groundwater prior to construction.
 - (ENVIRONMENT/CONSTRUCTION) Page 31
- 7. Proper erosion and sedimentation controls shall be implemented during construction. (CONSTRUCTION/ENVIRONMENT) Page 33
- Prior to the commencement of work, the contractor shall submit a stormwater pollution prevention (SWPPP) plan specific to this project. The plan shall be approved by the Department and implemented and monitored as noted. (CONSTRUCTION/ ENVIRONMENT) Page 34
- 9. Increased stormwater runoff volume from the proposed additional pavement would be mitigated by constructing a stormwater system capable of treating twice the increase in impervious surface area. This system would include a combination of measures such as one or more wet extended detention ponds, use of permeable pavers or asphalt in appropriate non-vehicle traffic locations (i.e., pedestrian walkways and bike paths), and/or an underground (subsurface) infiltration basin. (ENVIRONMENT/HIGHWAY DESIGN) Page 35
- 10. If changes to the project will result in disturbance beyond the current limits of work, the project shall be reviewed by Bureau of Environment since permits may be required. For any additional work that the Contractor may propose to do in wetlands or waters of the State, appropriate applications, along with the necessary working plans, to the NHDES Wetlands Bureau and, if necessary, to the USACE shall be provided by the Contractor sufficiently in advance for their consideration and approval.

(CONSTRUCTION/ENVIRONMENT) Page 37

- 11. The following avoidance and minimization measures (AMMs) shall be followed to comply with the NLEB effect determination.
 - The Northern Long-Eared Bat Flyer shall be shared with all operators, employees, and contractors working on the project, and operators, employees, and contractors shall be aware of all environmental commitments, including all applicable AMMs.
 - Direct temporary lighting away from suitable habitat during the active season.
 - When installing new or replacing existing permanent lights, use downwardfacing, full cut-off lens lights (with same intensity or less for replacement lighting).
 - Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.
 - Ensure tree removal is limited to that specified in project plans and ensure that all contractors understand clearing limits and how they are marked in the field.

All sightings of dead or sick bats in the project area shall be immediately reported to the Bureau of Environment.

(ENVIRONMENT/HIGHWAY DESIGN/CONSTRUCTION) Page 41

- 12. Coordination with the Jaffrey War Memorial Committee will occur to develop final plans to compensate for the loss of land from the Jaffrey War Memorial Park. Existing features located within the park would be replaced in the reconfigured park where possible.
 - (HIGHWAY DESIGN/ENVIRONMENT) Page 45
- 13. Recreational access along the Monadnock Recreational Rail Trail shall be maintained where the trail crosses the Project throughout the duration of construction. A detour plan would be developed and implemented, if necessary, during certain phases of construction. Details of the project final design would be coordinated with the NH Bureau of Trails to ensure that the trail crossing of the Five-Way Roundabout minimizes impacts to snowmobile users.
 - (ENVIRONMENT/CONSTRUCTION) Page 45
- 14. The loss of the Bissell Alderman Park will be mitigated by relocating the octagonal granite watering trough, with its memorial plaque, and the two granite benches to another location within the Town. The relocation of these features would be coordinated with the Town of Jaffrey during final design.
 - (HIGHWAY DESIGN/ENVIRONMENT/CONSTRUCTION) Page 45
- 15. A Section 106 Memorandum of Agreement (MOA) was developed in consultation with FHWA, NHDHR, and the Consulting Party to mitigate for the adverse effect to the Downtown Jaffrey Historic District. NHDOT shall ensure that all such mitigation stipulations are implemented in accordance with the MOA.
 - (ENVIRONMENT/HIGHWAY DESIGN/CONSTRUCTION) Page 50
- 16. To protect the structural integrity of the Jaffrey Mills complex located adjacent to the project, the equipment and methods that would be used adjacent to the Jaffrey Mills complex would be identified, and, if needed, a "Construction Vibration Assessment" would be developed as the project plans progress. Methods for reducing construction vibrations are considered on a case-by-case basis, but they could include temporary construction monitoring and any adjustments to proposed machinery and methods of construction.
 - (ENVIRONMENT/HIGHWAY DESIGN/CONSTRUCTION) Page 50
- 17. If any stone walls are impacted by the proposed construction work, NHDOT would follow the 2017 Stone Wall Policy Guidelines⁵⁰ prior to construction to determine the quality of the stone wall(s) proposed to be impacted and any mitigation measures that would be required. Consultation with NHDHR would be required during this process.
 - (ENVIRONMENT/HIGHWAY DESIGN) Page 51

NH Department of Transportation. 2017 Stone Wall Policy Guidelines. Bureau of Environment. February 2017.

- 18. Groundwater that has the potential to have PFAS-impacted groundwater above the AGQS would be subject to management through a Groundwater Management Plan. (ENVIRONMENT/CONSTRUCTION) Page 53
- 19. A Soil Management Plan will be prepared by the contractor to provide guidance for the identification, handling, storage, reuse, and disposal of LRS and contaminated soils generated during construction activities. LRS excavated from within the NHDOT operational right-of-way shall be addressed in accordance with applicable NHDES rules and/or waivers. The Soil Management Plan would also provide guidance on the handling and management of soil located on and adjacent to the former railroad during Project construction.

(ENVIRONMENT/CONSTRUCTION) Page 53

20. Hazardous building materials (as bestos, lead-based paint, polychlorinated biphenyls, mercury, and others) would be inventoried prior to any structural demolition work. If hazardous materials are found to be present in structures proposed to be demolished, the materials would be properly abated by a licensed contractor in accordance with state and local regulations and shipped to a receiving facility licensed to handle the specific type of solid waste under the appropriate shipping documents such as manifests.

(RIGHT-OF-WAY/ENVIRONMENT/CONSTRUCTION) Page 54

- 21. Overall, the Proposed Action would have adverse visual impacts due to the degree of visual change that is proposed. However, these visual changes could be mitigated by the following:
 - Bridge design appropriate to its historic and natural setting
 - > Five-way roundabout functioning as gateway to downtown Jaffrey
 - Minimize tree clearing/vegetation removal along the Contoocook River
 - Mitigation to be coordinated with the Town of Jaffrey and Section 106 MOA (see Environmental Commitment #15)

(ENVIRONMENT/HIGHWAY DESIGN) Page 58

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Part II. Final Section 4(f) Evaluation

2.1 Introduction

Pursuant to Section 4(f) of the Department of Transportation Act of 1966, 49 USC 303(c), and Section 18(a) of the Federal Highway Act of 1968, 23 USC 138 (as amended by the Federal-Aid Highway Act of 1983), the Secretary of Transportation shall not approve any program or project which:

"requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance as so determined by federal, state, or local officials having jurisdiction thereof, or any land from a historic site of national, state, or local significance as so determined by such officials unless (1) there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such park, recreation area, wildlife and waterfowl refuge, or historic site resulting from such use."

"Use" of a Section 4(f) property can occur in one of three ways:

- When land is permanently incorporated into a transportation facility;
- When there is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose and determined by the criteria set forth at 23 CFR 774.13(d); or,
- When there is a constructive use of a Section 4(f) property as determined by the criteria set forth at 23 CFR 774.15.

If an alternative avoids Section 4(f) properties and is prudent and feasible to construct, then it must be selected. If no prudent and feasible avoidance alternative exists, only the alternative that causes the least overall harm and includes all possible planning to minimize harm to Section 4(f) properties may be approved.

This Final Section 4(f) Evaluation documents the analysis undertaken to determine whether there exists a feasible and prudent alternative that avoids the use of the relevant Section 4(f) resources within the project limits. (See **Figure 1.1-1** and **Figure 1.1-2** for the project location and Study Area.) This Final Section 4(f) Evaluation also demonstrates that the Proposed Action includes all possible planning to minimize harm resulting from such use. This evaluation describes agency and public coordination that has occurred, and the measures proposed to minimize harm to the identified Section 4(f) properties.

2.2 Purpose and Need

The purpose of this Project is to address the traffic congestion and safety deficiencies associated with the current configuration of the US 202 "dog-leg" intersections of Main Street with Peterborough Street and Main Street with River Street. It is important to the community that the purpose of the Project be considered within the context of the community's desire to enhance pedestrian mobility while supporting the quality of life and economic vitality of Jaffrey's downtown.

The Project Need relates to the high-volume US 202 movement (Peterborough Street to River Street, and River Street to Peterborough Street) that must travel through both intersections – first with a right-turn movement followed by a left-turn movement. Because the two traffic signal controlled intersections are separated by only about 300 feet, there is not enough storage length to accommodate the left-turn movements. As a result, vehicles in the left-turn lanes queue back into the adjacent signalized intersection creating a gridlock condition. This gridlock condition, which occurs sporadically – at least eight to ten times during the peak hour – produces an unstable flow that is frustrating to both motorists and pedestrians. The condition is also potentially hazardous as motorists move from one lane to another in an effort to maneuver around blocked vehicles. This queueing problem was confirmed with a Sim Traffic simulation model as well as with actual observations including monitoring the interaction between the intersections with a drone.

Additionally, large trucks (WB-50 or longer) traveling along US 202 have difficulty turning right onto Main Street from both Peterborough Street and River Street. Large trucks have been observed crossing into the opposing travel lane to complete the turn.

2.3 Proposed Action

The Proposed Action calls for the existing five-way traffic signal controlled Main Street/Peterborough Street/Turnpike Road/Stratton Road/Blake Street intersection to be reconstructed to form a five-way single-lane roundabout. The proposed roundabout would have an inscribed diameter (approximate outside curb-to-curb edge) of

approximately 125 feet. Each approach to the roundabout would consist of only a single lane except for the northbound approach from the new connector roadway that would also provide a channelized right-turn lane to accommodate buses, large trucks, fire engines, and similar large vehicle turns onto Stratton Road.

Along with reconstructing the five-way intersection at Main Street, the Proposed Action calls for US 202 to be realigned by constructing a new 140-foot long bridge crossing the Contoocook River approximately 375 feet south of the Main Street bridge. The new segment of US 202 would extend south and west from the Five-Way roundabout using portions of the current Blake Street alignment to cross the river to River Street. The new segment of US 202 would intersect River Street at a second proposed roundabout. The River Street roundabout would be a three-way single-lane roundabout with an inscribed diameter of approximately 125 feet.

In addition to the proposed improvements to traffic flow through the Five-Way intersection and along US 202, the proposed improvements include new accommodations for pedestrians. The proposed connector roadway and bridge crossing the Contoocook River would provide a 5.5-foot-wide sidewalk and a 5- to 7-foot-wide shoulder/bike lane on each side of the roadway. The two roundabouts would provide pedestrian crosswalks and pedestrian refuge islands on each approach to the roundabout, which would accommodate pedestrians crossing only one lane and one direction of traffic at a time. Access to the Monadnock Recreational Rail Trail located to the north and south of the intersection would also be maintained.

The Proposed Action also includes implementation of a stormwater management plan to minimize water quality impacts. This plan would include the construction of one stormwater basin to treat the additional impervious area. This basin would be constructed on the east side of the Contoocook River in the vicinity of the new proposed bridge structure and a reconfigured public parking lot, and would drain to the Contoocook River. As the Project design progresses, the potential use of porous pavers or asphalt in appropriate locations as a means of reducing the amount of impervious area and the use of other low impact measures may also be evaluated.

An overview of the Proposed Action is provided in **Figure 1.3-1**. General Plans for the Proposed Action are provided in **Appendix B.**

2.4 Description of Section 4(f) Properties

This section describes the Section 4(f) properties that are located within the Study Area and which may be impacted by the Project. Project planning conducted by the New Hampshire Department of Transportation (NHDOT) and the Federal Highway Administration (FHWA) in collaboration with the NH Division of Historical Resources (NHDHR), which serves as the New Hampshire State Historic Preservation Office (NHSHPO), reviewed the Project for potential impacts to Section 4(f) properties. Based on this review, the National Register-Listed Downtown Jaffrey Historic District including a National Register-eligible Boundary Increase and one individually-listed property, the National Register-Listed Jaffrey Mills, are located within the Study Area. Additionally, two publicly-owned parks or recreational areas that are considered Section 4(f) resources are

located within the Study Area, including Jaffrey Community Field and the Monadnock Recreational Rail Trail. A description of additional parks and recreational areas located within or near the Project that are not Section 4(f) resources are also included below.

2.4.1 Parks and Recreational Areas

Figure 2.4-1 shows the locations of Section 4(f) and non-Section 4(f) parks and recreational areas within the Study Area. The Proposed Action would affect one publicly owned Section 4(f) park or recreational area, the Monadnock Recreational Rail Trail.⁵¹

2.4.1.1 Section 4(f) Parks and Recreational Areas

Monadnock Recreational Rail Trail

The Monadnock Recreational Rail Trail is a paved multi-use trail that runs 7.2 miles from Webster Street in Jaffrey south through the Town of Rindge to the Massachusetts-New Hampshire state line just above Winchendon, MA. The trail runs relatively parallel to US 202 and provides a connection between the town centers of Jaffrey and Rindge. The trail runs along the Contoocook River, Contoocook Lake, and Pool Pond in addition to several other scenic wetland areas. 52 Within downtown Jaffrey, the trail runs generally north-south within a former rail corridor on the east side of the Study Area (refer to Figure 2.4-1 and photos 19 and 20 in Appendix A).

Jaffrey Community Field

The Town-owned Jaffrey Community Field is located south and east of the Proposed Action (refer to Figure 2.4-1). Community Field features a ball field and associated parking areas and facilities. Community Field can be accessed off Stratton Road or Blake Street and is within close proximity to the Conant High School. The Monadnock Recreational Rail Trail runs north to south parallel to the western side of the ball field.

Memorial Square Town Common

The Memorial Square Town Common is located along the northwest corner of the intersection of NH 137 and NH 124. The Town Common includes a gazebo, the Buddies Monument (a World War I memorial), the World War II Gold Star Mothers memorial, and the Town Elm. Benches, shade trees, and nearby parking are also available for public use. The Town Common is located near the Jaffrey Police Department, local businesses, and the Jaffrey Mills Apartments. While this public park is located close to the project, the Proposed Action would not result in any impacts, as illustrated in **Figure 2.4-1**. Therefore, there is no Section 4(f) use of this resource.

The Jaffrey War Memorial is a privately-owned and managed property and is therefore not subject to Section 4(f). Furthermore, it is not a contributing resource to the Downtown Jaffrey Historic District.

TrailLink. Monadnock Recreational Rail Trail, New Hampshire. Accessed March 2019, https://www.traillink.com/trail/monadnockrecreational-rail-trail/.

2.4.1.2 Non-Section 4(f) Parks and Recreational Areas

Bissell Alderman Park

Bissell Alderman Park is an open green space that is located along US 202 (Peterborough Street) adjacent to the Rite Aid parking lot (refer to **Figure 2.4-1**). This parcel is within the US 202 right-of-way (ROW), owned by the State of New Hampshire (NHDOT). The Town of Jaffrey manages the parcel as a park under NHDOT sufferance. The park was created on a vacant lot (formerly Hackler Motors) after NHDOT completed roadway widening work, and was dedicated on June 4, 1994.⁵³ The park is approximately 5,663 square feet and the Monadnock Recreational Rail Trail runs along US 202 through the park. Bissell Alderman was a local architect who designed the Jaffrey War Memorial Park and Humiston Field. Alderman Park consists of landscaped green space, a set of granite benches, and an octagonal granite watering trough that incorporates a memorial plaque honoring Bissell Alderman.

The State of New Hampshire (and specifically NHDOT) is the official with jurisdiction over this property. The NHDOT determined, and FHWA concurred, that the park itself is not a "significant" publicly owned park in terms of Section 4(f). ⁵⁴ Although the parcel may have some level of importance at the local level as a park, the Town's concerns are towards the specific features located on the NHDOT property. To address these concerns, these specific items of interest (the two granite benches and the octagonal granite watering trough/planter with the commemorative plaque) would be relocated to a more appropriate location in coordination with the Town. Refer to Photos 4 through 6 in **Appendix A** for photos of the park and associated features.

Jaffrey War Memorial Park

The Jaffrey War Memorial Park is a small riverside park that honors those who served in the Korea and Vietnam Wars (refer to **Figure 2.4-1**), located along US 202 (River Street) to the south of the Contoocook River Dam. ⁵⁵ The park is privately owned, having been funded by citizens, businesses, and organizations from the local community, and is currently maintained by local citizens. The Jaffrey War Memorial Park was designed by Bissell Alderman, who was a local architect. This park was dedicated in 1984 and is open to the public, featuring a flag pole and benches along the Contoocook River (refer to photos 11 through 13 in **Appendix A**). The Jaffrey War Memorial Park is not considered a Section 4(f) resource since this public space is privately owned.

National Park Service. "East Jaffrey Historic District." *National Register of Historic Places Nomination Form*. US Department of the Interior. Signed June 13, 2002.

In an email dated September 13, 2019, Jamison Sikora, FHWA NH Division Environmental Program Manager concurred with NHDOT's determination that Bissell Alderman Park is not afforded protection under Section 4(f), as the park is not a significant publicly owned park.

Jaffrey Chamber of Commerce. "Jaffrey War Memorial Park." People and Places of Interest. Accessed March 2019, http://www.jaffreychamber.com/pages/PeoplePlacesofInterest.

Wildlife and Waterfowl Refuges

There are no publicly-owned wildlife and waterfowl refuges managed by national, state, or local agencies located within the Study Area.

2.4.3 **Historic Properties**

Surveys for historical resources within the Study Area were completed during this project in consultation with the NHDOT and NHDHR. Two resources, the Downtown Jaffrey Historic District/Boundary Increase Area (referred to as the "Historic District") and the Jaffrey Mills complex were identified (refer to Figure 2.4-2) Photos 8 and 9 in **Appendix A** depict the Jaffrey Mills complex.

Downtown Jaffrey Historic District and Boundary Increase Area

The Downtown Jaffrey Historic District (Listed 6/13/2002) is approximately 75 acres and encompasses 134 contributing resources, including buildings, parks, monuments and sculptures, dams and bridges. The Historic District is listed under Criteria A and C at the local level for its associations with Community Planning and Development and Architecture.

A revised Area Form for the Downtown Jaffrey Historic District was submitted to NHDHR in November 2018 to determine if the period of significance should be extended to 1968, the current 50-year cut-off date, and to examine potential areas of expansion of the boundaries of the Historic District. The 2018 Area Form proposed to increase the Downtown Jaffrey Historic District to include Charlonne Street, which runs roughly parallel to the southwest boundary of the existing district, and a short portion of River Street terminating at Tyler Hill Road, as a directly related part of Downtown Jaffrey's development in the late nineteenth and early twentieth centuries. A NHDHR determination of eligibility form dated January 30, 2019 indicates that NHDHR concurred with the increased boundary of the Downtown Jaffrey Historic District, which increased the number of contributing resources to 173 properties.

Contributing Properties to the Downtown Jaffrey Historic District/Boundary Increase Area

Historic districts may include properties or elements that contribute to the overall significance of the district that is listed or eligible for listing in the National Register. When a project uses land from a property that is a contributing element to a historic district, Section 4(f) is applicable. Therefore, this Final Section 4(f) Evaluation considers contributing properties to the Downtown Jaffrey Historic District which may be impacted by the Project.

4 Stratton Road. The building at 4 Stratton Road was originally constructed as a hardware store in 1946. The building is a contributing property to the Historic District and still retains integrity of setting, location, and association, but has diminished integrity of design and materials due to a large late twentieth century addition and material alterations.

- **15 River Street.** The building at 15 River Street was constructed in 1830 as a single-family house and is now a multi-family rental property. While the building is still contributing to the Historic District, the building has been heavily altered with very little integrity of materials, design, or workmanship remaining since the National Register District-listing in 2002.
- 19 River Street. The building at 19 River Street was constructed ca. 1945 as a single-family house that, based on the assessor's information, does not appear to have undergone any significant changes since the Historic District was listed in 2002. The building was listed as a contributing property to the Historic District in the Downtown Jaffrey Historic District Boundary Increase area form.
- 21 River Street. The building at 21 River Street was constructed ca. 1850 as a single-family house and is now a multi-family rental property. The building is a contributing property to the Historic District and retains integrity of setting, location, design, and association.
- 23 River Street. The building at 23 River Street was constructed ca. 1880 as a single-family house and is now a multi-family rental property. This building is a contributing property to the Historic District and retains integrity of setting, location, design, and association.

Jaffrey Mills

The Jaffrey Mills (Listed 2/8/1982) at the northeast corner of the intersection of Main Street (NH 124) and North Street (NH 137) was listed on the National Register of Historic Places in 1982 under Criteria A and C for its associations with the industrial and economic history of Jaffrey and for its architecture. The textile mills were established in 1868, with expansions in 1872 and 1897. The property has been owned by several individuals but remained in textile production until 1943.

2.4.4 Archaeological Resources

As indicated in the September 2019 Adverse Effect Memo, no archaeological resources are expected to be impacted by the Proposed Action. (See **Appendix I**.) Although a large extent of the Study Area has experienced ground disturbance, a Phase IA Archaeological Sensitivity Assessment determined that certain portions of the Study Area were sensitive. A subsequent Phase IB survey within the footprint of the Proposed Action discovered some artifacts consistent with a circa 1836 to present timeframe. However, the Phase IB report concluded that the context of these artifacts was too poor to consider the area an archaeological site. Based on the information collected during the Phase IB survey, no additional archaeological investigations were recommended, and the NHDHR concurred with this assessment.

Impacts of the Proposed Action on Section 4(f) Properties

A brief description of the Proposed Action impacts to identified Section 4(f) properties is provided below.

2.5.1 **Parks and Recreational Areas**

Monadnock Recreational Rail Trail

The intersection of the Monadnock Recreational Rail Trail with Stratton Road and Turnpike Road would be reconfigured by the Proposed Action (see Figure 2.5-1). The Proposed Action would maintain a connection across Stratton Road and Turnpike Road to the trail and sidewalk system north of the proposed Five-Way Roundabout (refer to the General Plan in **Appendix B**), but the route through this intersection would be slightly modified by the roundabout. The reconfigured roundabout crossing would be more pedestrian friendly than the existing intersection since crosswalks and pedestrian refuge islands are located on each approach to the roundabout, and pedestrians would need to cross only one lane and one direction of traffic at a time. Additionally, the final design will address requests from the NH Bureau of Trails regarding the revised snowmobile crossing (refer to **Appendix D**). NHDOT has committed to maintaining public access to the trail during construction.

As defined in 23 CFR 774.17, a "use" of Section 4(f) property occurs when land is permanently incorporated into a transportation facility. The approximately 150-foot portion of the Monadnock Recreational Rail Trail that would be improved by the Proposed Action lies within the existing right-of-way of Turnpike Road and Stratton Road, along with short sections of existing sidewalk. Because this portion of the trail currently utilizes existing transportation infrastructure (i.e., sidewalk and roadway), there would be no permanent conversion of the Monadnock Recreational Rail Trail to transportation use. The Proposed Action would maintain the trail connection across roadways and sidewalk, similar to the current trail route. The Proposed Action would increase public safety and enhance the trail features through the reconfigured roundabout crossing. The Proposed Action would not adversely affect the features, attributes, or activities of the Monadnock Recreational Rail Trail. Based on the effects described above, the Proposed Action would not constitute a use of this Section 4(f) resource.

Jaffrey Community Field

Acquisition of approximately 230 square feet for new ROW will occur on the northern edge of a Town-owned property (Parcel 32) which is one of two parcels that comprise Community Field. The minor acquisition occurs on the northern edge of the parcel directly adjacent to Stratton Road, approximately 455 feet from the ball field, in an area not used for recreation. Minor reconstruction of the access road from Blake Street leading to the park's parking area would improve access to the park. Access to the park would remain during construction, including a second access road into the parking area from Union Street which would be unaffected. The minor acquisition (less than 1 percent of the lot) will not adversely impact the recreational use of the parcel. This impact is therefore considered de minimis since it would result in no adverse effect to the activities, features, or attributes of Community Field. (See Figure 2.5-2.) In accordance with FHWA Section 4(f) regulations, FHWA and NHDOT sought written concurrence from

the Town of Jaffrey for the *de minimis* impact determination. The Town of Jaffrey concurred with this finding on August 4, 2020 (see **Appendix D**).

2.5.2 Historic Properties

In March 2018, a Request for Project Review (RPR) was submitted to NHDHR for the proposed Project. NHDHR reviewed the RPR on April 18, 2018, with subsequent meetings held on July 11, 2019 and September 12, 2019 to discuss the proposed impacts on the National Register-Listed Downtown Jaffrey Historic District including a National Register-eligible Boundary Increase, and the National Register-Listed Jaffrey Mills.

Downtown Jaffrey Historic District and Boundary Increase Area

The Proposed Action would result in physical and visual effects to the Downtown Jaffrey Historic District and Boundary Increase Area. (See **Figure 2.5-3**.) Proposed physical effects within the Historic District includes construction of two new roundabouts, the US 202 realignment including the construction of a new bridge across the Contoocook River, and a stormwater basin. Two contributing properties (4 Stratton Road and 15 River Street) would be fully acquired and demolished to accommodate the two roundabouts under the Proposed Action. Two contributing properties (21 River Street and 23 River Street) would be partially acquired under the Proposed Action to accommodate the three-way roundabout, with greater physical property impacts proposed to the parcel at 21 River Street. The joint driveway to 19 and 21 River Street, both contributing properties, would be reconfigured to accommodate the new three-way roundabout. These impacts would result in physical destruction or damage to part of the Historic District resource [refer to 36 CFR Section 800.5(a)(2)(i)]. (See **Figures 2.5-4** to **2.5-7** for individual impacts to contributing properties.)

Visually, the Proposed Action would introduce multiple new transportation elements into the setting of the Historic District including two roundabouts and a new bridge located at a new river crossing. At a minimum, views from the Main Street bridge south along the Contoocook River would be partially obstructed by the introduction of the proposed bridge structure. Although a sensitive design of the new bridge structure could minimize these visual impacts, the bridge would introduce a modern element into a natural viewshed of the Historic District's setting [36 CFR Section 800.5(a)(2)(v)] and change the character of a physical feature (the Contoocook River) within the Historic District's setting [36 CFR 800.5(a)(2)(iv)].

The September 2019 Adverse Effect Memo for the Project determined that the Proposed Action would have an adverse effect on the Downtown Jaffrey Historic District.

Jaffrey Mills

The Jaffrey Mills complex is located on the north side of Main Street at the intersection of North Street/NH 137. The National Register boundary for the Jaffrey Mills is defined as the property boundary of Jaffrey Tax Map 238 Lot 257.1 and Tax Map 238 Lot 257.

The Proposed Action would not require acquisition of any permanent or temporary ROW or easement from either of these parcels.

The Proposed Action would reduce the number of travel lanes along Main Street and would reconfigure on-street parking in front of the Jaffrey Mills. Roadway work includes new sub-base and pavement to the east of the Contoocook River (Main Street) bridge, and simple mill and overlay of existing pavement to the west of the bridge. No work on the bridge is proposed other than pavement rehabilitation.

Additionally, the Proposed Action would reconstruct the existing sidewalk adjacent to the East Building and Mill Office. The East Building directly abuts the existing sidewalk, whereas landscaping and shrub plantings are located between the Mill Office and the existing sidewalk. The proposed sidewalk reconstruction would occur within the existing footprint and would not impact the Jaffrey Mills buildings; the existing distance between the sidewalk and the mill buildings would be maintained. The reconstructed sidewalk would be configured to direct water flow away from the buildings. Additionally, a weather tight expansion joint would be installed between the East Building and the reconstructed sidewalk to prevent damage to the mill building.

No direct impacts to the mill buildings are proposed to occur as a result of the Proposed Action. However, dust, noise, and vibrations from the sidewalk replacement construction could cause minimal temporary impacts to the mill buildings. As project plans progress, the equipment and methods that would be implemented would be identified, and, if needed, a "Construction Vibration Assessment" would be developed. Methods for reducing construction vibrations are considered on a case-by-case basis, but they could include temporary construction monitoring and any adjustments to proposed machinery and methods of construction.

Based on the impacts and benefits proposed to the Jaffrey Mills complex, the September 2019 Adverse Effect Memo for the Project determined the Proposed Action would have No Adverse Effect on the Jaffrey Mills. Although limited construction within existing ROW would occur directly adjacent to the Mills, it would not affect the significance of the industrial history or architecture of the Mills, from which it derives its significance. The Project would not require use of this Section 4(f) resource.

2.6 Alternatives Analysis

2.6.1 Requirements for Evaluating Avoidance Alternatives

The use of Section 4(f) property is prohibited unless there is no feasible and prudent avoidance alternative. Because the Proposed Action would require the use of Section 4(f) properties, an analysis of potential avoidance alternatives is required. An avoidance alternative is prudent and feasible if it avoids using the Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the

Assessments will be made using the following guidance documents: "New Hampshire DOT Research Record: Ground Vibrations Emanating from Construction Equipment" (2012) and "NCHRP 25-25/Task 72: Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects" (2012).

importance of protecting the Section 4(f) property. An avoidance alternative is not feasible if it cannot be built as a matter of sound engineering judgement. According to 23 CFR 774.117, an alternative is not prudent if:

- i. It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
- ii. It results in unacceptable safety or operational problem;
- iii. After reasonable mitigation, it still causes:
 - a. Severe social, economic, or environmental impacts;
 - b. Severe disruption to established communities;
 - c. Severe disproportionate impacts to minority or low income populations;
 - d. Severe impacts to environmental resources protected under other Federal statutes;
- It results in additional construction, maintenance, or operational costs of an iv. extraordinary magnitude;
- It causes other unique problems or unusual factors; or V.
- νi. It involves multiple factors in paragraphs (3)(i) through (3)(v) of this definition, that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

If a determination is made that no feasible and prudent avoidance alternative exists, then minimization efforts must be pursued to reduce the impact to Section 4(f) properties. If all alternatives that meet the Proposed Action's Purpose and Need require use of a Section 4(f) property, an analysis of which alternative results in the least overall harm must be performed. The analysis of avoidance alternatives and the least harm analysis for this project are discussed in the following sections.

2.6.2 **Avoidance Alternatives**

Two avoidance alternatives were considered during planning of the Project:

No-Build Alternative

This alternative would retain the current configuration and traffic movements of the five-way intersection of Main Street, Peterborough Street, Turnpike Road, Stratton Road, and Blake Street and the Four-Way intersection of North Street (NH 137) and River Street (US 202). The No-Build Alternative was rejected because it does not address the traffic congestion and safety concerns identified in the Project's Purpose and Need. Under the existing configuration, the two traffic signal-controlled intersections are spaced only 300 feet apart, which results in left-turn vehicles queuing from one intersection into and through another. Additionally, the existing five-way intersection is not pedestrian friendly under the current configuration due to the expansive pavement area and long crosswalks. Because it fails to meet the Project Purpose and Need, the No-Build Alternative is not prudent, and is not a viable avoidance alternative.

Upgrade Existing Traffic Signals Alternative

This alternative attempts to address the traffic congestion problem by upgrading the traffic signal hardware and programing software at the two existing dog-leg configured intersections. The alternative would allow for Flashing Yellow Arrow phasing for the Main Street westbound left-turn onto River Street and for the Main Street eastbound left-turn onto Peterborough Street. A Flashing Yellow Arrow indication permits motorists to turn left after yielding to on-coming traffic and pedestrians. A GPS receiver would be installed that would reset the signal controller clock daily to ensure that the two intersections maintain continuous coordination. Additionally, the loop detection on the River Street approach, which currently has the movements from the right-turn lane operating at the same time at the through/left-turn lane, would be separated so the River Street right-turn movement would run separately and at the same time as the left-turn from Main Street on to River Street.

The results of operational analyses conducted for the future 2040 design year with the traffic signal modifications in place reveal that during the AM peak hour four of the five approaches to the Main Street/Peterborough Street/Tumpike Road/Stratton Road/Blake Street would operate poorly at LOS E or F. During the PM peak hour three of the four approaches to the Main Street/River Street/North Street intersection would operate poorly at LOS E or F. Although upgrading the existing traffic signals would modestly improve the efficiency of the existing condition, modifying the existing traffic signals would not address the Project Purpose and Need. Additionally, the traffic signal modifications would not address the congestion problem caused by large tractor-trailer trucks that currently maneuver through the two closely spaced intersections. Because it fails to meet the Project Purpose and Need and traffic flow would not be adequately improved, the Upgrade Existing Traffic Signals Alternative is not prudent, and is not a viable avoidance alternative.

Summary and Findings Related to Avoidance Alternatives

The Project is located within a geographically constrained area. Due to the large size of the Historic District and presence of three main routes (US 202, NH 137, and NH 124) that converge within a densely developed portion of Downtown Jaffrey, all alternatives that would meet the Project's Purpose and Need would impact properties that contribute to the Historic District. The surrounding area is developed with residential neighborhoods and commercial businesses, and most of the existing through roadways are already at capacity and could not be further expanded or developed without impact to the Historic District, residences, or businesses. The constraints posed by these surrounding land uses, coupled with the roadway geometry needed to achieve the Project's transportation objectives, limits the potential to avoid Section 4(f) properties through engineering design measures. To provide appropriate roadway geometry and minimize impacts to environmental, cultural, and community resources, all feasible and prudent action alternatives would require use of Section 4(f) properties.

The alternatives analysis demonstrates that there are no feasible and prudent avoidance alternative. The avoidance alternatives would not meet the Project's Purpose and Need and would therefore not be prudent.

2.6.3 Alternatives Requiring Use of Section 4(f) Properties

This section evaluates the potential for the remaining alternatives to minimize harm to Section 4(f) properties. Through an extensive public outreach effort, a series of alternatives analyses were conducted for the Project. A total of four Alignment Alternatives and four Intersection Alternatives at the Main Street/Peterborough Street/Turnpike Road/Stratton Road/Blake Street intersection were considered. As described in **Section 2.5** and in the content below, the alternatives would have varying degrees of impact to Section 4(f) properties.

Alignment Alternatives:

- > Alternative 1 T-Intersection
- Alternative 1 Roundabout (Proposed Alignment)
- Alternative 2
- > Alternative 3

Intersection Alternatives:

- > Four-Way Traffic Signal Controlled
- > Five-Way Traffic Signal Controlled
- > Four-Way Roundabout
- Five-Way Roundabout (Proposed Intersection)

Section 2.5 concludes that the Proposed Action (i.e., *Alignment Alternative 1 - Roundabout* and *Intersection Alternative - Five-Way Roundabout*) would involve use of Section 4(f) properties related to the full acquisition, partial acquisition, and temporary impact to several contributing properties to the Downtown Jaffrey Historic District.

A summary of the four Alignment Alternatives and four Intersection Alternatives are provided below and are depicted in **Figure 1.3-2**. Each summary includes a brief description of the Section 4(f) properties that would be impacted.

2.6.3.1 Alignment Alternatives

Alternative 1 – T-Intersection

Under Alternative 1, US 202 is proposed to be re-routed south along what is currently Blake Street and cross the Contoocook River with a new 140-foot long bridge approximately 375 feet upstream from the Main Street bridge (refer to **Figure 2.6-1**). US 202 would then intersect River Street approximately 400 feet southwest of Main Street. Alternative 1 is the shortest of the three proposed Alignment Alternatives, with a total length of approximately 1,050 feet. This alignment is located entirely within the Downtown Jaffrey Historic District.

The intersection of US 202 with River Street under this alternative proposes to continue the new alignment of US 202 onto River Street and add a stop sign to the northern River Street approach to the intersection. Therefore, vehicles traveling north along the new US 202 alignment would have the option to continue straight through the intersection to the new bridge crossing over the Contoocook River, or to turn left onto River Street towards Downtown Jaffrey. Vehicles traveling south along the new US 202 alignment would be able to turn right onto River Street after the bridge structure or continue straight along US 202 south.

Since this alternative would provide a continuous traffic flow along the new US 202 alignment from the new bridge onto River Street, the road geometry would require a gradual curve required for vehicle speeds of 25 mph. Due to the orientation of the bridge and its close proximity to River Street, this intersection would require the full acquisition of three properties and the partial acquisition of two properties. Therefore, property impacts for the T-intersection would be greater than the three-way roundabout intersection (described below).

This alternative would require the full acquisition and demolition of three contributing properties (19, 21, and 23 River Street) and the partial acquisition of 29 and 31 River Street, also contributing properties, consisting of a narrow section of lawn in front of the latter properties for sidewalk construction.

Alternative 1 – Roundabout (Proposed Alignment)

This alternative proposes to re-route US 202 along what is currently Blake Street and cross the Contoocook River approximately 375 feet upstream from the Main Street bridge, similar to the previously described alternative. However, under this alternative, the intersection of US 202 with River Street would be constructed as a three-way roundabout rather than a T-intersection (refer to **Figure 2.6-2**).

This roundabout intersection has a smaller footprint than the T-intersection since vehicles entering/exiting the bridge over the Contoocook River would be leaving/entering the roundabout, thus lowering traveling speeds and decreasing the curve radius between the bridge and the roundabout, as opposed to a gradual curve for the T-Intersection Alternative. This smaller footprint reduces impacts – the three-way would require the full acquisition and demolition of only one property (which contributes to the Historic District) and the partial acquisition of two contributing properties. The presence of a roundabout would also encourage reduced vehicle speeds through this populated section of Jaffrey, which would increase the safety of drivers and pedestrians within Downtown Jaffrey. The posted speed limit would be 20 mph for vehicles approaching the intersection along the new US 202 alignment north and south of the intersection.

This alternative would require the full acquisition of one contributing property (15 River Street) and the partial acquisition of two contributing properties (21 and 23 River Street).

Alternative 2

Alternative 2 would re-align US 202 south along what is currently Blake Street, extending the roadway southwest and turning to cross the Contoocook River approximately 600 feet upstream from the Main Street bridge, just prior to 21 Blake Street (refer to **Figure 2.6-3**). The proposed alignment would include a new roadway segment to the rear of the properties along the east side of River Street between 21 River Street to the north and 49 River Street to the south. This alternative would require the reconfiguration of the intersection of River Street with Tyler Hill Road. The total length of this realigned roadway is approximately 2,600 feet. This newly aligned segment of roadway would have

a design speed of 25 mph. of the majority of this alternative is located within the Downtown Jaffrey Historic District and Boundary Increase Area.

This alternative would require the full acquisition of one contributing property (25 River Street) and the partial acquisition of eight contributing properties (21, 23, 27, 31, 39, 41, 45, 49 River Street). Under this alignment alternative, the new US 202 would be rerouted to the rear of these partially-acquired properties between River Street and the Contoocook River.

Alternative 3

Alternative 3 would re-align US 202 along what is currently Blake Street, extending the roadway southwest and turning to cross the Contoocook River, approximately 1,200 feet upstream of the Main Street bridge, beyond the Downtown Jaffrey Historic District, connecting with Tyler Hill Road near the intersection of River Street and Tyler Hill Road (refer to Figure 2.6-4). This alternative would require the reconfiguration of the intersection of River Street with Tyler Hill Road. This alignment is the longest of the Alignment Alternatives with a length of approximately 3,100 feet. This newly aligned segment of roadway would have a design speed of 25 mph.

This alternative would require the full acquisition of one contributing property (21 Blake Street) and the partial acquisition of two contributing properties (49 and 51 River Street) within the Downtown Jaffrey Historic District. It would also require full acquisition of three properties located at 5 and 6 Tyler Road and 69 River Street.⁵⁷

This alternative would involve natural resource impacts caused by the bridge crossing. Due to the bridge structure, this alternative has the greatest impacts to wetland and floodplain resources of all the Alignment Alternatives. This alternative would impact the parcel owned by the Town of Jaffrey (Tax Map 239 Lot 225) that was acquired with Land and Water Conservation Funds (LWCF) and is therefore a parcel protected by Section 6(f) of the LWCF Act.

Intersection Alternatives 2.6.3.2

Four-Way Traffic Signal Controlled Intersection

This alternative maintains the existing traffic signal control while discontinuing the Stratton Road leg of the intersection. Eliminating the Stratton Road approach to the intersection would result in a redistribution of Stratton Road traffic to and from Turnpike Road, likely by way of Ellison Street (refer to Figure 2.6-5). This in turn would necessitate the realignment and upgrade of Ellison Street where it intersects Turnpike Road.

All four approaches to the Main Street/Peterborough Street/Turnpike Road/New Connector Roadway (Blake Street) intersection would have exclusive left-turn lanes, while the US 202 (Peterborough Street) southbound approach to the intersection would be shifted to the east to provide a wider turning radius for tractor trailer trucks. Additionally, the signal timing at the intersection would be improved to enhance the

While these properties have not been surveyed as potential historic resources, they are each more than 50 years old.

flow of traffic through the intersection. This alternative would include larger, more pedestrian-friendly sidewalks along Main Street and the roadway approaches to the intersection. Pedestrian crossings within the intersection would be shorter, which is aided by the elimination of the Stratton Road approach to the intersection.

While the Four-Way Intersection Alternative provides efficiency by converting the fiveway intersection to a more standard four-way intersection, closing Stratton Road would result in additional impacts and costs. Closing Stratton Road would require another connection from Stratton Road to Turnpike Road, such as improving the intersection of Ellison Street with Turnpike Road. Bissell Alderman Park, a public green space located within the US 202 ROW, would be completely impacted.

This alternative would require the full acquisition of 4 Stratton Road, a contributing property to the Downtown Jaffrey Historic District. Additionally, improvements to the Ellison Street intersection would impact Tax Map 239 Lot 99, also a contributing property to the Historic District.

Due to the proposed closing of Stratton Road, this alternative would incur additional impacts and costs, including constructing another connection from Stratton Road to Turnpike Road such as improving the intersection of Ellison Street with Turnpike Road.

Five-Way Traffic Signal Controlled Intersection

This alternative is similar to the Four-Way Traffic Signal-Controlled Alternative in that it maintains traffic signal control, provides exclusive left-turn lanes on each intersection approach, and shifts the Peterborough Street leg of the intersection to the east to improve the truck turning radius (refer to **Figure 2.6-6**). The only difference is that this alternative maintains full access/egress to/from Stratton Road.

This alternative would require the full acquisition of 4 Stratton Road, a contributing property to the Downtown Jaffrey Historic District.

Upon evaluation of the Intersection Alternatives, the Five-Way Intersection Alternatives were chosen over the Four-Way Intersection Alternatives due to the extra impact and cost created by the closure of Stratton Road. This alternative was considered along with the other Intersection Alternatives by the Technical Advisory Committee (TAC) that was appointed to represent and serve as a liaison to the community to review the Project. The Jaffrey Select Board (the local governing body), determined upon evaluation and consideration that the Five-Way Roundabout Alternative was preferable to the signalcontrolled Intersection Alternatives.

Four-Way Roundabout

This alternative proposes to construct a modern four-way round about at the Main Street/ Peterborough Street/Tumpike Road/New Connector Roadway (Blake Street) intersection (refer to Figure 2.6-7). The addition of the roundabout and new bridge crossing would serve to safely and efficiently accommodate both regional and local traffic while slowing traffic, enhancing pedestrian movement, and serving as a "gateway" to downtown Jaffrey. The roundabout would also allow the existing four-lane section of

Main Street to be reduced to two lanes, thereby allowing either additional on-street parking or wider, more pedestrian-friendly sidewalks.

The roundabout would be designed to accommodate a WB-67 (53' trailer) truck vehicle, which is larger than the typical 18-wheel tractor trailer. The roundabout, as designed, would have an outside curb to curb diameter distance of 125 feet.

Like the Four-Way Traffic Signal-Controlled Intersection Alternative, the Four-Way Roundabout Alternative would include closing Stratton Road, which would result in a redistribution of Stratton Road traffic to and from Turnpike Road, likely by way of Ellison Street. This, like the Four-Way Traffic Signal-Controlled Alternative, would require another connection from Stratton Road to Turnpike Road, such as improving the intersection of Ellison Street with Turnpike Road. Such a closure would therefore incur additional impact and cost. Additionally, Bissell Alderman Park, a public green space located within the US 202 ROW, would be completely impacted.

This alternative would require the full acquisition of 4 Stratton Road, a contributing property to the Downtown Jaffrey Historic District. Additionally, improvements to the Ellison Street intersection would impact Tax Map 239 Lot 99, also a contributing property to the Historic District.

This alternative would involve operational impacts due to the closure of Stratton Road and the additional impact and cost implications related to this closure.

Five-Way Roundabout (Proposed Intersection)

The Five-Way Roundabout Alternative, the Proposed Intersection, calls for the existing five-way traffic signal controlled Main Street/Peterborough Street/Turnpike Road/Stratton Road/Blake Street intersection to be reconstructed to form a five-way single-lane roundabout (refer to Figure 2.6-8). The proposed roundabout would have an inscribed diameter (approximate outside curb-to-curb edge) of approximately 125 feet. Each approach to the roundabout would consist of only a single lane except for the northbound approach from the new connector roadway that would also provide a channelized right-turn lane to accommodate bus buses, large trucks, fire engines, and similar large vehicle turns onto Stratton Road. This channelized right-turn lane allows the roundabout to be smaller to avoid impacts to 10 Stratton Road.

This alternative would require the full acquisition of 4 Stratton Road, a contributing property to the Downtown Jaffrey Historic District.

As mentioned above under Five-Way Traffic Signal Controlled Intersection, the five-way Intersection Alternatives were chosen over the Four-Way Intersection Alternatives due to the extra impact and cost created by the closure of Stratton Road. When the two Five-Way Intersection Alternatives were considered by the Jaffrey Select Board, the Select Board determined that this alternative was preferable to the Four-Way Roundabout Alternative.

2.7 Least Overall Harm Analysis

According to 23 CFR 774.7(c), when multiple alternatives use a Section 4(f) property and the evaluation of avoidance alternatives concludes that there is no feasible and prudent avoidance alternative, then FHWA may approve, from the remaining alternatives that use Section 4(f) property, only the alternative that causes the least overall harm in light of the preservation purpose of the statute.

2.7.1 **Least Harm Criteria**

In accordance with 23 CFR 774.3(c)(1), the least overall harm is determined by balancing the following seven factors:

- 1. Ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property);
- 2. Relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection;
- 3. Relative significance of each Section 4(f) property;
- 4. Views of the officials with jurisdiction over each Section 4(f) property;
- 5. Degree to which each alternative meets the purpose and need for the project;
- 6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
- 7. Substantial differences in costs among alternatives.

The following alternatives for the alignment of the Project and the configuration of the downtown Main Street/Peterborough Street/Turnpike Road/Stratton Road/Blake Street intersection were considered in this least overall harm analysis:

Alignment Alternatives:

- > Alternative 1 T-Intersection
- > Alternative 1 Roundabout (Proposed Alignment)
- > Alternative 2
- > Alternative 3

Intersection Alternatives:

- Four-Way Traffic Signal Controlled Intersection
- > Five-Way Traffic Signal Controlled Intersection
- > Four-Way Roundabout
- > Five-Way Roundabout (Proposed Intersection)

Each of the Alignment and Intersection Alternatives were evaluated against the criteria established in 23 CFR 774.3(c)(1) to determine which alternative results in the least overall harm. The evaluation is discussed in the following sections and is summarized in Table 2-1.

Criterion 1. Ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property).

Alignment Alternatives: Mitigation for impacts to the Historic District were agreed upon in a Memorandum of Agreement (MOA) as part of the Section 106 consultation process (refer to **Appendix I**). Because *Alternative 1 – Roundabout* (i.e., the Proposed Alignment) would impact fewer Section 4(f) properties than other alternatives, the ability to mitigate impacts resulting from this alternative is greater than other potential alignment alternatives.

Intersection Alternatives: Mitigation for impacts to the Historic District were agreed upon in a MOA as part of the Section 106 process for the Proposed Intersection Alternative (refer to **Appendix I**). The two Four-Way Intersection Alternatives would impact two contributing properties to the Historic District, while the two Five-Way Intersection Alternatives would impact one contributing property. Therefore, the two Five-Way Intersection Alternatives would require less mitigation than the Four-Way Intersection Alternatives. Based upon the impact similarities of each Intersection Alternative with the Five-Way Roundabout (i.e., the Proposed Intersection), it is reasonable to conclude that mitigation for impacts would have been agreed upon in a MOA.

Criterion 2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features.

Alignment Alternatives: There is a substantial difference in the relative severity of harm resulting from each of the four Alignment Alternatives as measured in terms of the number of historic properties directly impacted by right-of-way acquisition and building demolition. Of the four alternatives, Alignment Alternative 1 – Roundabout and Alternative 3 would each require the full acquisition and demolition of only one contributing resource and the partial acquisition of two additional contributing resources.⁵⁸ This level of impact is substantially less than either the *Alternative* 1 - T-Intersection, which would fully acquire three contributing properties and partially acquire two additional properties or Alternative 2, which would impact nine contributing resources, including one full acquisition and eight partial acquisitions.

Intersection Alternatives: All four Intersection Alternatives would result in equivalent impacts to 4 Stratton Road, a contributing resource to the Historic District. Additionally, the two Four-Way Intersection Alternatives would impact an additional parcel that is a contributing resource, Tax Map 239 Lot 99. Therefore, the two Five-Way Intersection Alternatives would have less relative severity of harm than the Four-Way Intersection Alternatives.

Criterion 3. Relative significance of each Section 4(f) property.

Alignment Alternatives: Based on the historic inventories completed to date, there is no difference in the relative significance of the various Section 4(f) properties impacted by the Alignment Alternatives. All of the affected Section 4(f) properties have been identified as contributing resources to the Downtown Jaffrey Historic District, of which there is a total of 173 contributing resources, and none of the properties have been identified as being individually eligible. 59

Alternative 3 would also impact the properties at 5 and 6 Tyler Hill Road and 69 River Street, which are located outside of the Boundary Increase Area. These properties are over 50 years old, however they have not been surveyed as potential historic resources. Therefore, these properties were not evaluated in the Least Harm Analysis as Section 4(f) resources.

The properties that would be impacted under Alternative 3 that are outside of the Boundary Increase Area (5 and 6 Tyler Hill Road and 69 River Street) were not included in the Boundary Increase Area because the context of these properties within their setting wasn't consistent with the rest of the Historic District. These parcels have not been individually evaluated.

Intersection Alternatives: All four Intersection Alternatives would result in equivalent impacts to 4 Stratton Road, a contributing resource to the Historic District, as well as the Monadnock Recreational Rail Trail. Additionally, the two Four-Way Intersection Alternatives would impact another parcel that is contributing to the Historic District, Tax Map 239 Lot 99. Therefore, the two Five-Way Intersection Alternatives would impact fewer Section 4(f) properties than the two Four-Way Intersection Alternatives.

Criterion 4. Views of the officials with jurisdiction over each Section 4(f) property.

<u>Alignment Alternatives:</u> All Alignment Alternatives evaluated in this least overall harm analysis (refer to **Table 2-1** in **Section 2.7.2**, below) would impact properties that contribute to the Downtown Jaffrey Historic District. Section 106 consultation would be required for all Alignment Alternatives.

NHDOT has reviewed the impacts of the Proposed Action in detail with the NHDHR (i.e., SHPO) during an extensive Section 106 consultation, resulting in the execution of an Adverse Effect Memo dated September 2019. Coordination with the NHDHR has been ongoing throughout the planning stages of the Project, including during the alternative analysis. Coordination was further continued through the execution of an MOA to document required mitigation measures.

Intersection Alternatives: The four Intersection Alternatives were evaluated in this least overall harm analysis (refer to **Table 2-1** in **Section 2.7.2**, below). As previously stated in **Section 2.6.3**, the *Five-Way Roundabout Alternative* and the *Five-Way Traffic Signal Controlled Intersection* would have similar impacts to Section 4(f) properties (i.e., properties that contribute to the Downtown Jaffrey Historic District). As with the Alignment Alternatives, Section 106 consultation would be required for all Intersection Alternatives.

NHDOT has reviewed the anticipated impacts of the Proposed Action with the Town of Jaffrey and NHDHR. Through completing the requirements of the Section 106 process, NHDHR concurred with the execution of an Adverse Effect Memo (refer to **Appendix I**). Coordination was further continued through the execution of an MOA to document required mitigation measures.

Additionally, impacts to the Monadnock Recreational Rail Trail have been discussed with the NH Bureau of Trails. The NH Bureau of Trails has expressed their support of the Proposed Action and have identified improvements to the trail to be incorporated into the Project design to minimize impacts to trail users, including snowmobiles.

Criterion 5. Degree to which each alternative meets the Purpose and Need.

Alignment Alternatives: All four Alignment Alternatives were determined to meet the Purpose and Need to a similar degree, with no substantial differences among them. Intersection Alternatives: During the alternative evaluation, the Five-Way Intersection Alternatives were determined to meet the Purpose and Need to a higher degree than the Four-Way Intersection Alternatives. The Four-Way Intersection Alternatives partially meet the Purpose and Need because they do not provide the same level of access as the Five-Way Intersection Alternatives. The Four-Way Traffic Signal Controlled Intersection Alternative and the Four-Way Roundabout Intersection Alternative would eliminate access

to the intersection from Stratton Road, which would result in a redistribution of Stratton Road traffic to and from Turnpike Road by way of Ellison Street. This would require improving the intersection of Ellison Street with Turnpike Road, which would impact Tax Map 239 Lot 99 (a contributing property to the Historic District). Such a closure would therefore incur additional impacts and cost, and place limitations on access to Stratton Road for residents and the nearby high school located off Stratton Road. The Five-Way Roundabout Intersection Alternative benefits include providing access to all five roads, whereas the Four-Way Roundabout Intersection Alternative would eliminate access to Stratton Road from the intersection.

Criterion 6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f).

<u>Alignment Alternatives:</u> All Alignment Alternatives would involve right-of-way impacts; however, *Alignment Alternative 1 – Roundabout* would require acquisition and demolition of the fewest buildings when compared to the other three Alignment Alternatives. Twenty parcels would be impacted under *Alignment Alternative 2*, the largest number of right-of-way impacts.

Alternative 1 – Roundabout has substantially less impact on natural resources than the other Alignment Alternatives, including impacts to wetlands, 100-year floodplain, stream channel, river bank, water quality, groundwater resources, and tree clearing. Both Alignment Alternative 1 – Roundabout and Alignment Alternative 1 – T-Intersection would cross the Contoocook River at a narrow point, therefore resulting in the least amount of impact to wetland and surface water resources when compared to the other two Alignment Alternatives. The proposed bridge under Alignment Alternative 2 would span the Contoocook River south of the location of the Alignment 1 – T-Intersection bridge and the Alignment 1 – Roundabout bridge where the river is wider. Since the bridge at this location would require a center pier or multiple piers, Alignment Alternative 2 would require a greater amount of wetland and surface water impacts. Additionally, floodplain impacts would likely require compensatory mitigation.

Alignment Alternative 3 is the only alternative that would impact a parcel owned by the Town of Jaffrey (Tax Map 239 Lot 225) that was acquired through the LWCF. Therefore, any impacts to this parcel would be regulated under Section 6(f) of the LWCF Act. Alignment Alternative 3 would also have the longest span for the proposed bridge, which would involve the highest wetland and surface water impacts, as well as greatest amount of floodplain impacts (requiring compensatory mitigation), of all Alignment Alternatives. Alignment Alternative 3 would have the greatest amount of wetland impacts due to the bridge crossing and wetlands that run along the eastern side of the river south of Blake Street.

Under Alignment Alternative 1 – T-Intersection and Alignment Alternative 1 – Roundabout, the Jaffrey War Memorial Park would be partially acquired to allow room to construct a new intersection with River Street. The park is privately owned and therefore not subject to protection under Section 4(f).

Given the evaluation above, *Alignment Alternative 1 – Roundabout* was determined to have the least overall impact to resources not protected by Section 4(f), when compared to the other four Alignment Alternatives.

Intersection Alternatives: Of the Intersection Alternatives, the Four-Way Traffic Signal Controlled Intersection Alternative would involve the most right-of-way impacts (nine parcels) and would create the greatest amount of new impervious area. Due to this fact, the Four-Way Traffic Signal Controlled Intersection Alternative was determined to have the highest amount of overall impact to resources not subject to protection under Section 4(f).

The Five-Way Roundabout Intersection Alternative would involve the fewest parcel impacts (three parcels). The Four-Way Roundabout Intersection Alternative and the Five-Way Traffic Signal Controlled Intersection Alternative would impact the next largest number of parcels, five and seven, respectively. These three Intersection Alternatives would create 0.2 acres of new impervious area.

None of the four Intersection Alternatives would involve impacts to the following resources: tree clearing, wetlands, river bank, stream channel, 100-year floodplain, Section 6(f) properties, or privately-owned parks.

Criterion 7. Substantial differences in costs among alternatives.

Alignment Alternatives: Alignment Alternative 3 would cost substantially more to construct when compared to the other Alignment Alternatives. Alignment Alternative 3 would have the highest cost of \$14.8 million due to constructing a bridge over the Contoocook River at the widest point.

Intersection Alternatives: There would be no substantial difference in cost among the Intersection Alternatives. The Four-Way Roundabout Intersection Alternative has the lowest cost (\$1.9 million); however, while the Five-Way Roundabout Intersection Alternative is slightly higher (\$2.1 million), this Intersection Alternative would achieve greater benefits and would not be as expensive as the two Traffic Signal Controlled Intersection Alternatives (\$2.4 million).

2.7.2 Least Overall Harm Summary

After analysis of the factors considered pursuant to 23 CFR 774.3(c)(1), the Proposed Action, consisting of Alternative 1 – Roundabout and Five-Way Roundabout, were determined to be the Alignment Alternative and Intersection Alternative that results in the least overall harm. Table 2-1 below summarizes the comparison of impacts of these alternatives.

Alternative 1 – Roundabout and Alternative 3 were the two Alignment Alternatives with the least impacts to Section 4(f) properties. As previously mentioned, Alternative 3 would result in substantial natural resource impacts, have a high construction cost, and also affect a Section 6(f) property. Additionally, this alternative would completely bypass Downtown Jaffrey, which was also considered a negative impact by the community.

Alignment Alternative 1 was chosen over Alternative 2 due to the reduced property impacts, particularly to Section 4(f) resources, as well as the anticipated impacts to natural resources including wetlands and floodplains. The Alternative 2 alternative would also largely bypass Downtown Jaffrey. Upon consideration of Alternative 1 – T-

Intersection and Alternative 1 – Roundabout, the roundabout alternative was chosen since it would result in less property and 4(f) impacts than the *T-Intersection Alternative*.

The Intersection Alternatives were divided into two Four-Way Intersection Alternatives and two Five-Way Intersection Alternatives. As shown by this least overall harm analysis, the Four-Way Intersection Alternatives would eliminate access to Stratton Road and therefore would incur additional operational impacts and costs. Originally, the Five-Way Roundabout alternative proposed to impact one additional Section 4(f) property than the Five-Way Traffic Signal Controlled Intersection alternative. However, the Five-Way Roundabout alternative was evaluated to determine if property impacts could be reduced. Under the proposed design of the Five-Way Roundabout alternative, this alternative would result in the same number of impacts as the Five-Way Traffic Signal Controlled Intersection since the design modified the roundabout to include a channelized right-turn lane to allow for the inscribed diameter of the roundabout to be narrower than the original design. Therefore, the Five-Way Roundabout was selected as the Proposed Action since this form of traffic flow resulted in the same impacts to Section 4(f) and other resources not protected by Section 4(f) as the Five-Way Traffic Signal Controlled Intersection.

Summary of the Section 4(f) Least Overall Harm Analysis Table 2-1

| | | | Alignment Alternatives | | <u></u> | Intersection | Alternatives | |
|---|---|--|--|---|---|--|---|--|
| Criterion | Alternative 1 – T-Intersection | Alternative 1 – Roundabout (Proposed Alignment) | Alternative 2 | Alternative 3 | Four-Way Traffic Signal Controlled | Five-Way Traffic Signal Controlled | Four-Way Roundabout | Five-Way Roundabout (Proposed Intersection) |
| Ability to mitigate adverse effects to each Section 4(f) property | Given that this alternative impacts a greater number of contributing historic resources than the Proposed Alignment, mitigation for its impacts to the Downtown Jaffrey Historic District would be relatively more difficult. | Because this alignment alternative impacts the fewest number of Section 4(f) properties, the ability to mitigate these impacts is deemed more feasible than other alternatives. Mitigation for impacts to the Downtown Jaffrey Historic District was agreed upon in a MOA. | Given that this alternative impacts a greater number of contributing historic resources than the Proposed Alignment, mitigation for its impacts to the Downtown Jaffrey Historic District would be relatively more difficult. | This alternative would impact a similar number of contributing elements compared to the Proposed Alignment; mitigation for its impacts to the Downtown Jaffrey Historic District would likely be similar in scope to the approved MOA. | This alternative would impact an additional contributing element compared to the Proposed Alignment. Mitigation for its impacts to the Downtown Jaffrey Historic District would likely be similar in scope to the approved MOA, but likely increased to account for the additional impact. | Given that this alternative has impacts similar to the Proposed Intersection, mitigation for its impacts to the Downtown Jaffrey Historic District would likely be similar to those measures agreed upon in the final MOA. | This alternative would impact an additional contributing element compared to the Proposed Alignment. Mitigation for its impacts to the Downtown Jaffrey Historic District would likely be similar in scope to the approved MOA, but likely increased to account for the additional impact. | Mitigation for impacts to the Downtown Jaffrey Historic District was agreed upon in a MOA. |
| Relative severity to the remaining harm, after mitigation, to the protected activities and attributes or features | This alternative would impact a total of five properties that contribute to the Historic District, including the full acquisition and demolition of buildings at 19, 21, and 23 River Street, and the partial acquisition of 29 and 31 River Street. | This alternative would impact three properties that contribute to the Historic District, including the full acquisition and demolition of 15 River Street and the partial acquisition of 21 and 23 River Street. | This alternative would impact a total of nine properties that contribute to the Historic District, including the full acquisition and demolition of 25 River Street. It would also require partial acquisition of 21, 23, 27, 31, 39, 41, 45, 49 River Street. | This alternative would impact three properties that contribute to the Historic District, including full acquisition and demolition of 21 Blake Street. It would also require partial acquisition of 49 and 51 River Street. ⁴ | This alternative would require the full acquisition and demolition of 4 Stratton Road and full acquisition of the parcel at Tax Map 239 Lot 99, which are contributing resources to the Historic District. | This alternative would require the full acquisition and demolition of 4 Stratton Road, which is a contributing resource to the Historic District. | This alternative would require the full acquisition and demolition of 4 Stratton Road and full acquisition of the parcel at Tax Map 239 Lot 99, which are contributing resources to the Historic District. | This alternative would require the full acquisition and demolition of 4 Stratton Road, which is a contributing resource to the Historic District. |
| 3. Relative significance of each Section 4(f) property | All of the Section 4(f) properties impacted by this alternative are contributing resources to the Downtown Jaffrey Historic District. No known individually eligible properties would be impacted. | All of the Section 4(f) properties impacted by this alternative are contributing resources to the Downtown Jaffrey Historic District. No known individually eligible properties would be impacted. | All of the Section 4(f) properties impacted by this alternative are contributing resources to the Downtown Jaffrey Historic District. No known individually eligible properties would be impacted. | All of the Section 4(f) properties impacted by this alternative are contributing resources to the Downtown Jaffrey Historic District. No known individually eligible properties would be impacted. ⁴ | All of the Section 4(f) properties impacted by this alternative are contributing resources to the Downtown Jaffrey Historic District. No known individually eligible properties would be impacted. ⁴ | All of the Section 4(f) properties impacted by this alternative are contributing resources to the Downtown Jaffrey Historic District. No known individually eligible properties would be impacted. ⁴ | All of the Section 4(f) properties impacted by this alternative are contributing resources to the Downtown Jaffrey Historic District. No known individually eligible properties would be impacted. ⁴ | All of the Section 4(f) properties impacted by this alternative are contributing resources to the Downtown Jaffrey Historic District. No known individually eligible properties would be impacted. ⁴ |
| View of the officials with jurisdiction over each Section 4(f) property | NHSHPO has concurred with the execution of an Adverse Effect Memo and development of a MOA for the Proposed Alignment. | NHSHPO has concurred with the execution of an Adverse Effect Memo and development of a MOA. | NHSHPO has concurred with the execution of an Adverse Effect Memo and development of a MOA for the Proposed Alignment. | NHSHPO has concurred with the execution of an Adverse Effect Memo and development of a MOA for the Proposed Alignment. | NHSHPO has concurred with the execution of an Adverse Effect Memo and development of a MOA for the Proposed Intersection. | NHSHPO has concurred with the execution of an Adverse Effect Memo and development of a MOA for the Proposed Intersection. | NHSHPO has concurred with the execution of an Adverse Effect Memo and development of a MOA for the Proposed Intersection. | NHSHPO has concurred with the execution of an Adverse Effect Memo and development of a MOA. |
| 5. Degree to which each alternative meets the Purpose and Need | Fully Meets | Fully Meets | Fully Meets | Fully Meets | Partially Meets: Limits access to Stratton Road | Fully Meets | Partially Meets: Limits access to Stratton Road | Fully Meets |
| 6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f) | ROW: 14 parcels¹ Tree Clearing: 0.1 acres New Impervious Area: 0.5 acres Wetlands: 0 acres River bank: 220 LF Stream Channel: 0 LF 100-year Floodplain: 0.5 acres 6(f) Property: 0 Privately Owned Park: 1² | > ROW: 7 parcels³ > Tree Clearing: 0.1 acres > New Impervious Area: 0.3 acres > Wetlands: 0.01 acres > River bank: 220 LF > Stream Channel: 0 LF > 100-year Floodplain: 0.5 acres > 6(f) Property: 0 > Privately Owned Park: 1² | > ROW: 20 parcels > Tree Clearing: 0.8 acres > New Impervious Area: 2 acres > Wetlands: 0.9 acres > River bank: 292 LF > Stream Channel: 393 LF > 100-year Floodplain: 0.9 acres > 6(f) Property: 0 > Privately Owned Park: 0 | > ROW: 14 parcels > Tree Clearing: 2.2 acres > New Impervious Area: 2 acres > Wetlands: 1.2 acres > River bank: 38 LF > Stream Channel: 392 LF > 100-year Floodplain: 1.3 acres > 6(f) Property: 1⁵ > Privately Owned Park: 0 | >> ROW: 9 parcels >> Tree Clearing: 0 acres >> New Impervious Area: 0.3 acres >> Wetlands: 0 acres >> River bank: 0 LF >> Stream Channel: 0 LF >> 100-year Floodplain: 0 acres >> 6(f) Property: 0 >> Privately Owned Park: 0 | > ROW: 7 parcels > Tree Clearing: 0 acres > New Impervious Area: 0.2 acres > Wetlands: 0 acres > River bank: 0 LF > Stream Channel: 0 LF > 100-year Floodplain: 0 acres > 6(f) Property: 0 > Privately Owned Park: 0 | > ROW: 5 parcels > Tree Clearing: 0 acres > New Impervious Area: 0.2 acres > Wetlands: 0 acres > River bank: 0 LF > Stream Channel: 0 LF > 100-year Floodplain: 0 acres > 6(f) Property: 0 > Privately Owned Park: 0 | > ROW: 3 parcels³ > Tree Clearing: 0 acres > New Impervious Area: 0.2 acres > Wetlands: 0 acres > River bank: 0 LF > Stream Channel: 0 LF > 100-year Floodplain: 0 acres > 6(f) Property: 0 > Privately Owned Park: 0 |
| 7. Substantial differences in costs | \$4.8 M | \$5.5 M | \$9.4 M | \$14.8 M | \$2.4 M | \$2.4 M | \$1.9 M | \$2.1 M |

among alternatives Notes:

- Preliminary impacts taken from Alternatives Evaluation, completed by VHB on March 21, 2018.

 Jaffrey War Memorial Park. Tax Map 238 Lot 6.

 ROW impacts under this alternative taken from the General Plan in **Appendix B**.

 Alternative 3 would also impact 5 and 6 Tyler Hill Road and 69 River Street. Rose properties are each more than 50 years old, however they have not been surveyed as potential historic resources.
- LWCF Parcel, Community Park, 9 Union Street, Jaffrey, NH. Tax Map 239 Lot 225.

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2.8 Mitigation

Because the Project would have an adverse effect on cultural or historic resources that are potentially eligible for or listed on the NRHP, a Section 106 Cultural Resources Effect Memo, pursuant to the provisions of Section 106 of the National Historic Preservation Act (NHPA) (36 CFR 800), has been executed. The September 2019 Adverse Effect Memo addresses unavoidable impacts to the Downtown Jaffrey Historic District and Boundary Increase Area (see **Section 2.5**), including impacts to 4 Stratton Road, and 15, 19, 21 and 23 River Street which are all contributing properties to the District.

The Section 106 consultation with FHWA, NHDOT, NHDHR and a Consulting Party⁶⁰ identified the specific measures to mitigate this adverse effect. These measures are described in the MOA for the project (see **Appendix I**). ⁶¹ In summary, the MOA stipulations include the following measures:

- NHDHR, FHWA, and the Town will be provided the opportunity to review and comment on the bridge design developed by NHDOT during the design process.
- NHDOT, in coordination with the Town of Jaffrey, will prepare a Downtown Jaffrey National Register Historic District nomination update and boundary increase.
- To avoid impacts to the Jaffrey Mills during construction, the design of the reconstructed sidewalk along Main Street will be configured to direct water flow away from the East Building and Mill Office. Additionally, a weather tight expansion joint will be installed between the East Building and the reconstructed sidewalk to prevent damage to the mill building.
- During final design, NHDOT will determine the likely construction equipment and methods to be used for sidewalk and roadway work along Main Street directly adjacent to the Jaffrey Mills East Building and Mill Office. If warranted, NHDOT will develop a Construction Vibration Assessment. ⁶²
- NHDOT will commission three outdoor interpretive signs/panels about the Downtown Jaffrey Historic District and its resources to be installed at a location or locations to be determined in consultation with the NHDOT and the Jaffrey Historic District Commission. The interpretive panels are anticipated to examine one or more of the following themes: Downtown Jaffrey Historic District; Monadnock Railroad; Jaffrey Mills; and Historic and Extant Contoocook River Crossings.

One individual, Robert Stephenson of Jaffrey, NH, was identified as a Section 106 Consulting Party. Mr. Stephenson was a former president of the Jaffrey Historical Society, former chairman of the Historic District Commission, former member of the New Hampshire State Historical Resources Council, and current member of the Jaffrey War Memorial Committee.

In a letter to FHWA dated November 12, 2019 (see **Appendix D**), Andrew L. Raddant of the US Department of Interior, Office of Environmental Policy and Compliance, requested an opportunity to review the draft MOA and that a signed copy be included in the Final Section 4(f) Evaluation.

Assessments will be made using the following guidance documents: "New Hampshire DOT Research Record: Ground Vibrations Emanating from Construction Equipment" (2012) and "NCHRP 25-25/Task 72: Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects" (2012).

Additionally, NHDOT would continue to work with the NH Bureau of Trails and local users to mitigate impacts to the Monadnock Recreational Rail Trail. Recreational access along the trail shall be maintained throughout the duration of construction. A detour plan would be developed and implemented, if necessary, during certain phases of construction. Details of the project final design would be coordinated with the NH Bureau of Trails to ensure that the trail crossing of the Five-Way Roundabout minimizes impacts to snowmobile users.

2.9 Coordination and Public Participation

Meetings have periodically been held throughout the development of this Project, with various Federal, State and local agencies, as well as with the general public. Public meetings are listed in **Table 2-2**.

Table 2-2 Project Meetings

| Date | Торіс |
|------------|--|
| 05/09/2017 | Technical Advisory Committee Meeting |
| 06/27/2017 | Technical Advisory Committee Meeting |
| 09/12/2017 | Technical Advisory Committee Meeting |
| 10/17/2017 | Public Informational Meeting #1 |
| 10/24/2017 | Technical Advisory Committee Meeting |
| 02/13/2018 | Technical Advisory Committee Meeting |
| 02/20/2018 | Public Informational Meeting #2 – Public Workshop |
| 05/29/2018 | Technical Advisory Committee Meeting |
| 07/10/2018 | Technical Advisory Committee Meeting |
| 09/19/2018 | NHDOT Natural Resource Agency Coordination Meeting |
| 10/16/2018 | Technical Advisory Committee Meeting |
| 11/15/2018 | Public Informational Meeting #3 |
| 04/11/2019 | Cultural Resources Agency Meeting |
| 06/25/2019 | Technical Advisory Committee Meeting |
| 07/11/2019 | Cultural Resources Agency Meeting |
| 09/12/2019 | Cultural Resources Agency Meeting |
| 10/02/2019 | Public Hearing |
| 07/16/2020 | Finding of Necessity |

Notes for many of these meetings can be accessed via the internet at https://www.nh.gov/dot/projects/jaffrey16307/index.htm.

Additionally, letters were sent to applicable Federal, State, and local agencies during preliminary planning of the Project to gain agency feedback on the Project, as listed in **Table 2-3**.

Table 2-3 Agency Coordination

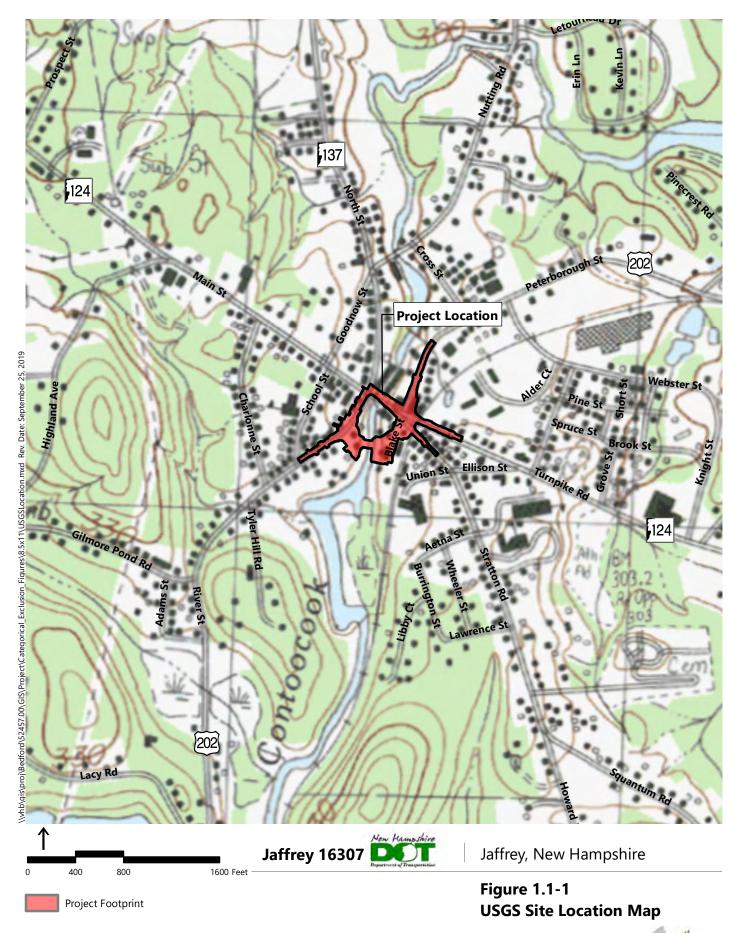
| Agency/Organization | Contact | Date Sent | Reply Received |
|--|--|-----------------------|--------------------------|
| USACE | Col. William M. Conde | 10/02/2017 | |
| USDOI – Office of Environmental Policy and Compliance | Andrew Raddant | 10/10/2019 | 11/12/2019 |
| USEPA – Office of Environmental Stewardship | Susan Studlien | 10/02/2017 | |
| USEPA – Office of Ecosystem Protection | Ken Moraff | 10/02/2017 | |
| | Thomas Chapman | | 11/17/2017 |
| USFWS | Information for Planning and Consultation (IPaC) | 10/02/2017 | 11/12/2018 03/06/2019 |
| USDA – NRCS | Richard Ellsmore | 10/02/2017 | |
| NOAA Fisheries – Greater Atlantic Region | John Bullard | 10/02/2017 | |
| FEMA | Paul Ford | 10/02/2017 | |
| NHDNCR | Michael York | 10/02/2017 | 10/16/2017 |
| NHDNCR – Division of Parks and Recreation | Bill Gegas | 10/02/2017 | |
| NHDNCR – Division of Historical Resources | Laura Black | 03/20/2018 | 04/23/2018 |
| NADINCK – DIVISION OF HIStorical Resources | Christina St. Louis | 01/11/2019 | 01/30/2019 |
| NHDES | Robert Scott | 10/02/2017 | |
| NHF&G | Glenn Normandeau | 10/02/2017 | |
| NHNHB | Amy Lamb | | 02/12/2018 2/25/2019 |
| NH Department of Resources and Economic Development | Jeffrey Rose | 10/02/2017 | |
| NH Department of Agriculture, Markets, and Food | Lorraine Merrill | 10/02/2017 | |
| NH Office of Energy and Planning | Jared Chicoine | 10/02/2017 | |
| NH Office of Energy and Planning, Floodplain Management Program | Jennifer Gilbert | 10/02/2017 | |
| NH Office of Energy and Planning, Conservation Land Stewardship Program | Steve Walker | 10/02/2017 | 10/02/2017 |
| NH Land and Community Heritage Investment Program | Paula Bellemore | 10/02/2017 | 02/22/2018 |
| Town of Jaffrey Planning | Jo Anne Carr | 10/02/2017 | |
| Town of Jaffrey Zoning Board of Adjustment | Lee Sawyer | 10/02/2017 | |
| Jaffrey Parks and Recreation Department | | 10/02/2017 | |
| Town of Jaffrey Conservation Commission | Carolyn Garretson | 10/02/2017 | |
| Southwest Region Planning Commission | Tim Murphy | 10/02/2017 | 01/24/2018 |
| | Janet Renaud | 10/02/2017 | |
| Contoocook & North Branch Rivers Local Advisory Committee | Matt Lunstead | 02/27/2019 03/14/2019 | 04/01/2019 |
| | ויומנו בעוואנכמע | 03/14/2013 | |

2.10 Summary Statement

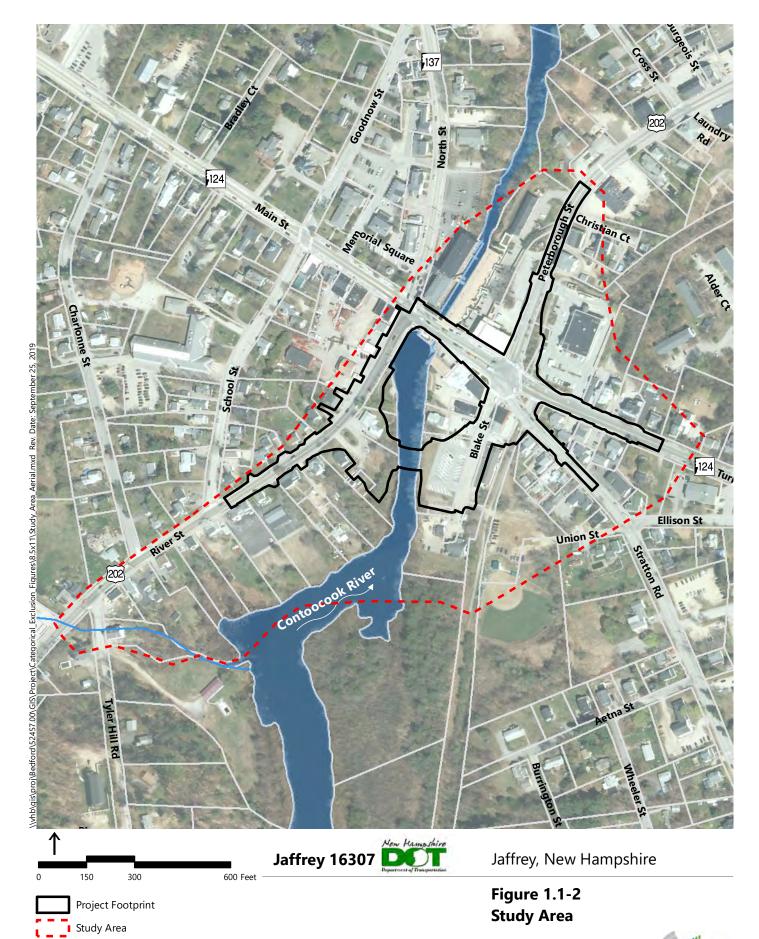
For reasons demonstrated in this Final Section 4(f) Evaluation, there are no feasible and prudent alternatives to the use of the Section 4(f) resources that are potentially eligible for or listed on the NRHP, which includes the Downtown Jaffrey Historic District and Boundary Increase Area and five individually-contributing properties to the Historic District. The Proposed Action includes all possible planning to minimize harm to the Section 4(f) property resulting from such use.

List of Figures

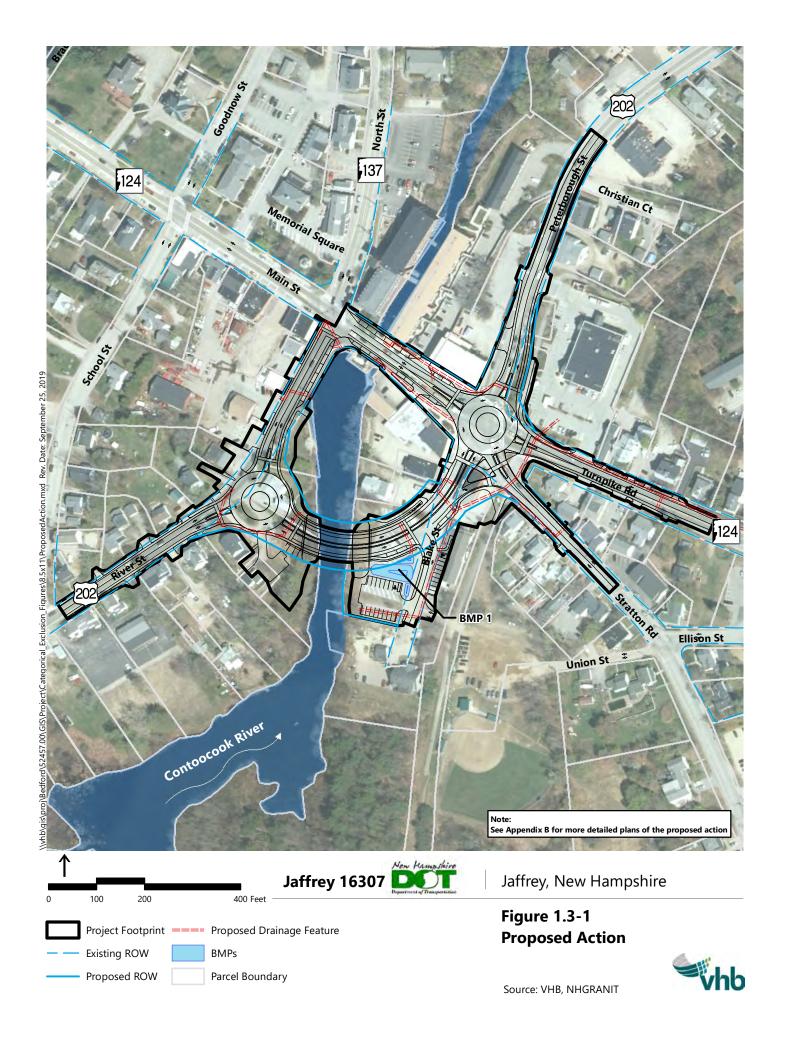
| Figure No. | litie |
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| - | Preliminary Parcel Impacts |
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| Figure 1.4-3 | Design Year Noise Impacts |
| Figure 1.4-4 | Farmland Soils |
| Figure 1.4-5 | Groundwater Resources |
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| • | Four-Way Traffic Signal Controlled Intersection |
| • | Five-Way Traffic Signal Controlled Intersection |
| Figure 2.6-7 | Four-Way Roundabout |
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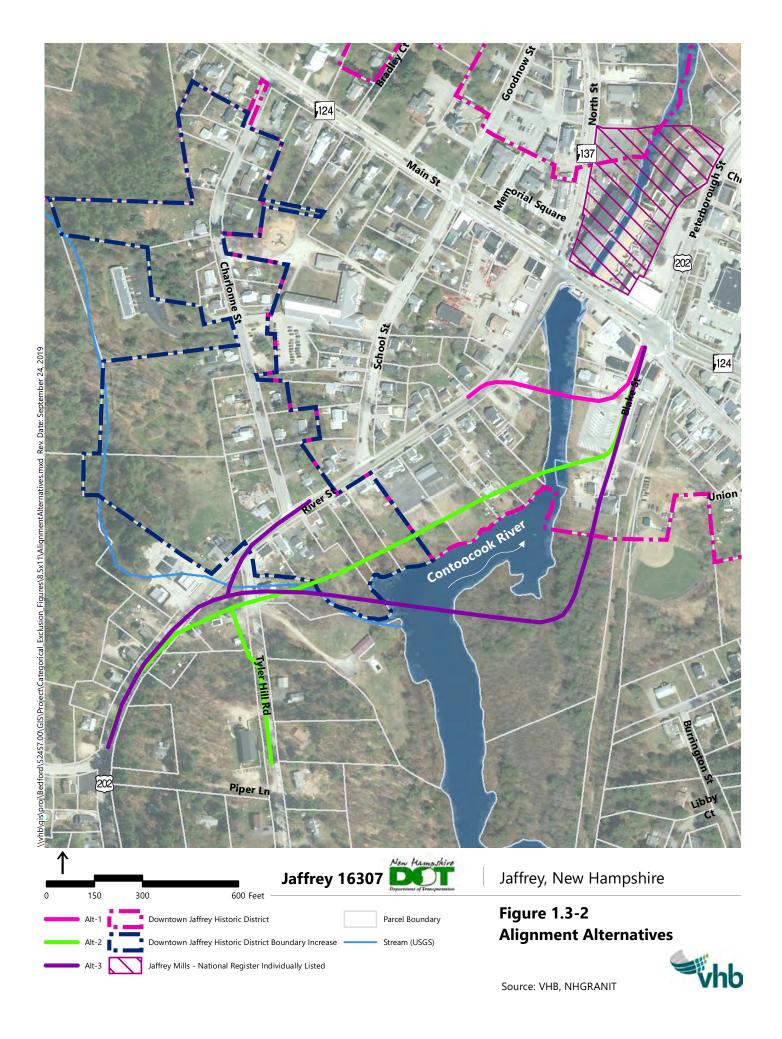


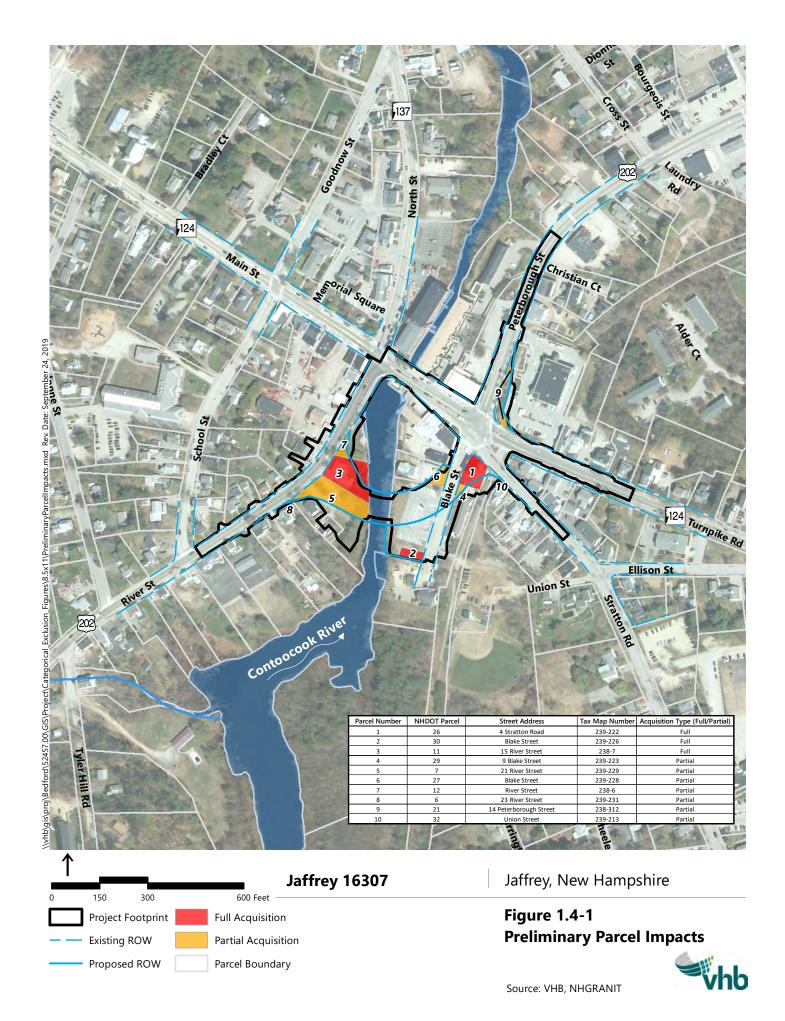
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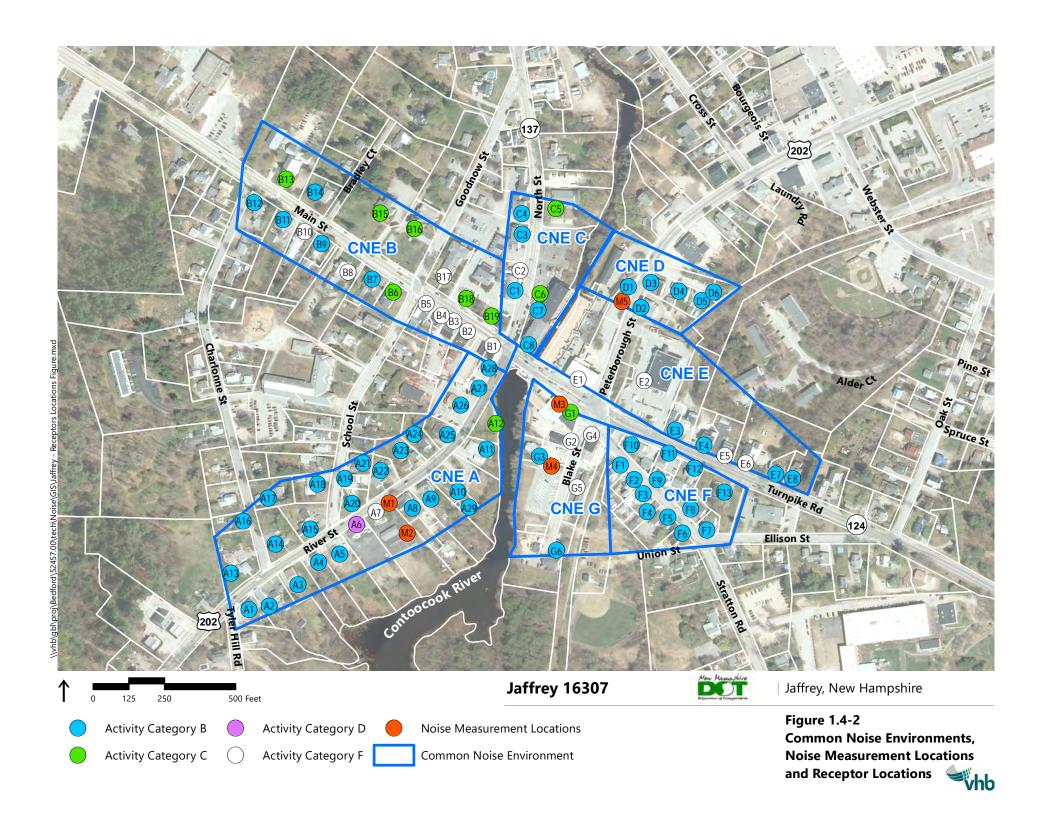


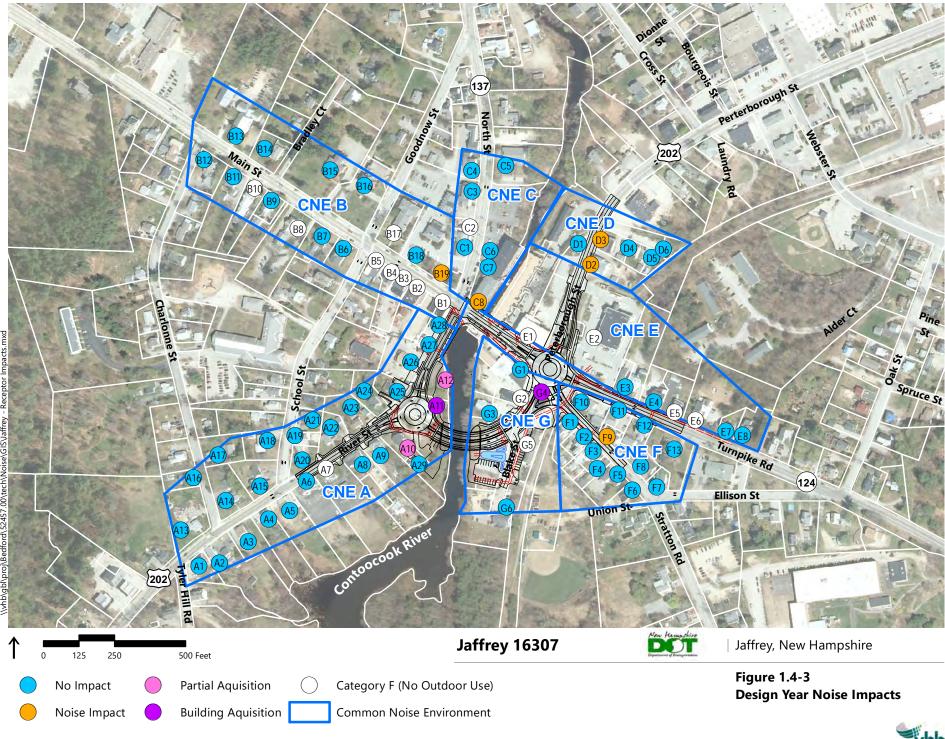




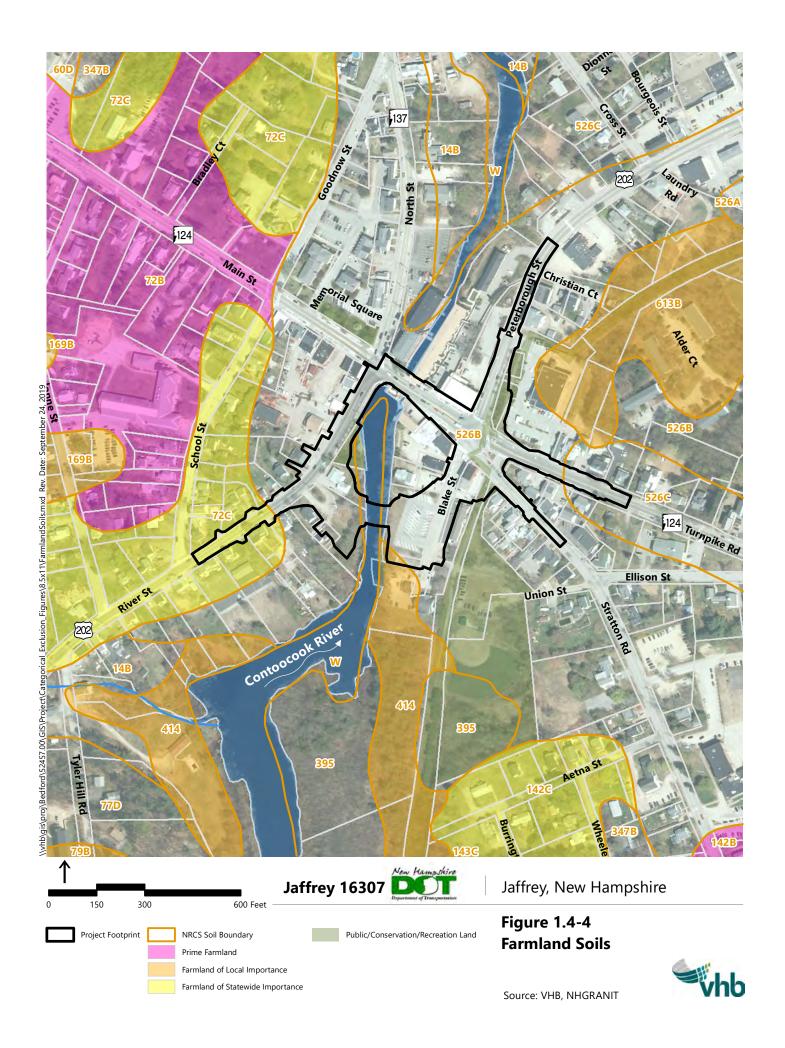


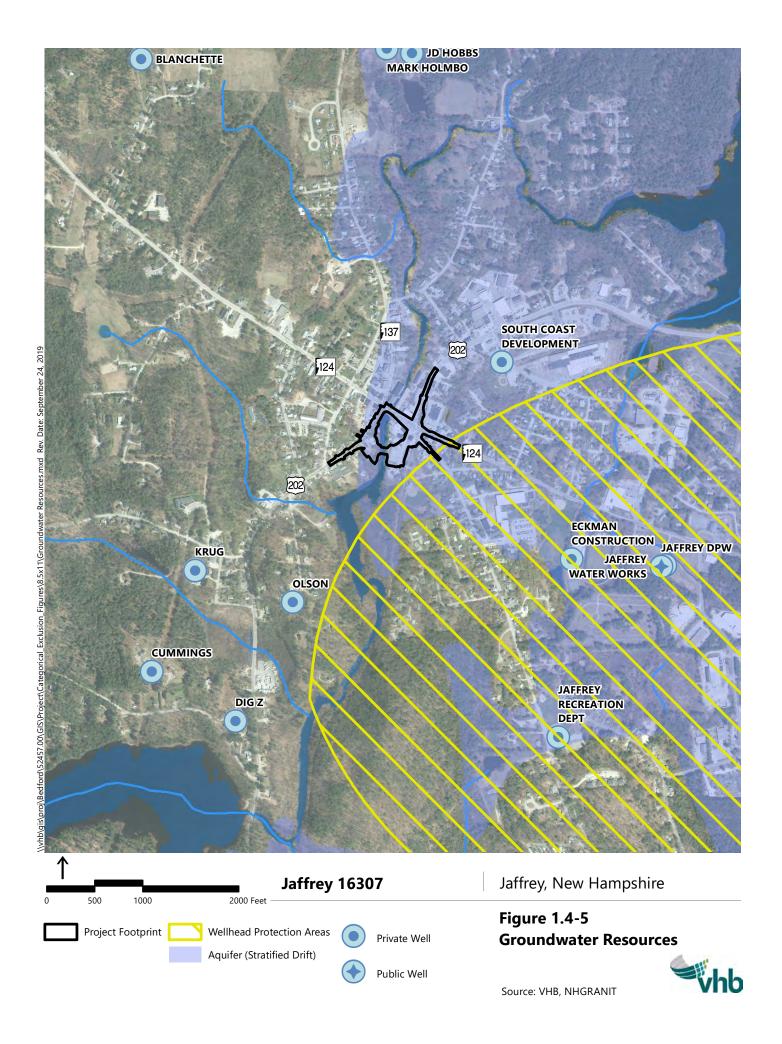


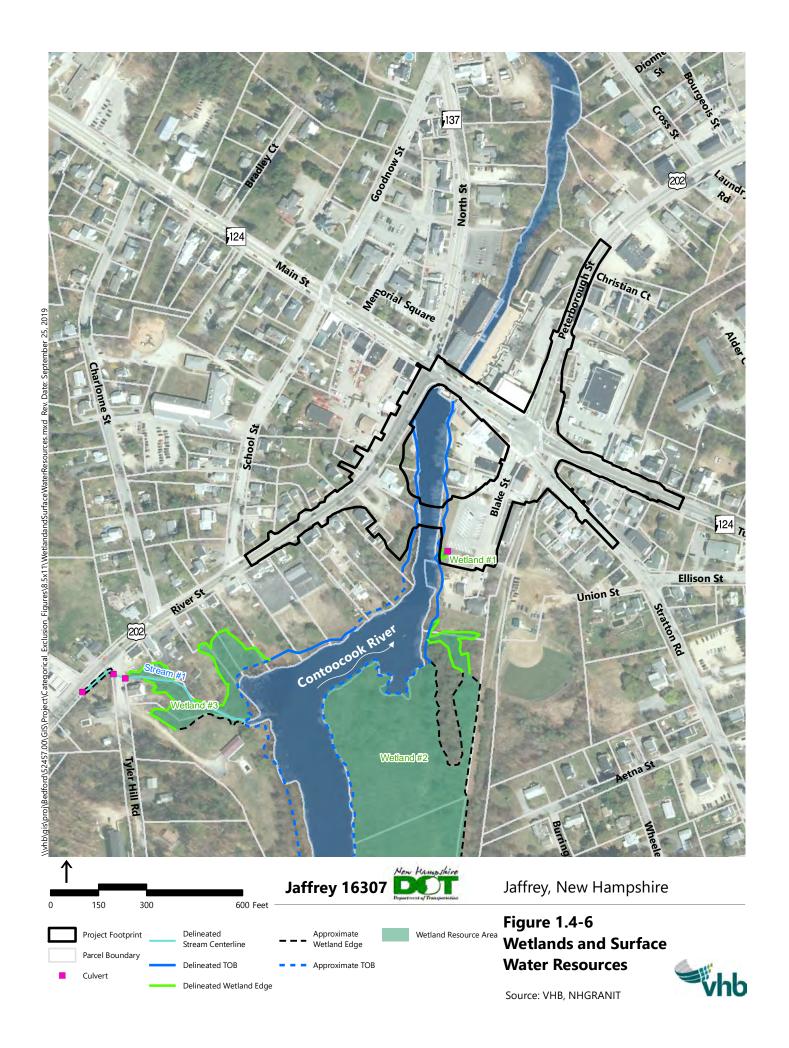


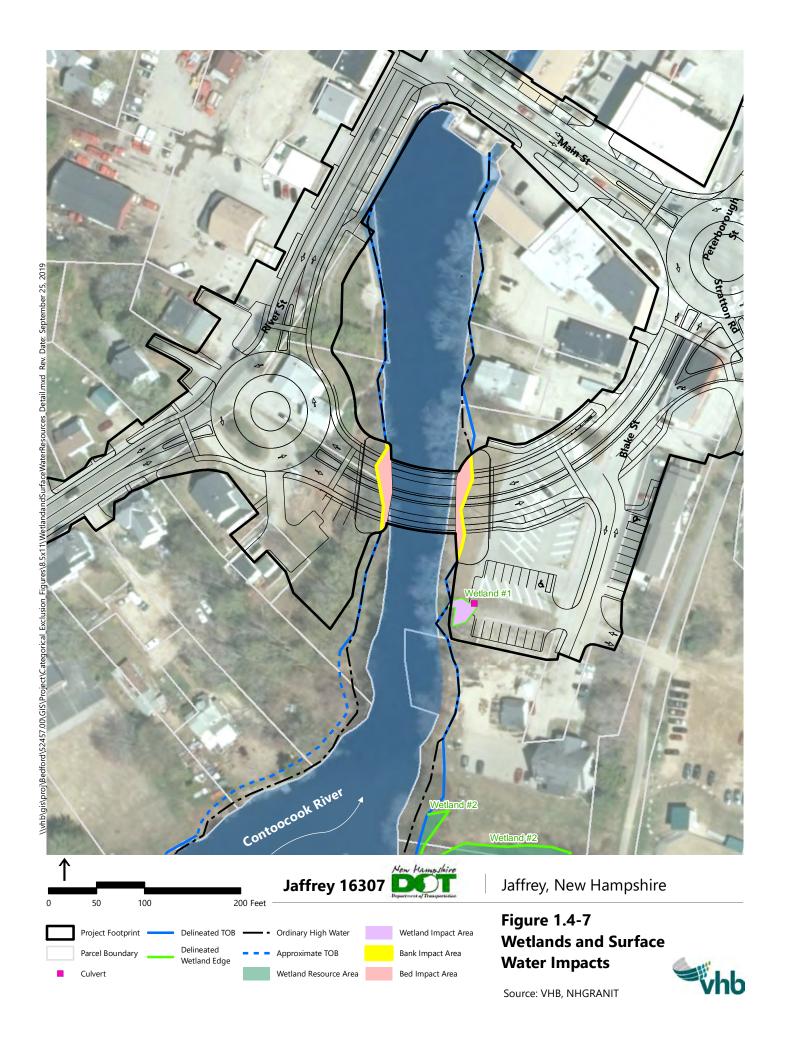


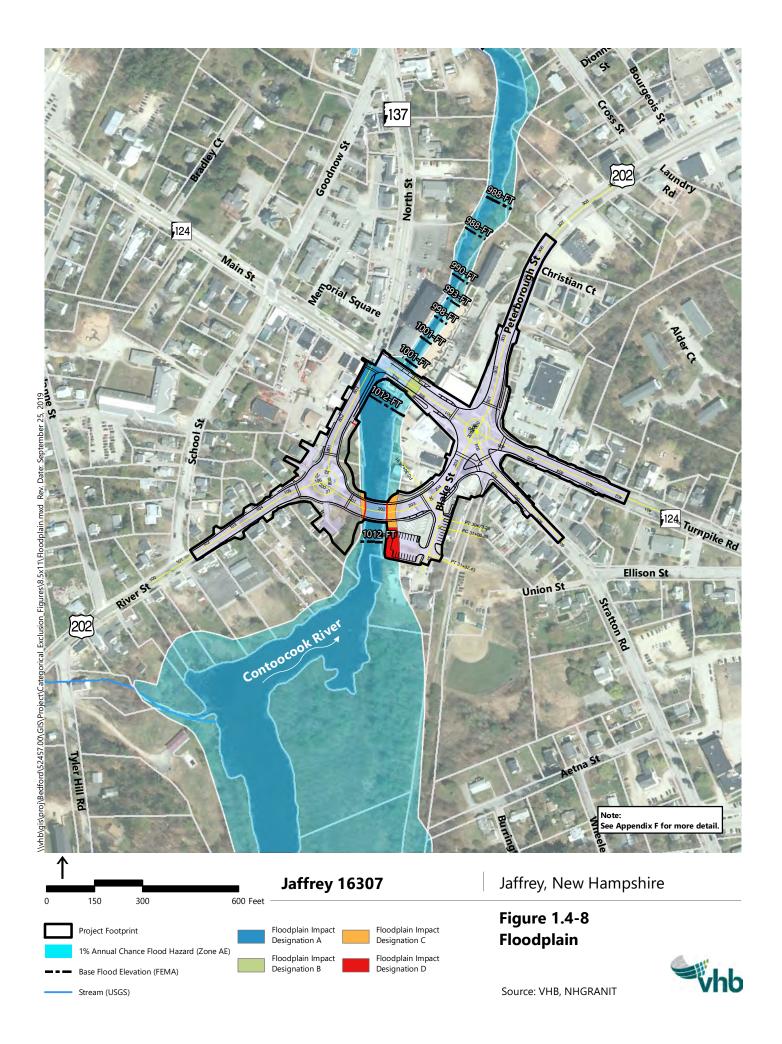


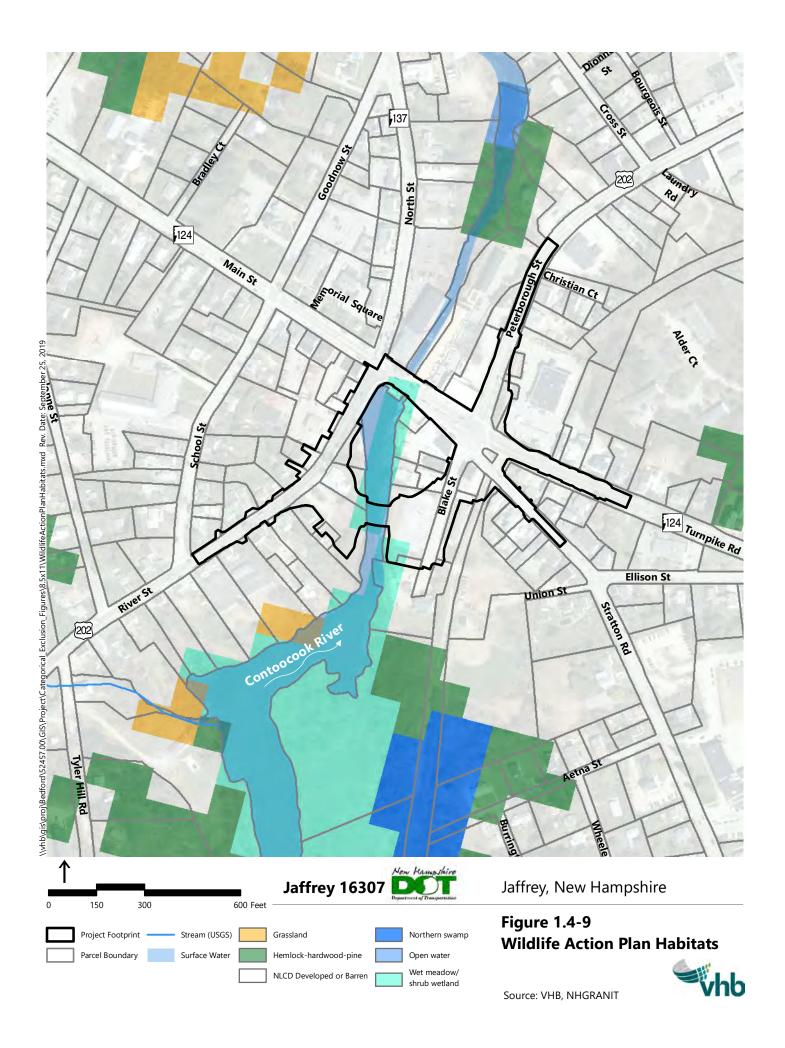


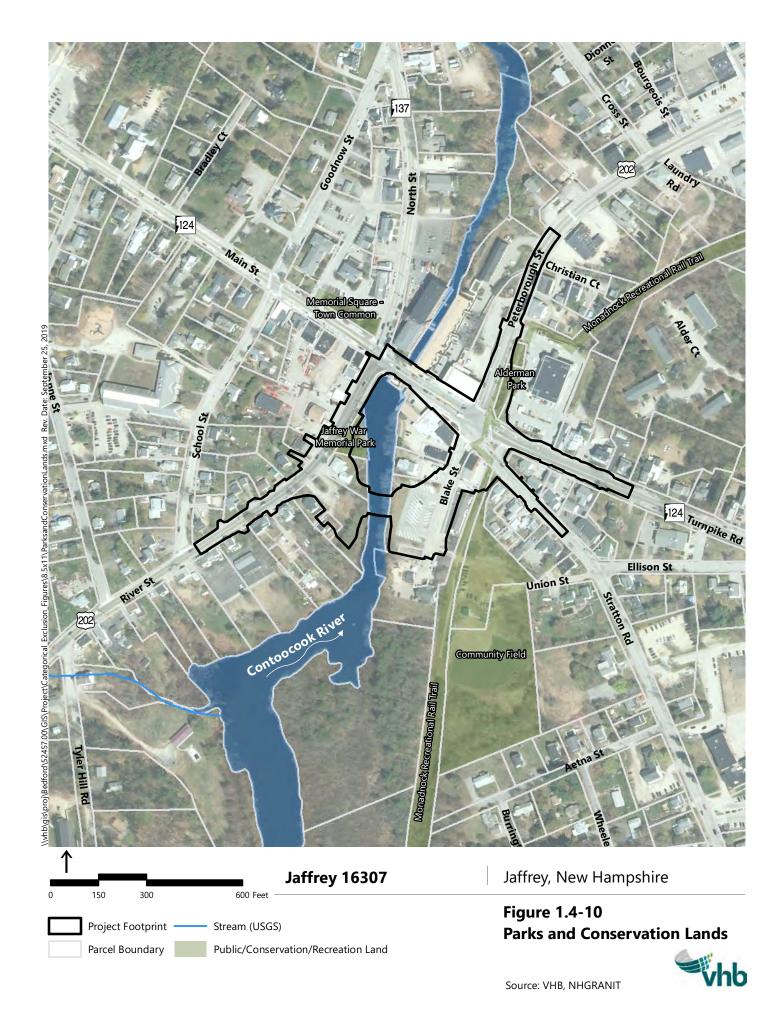


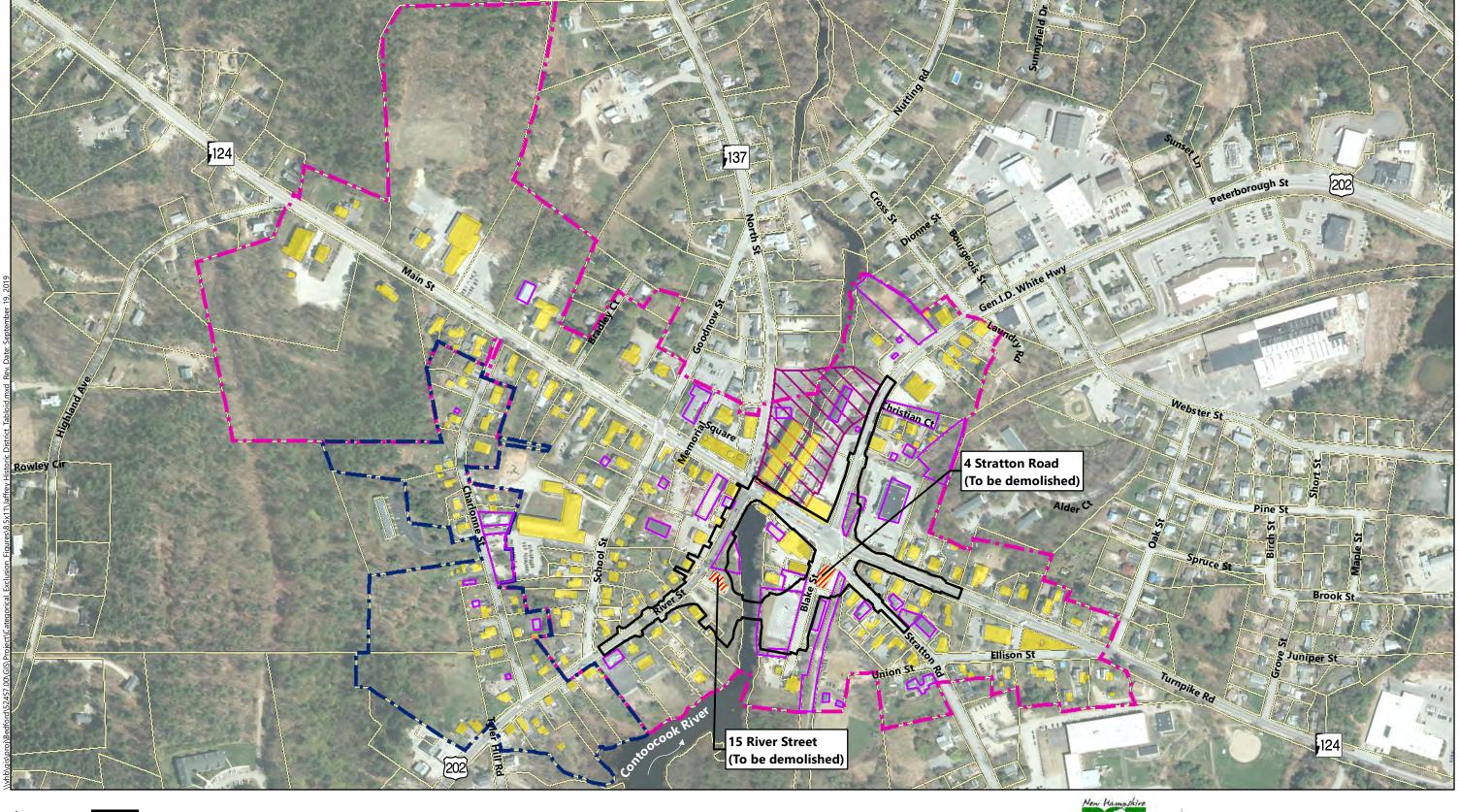












Project Footprint Non-Contributing Resource Contributing Resource Properties to be Demolished

Downtown Jaffrey Historic District

Downtown Jaffrey Historic District Boundary Increase

Jaffrey Mills - National Register Individually Listed

Parcel Boundary

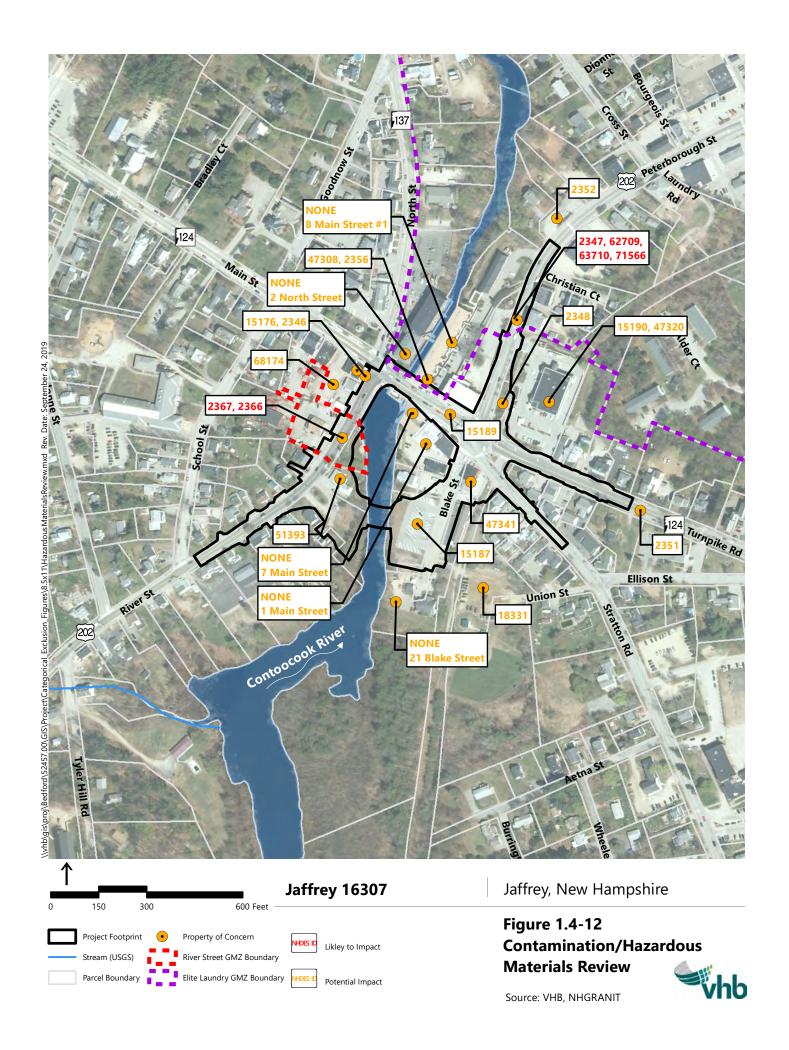
Jaffrey 16307

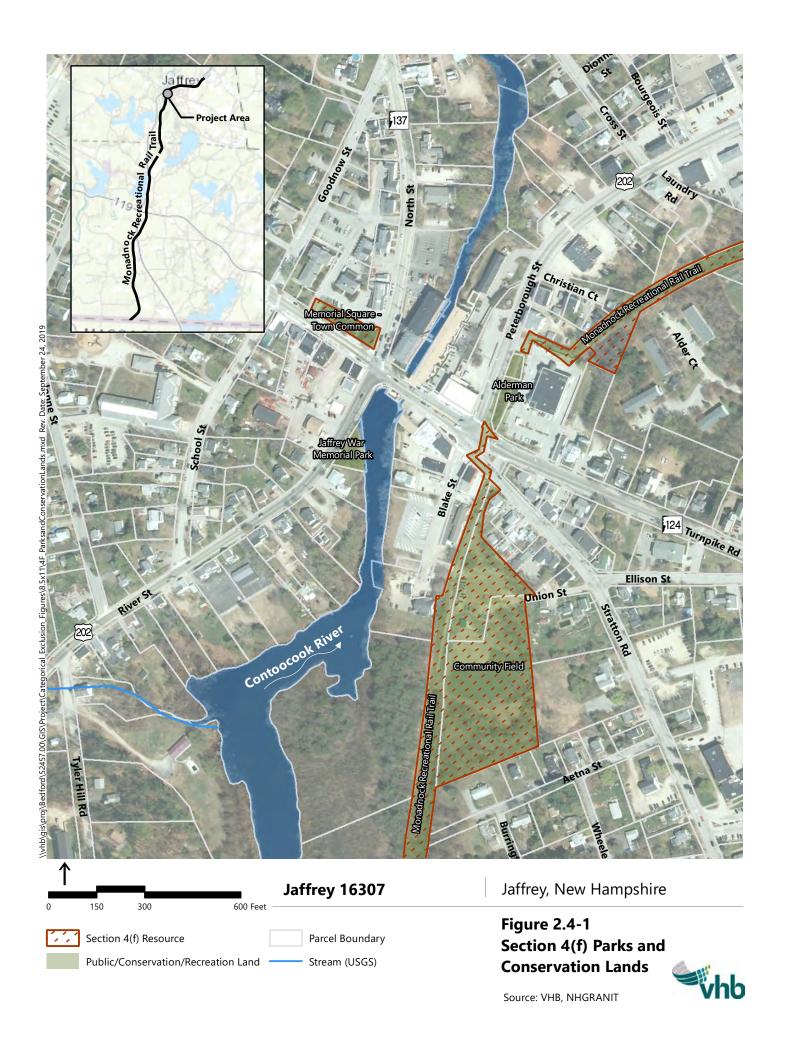


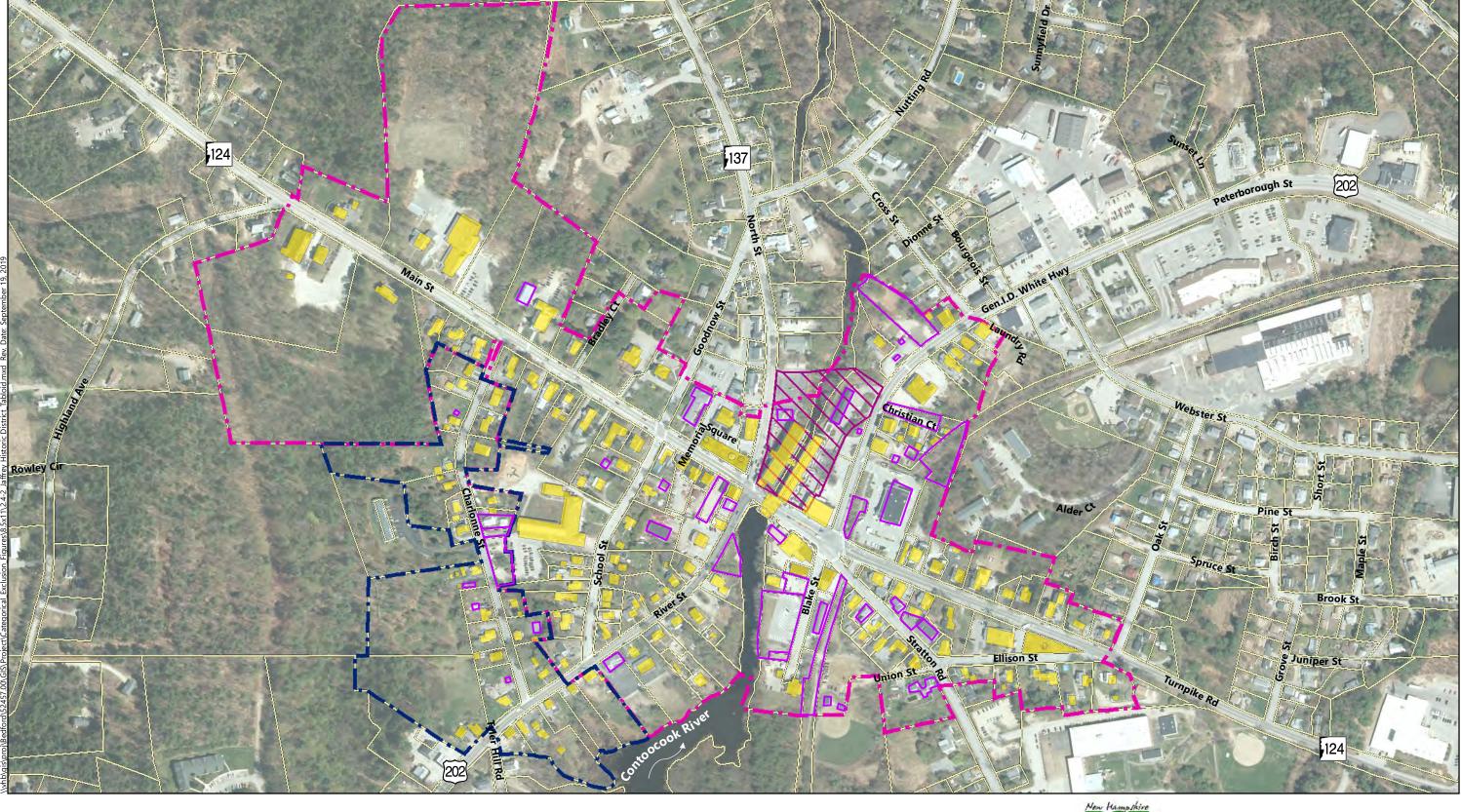
Jaffrey, New Hampshire



Source: NHGRANIT, VHB







Non-Contributing Resource

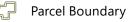
Contributing Resource

Downtown Jaffrey Historic District

Downtown Jaffrey Historic District Boundary Increase



Jaffrey Mills - National Register Individually Listed



Jaffrey 16307

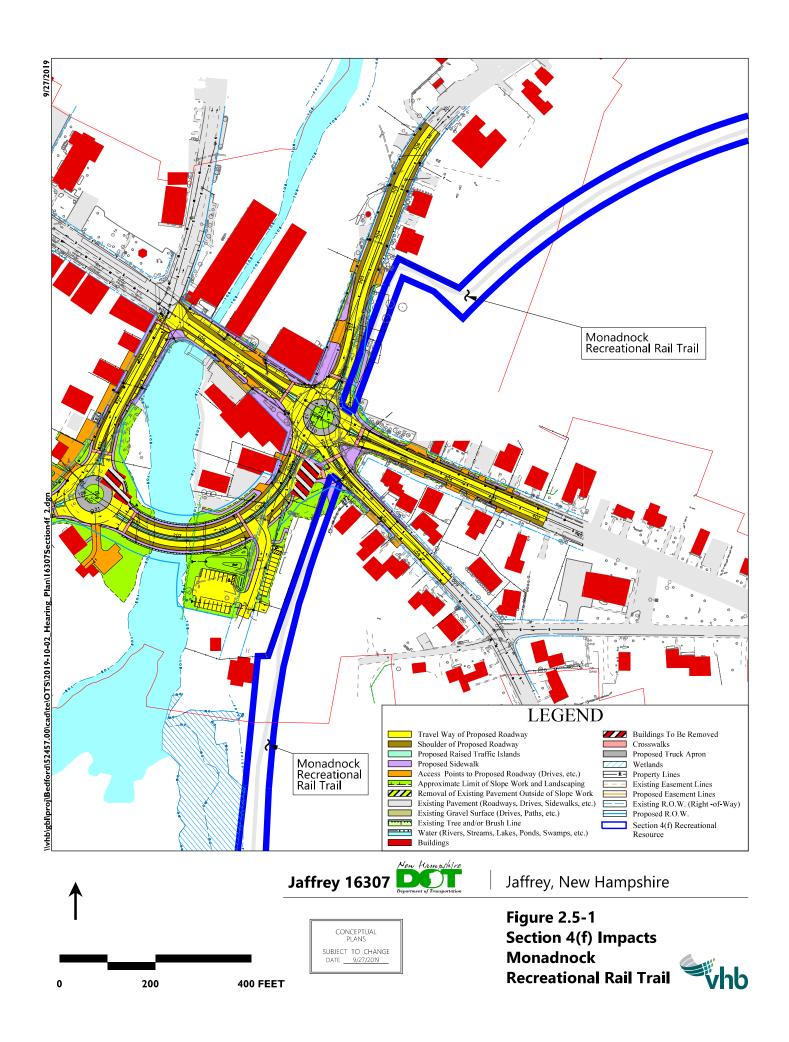


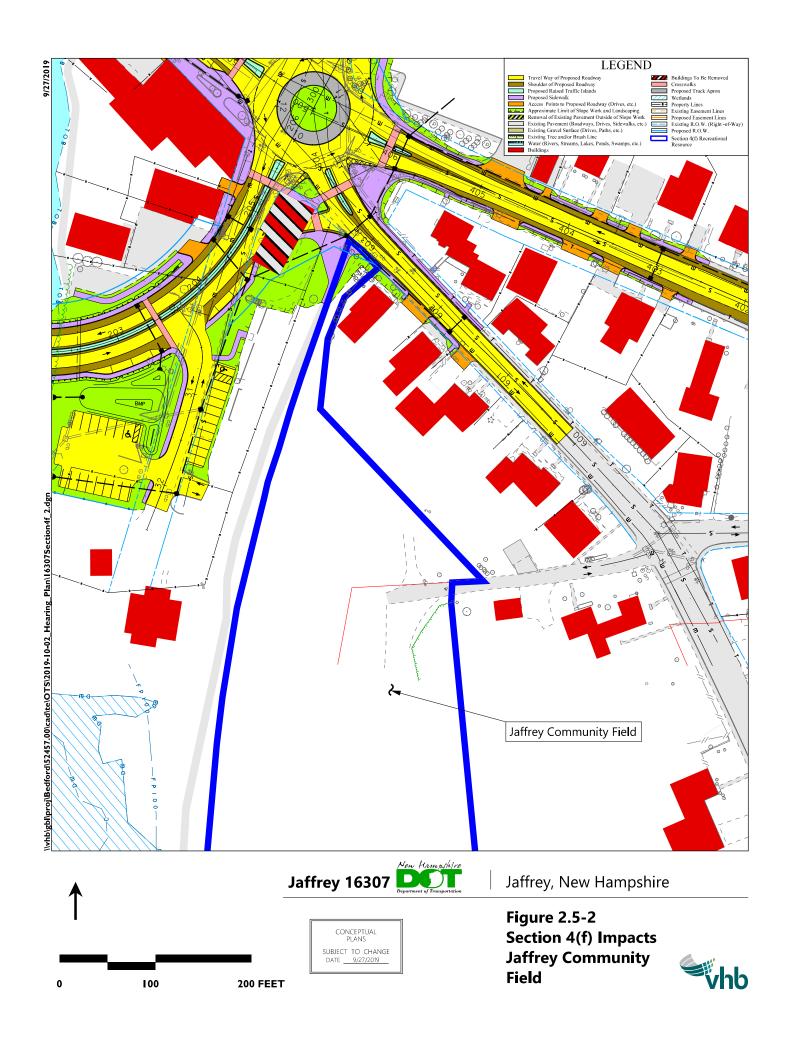
Jaffrey, New Hampshire

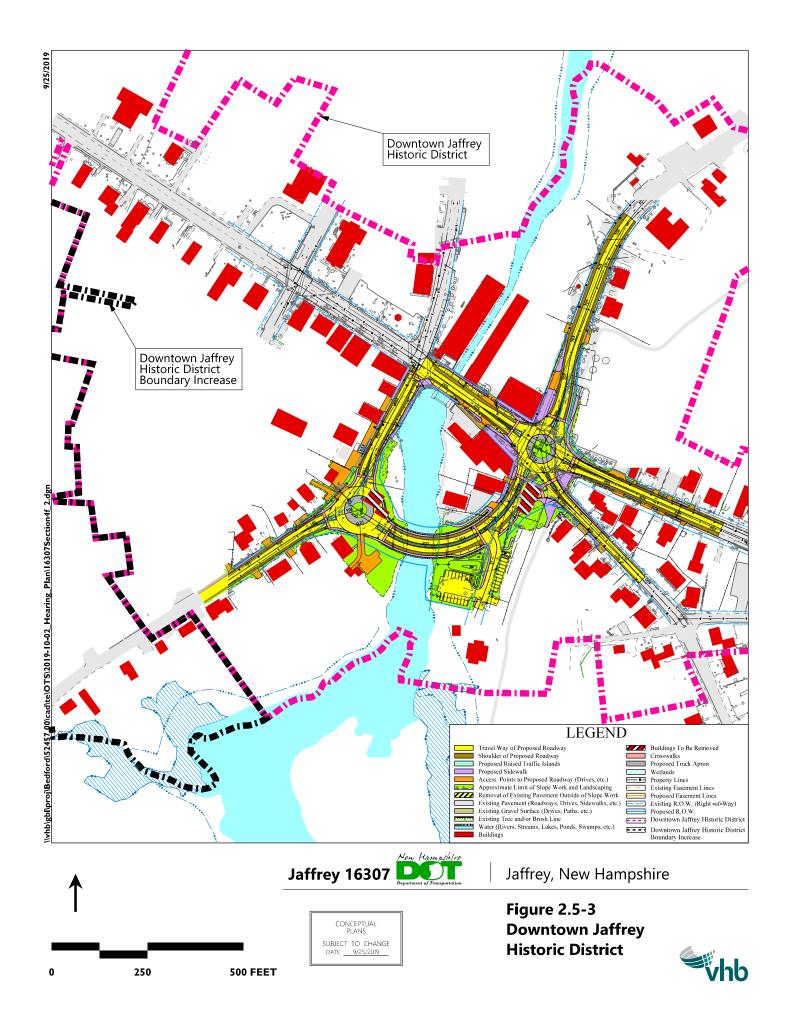


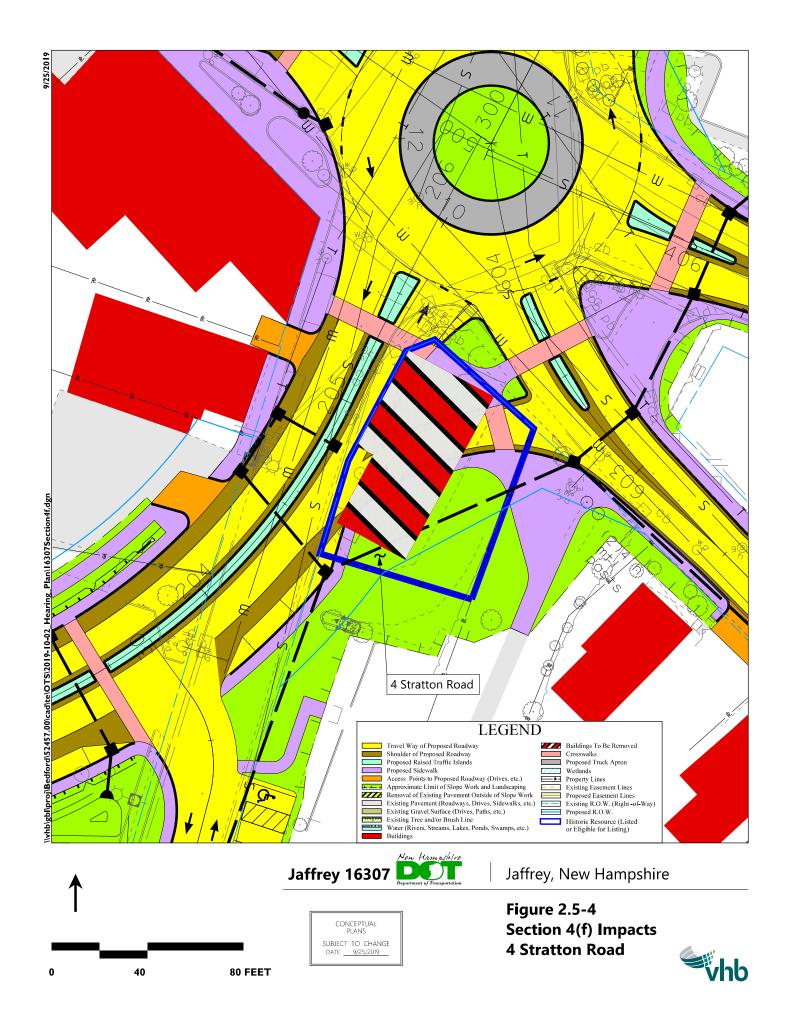
Source: NHGRANIT, VHB

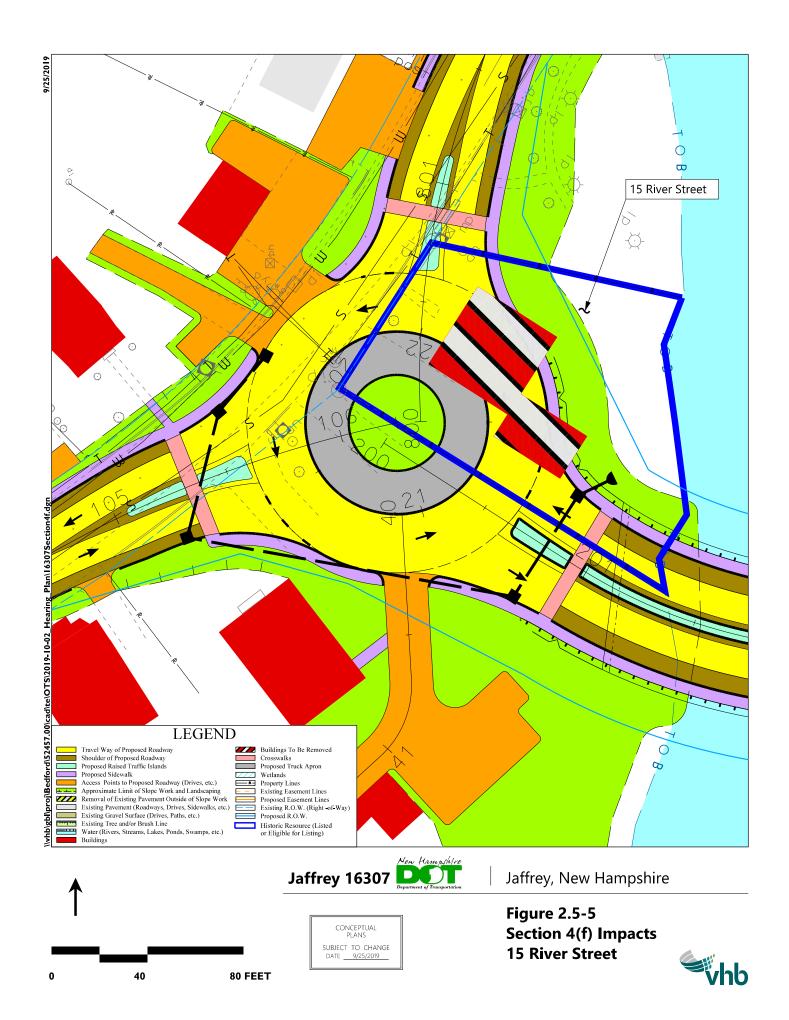


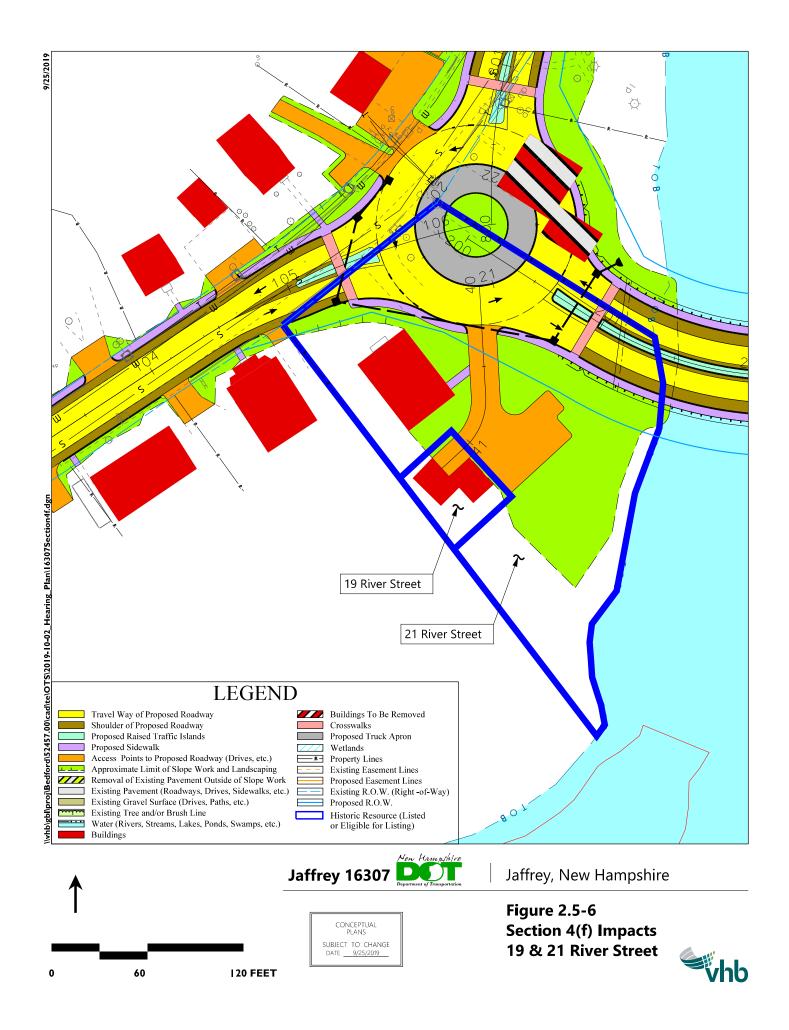


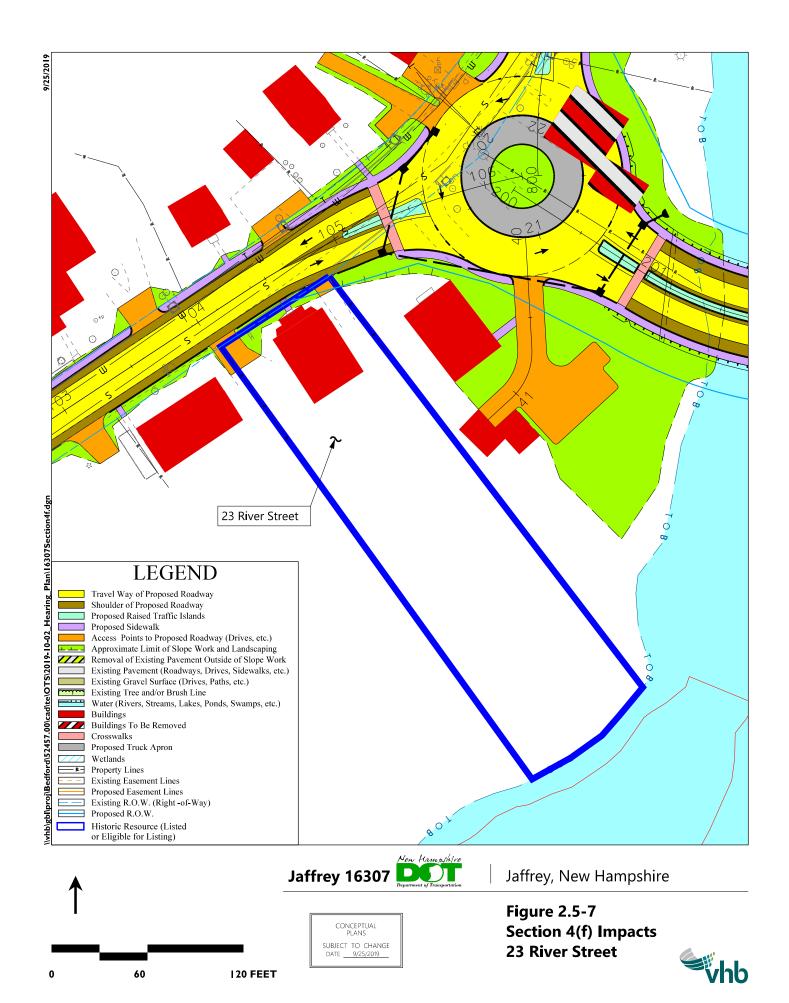


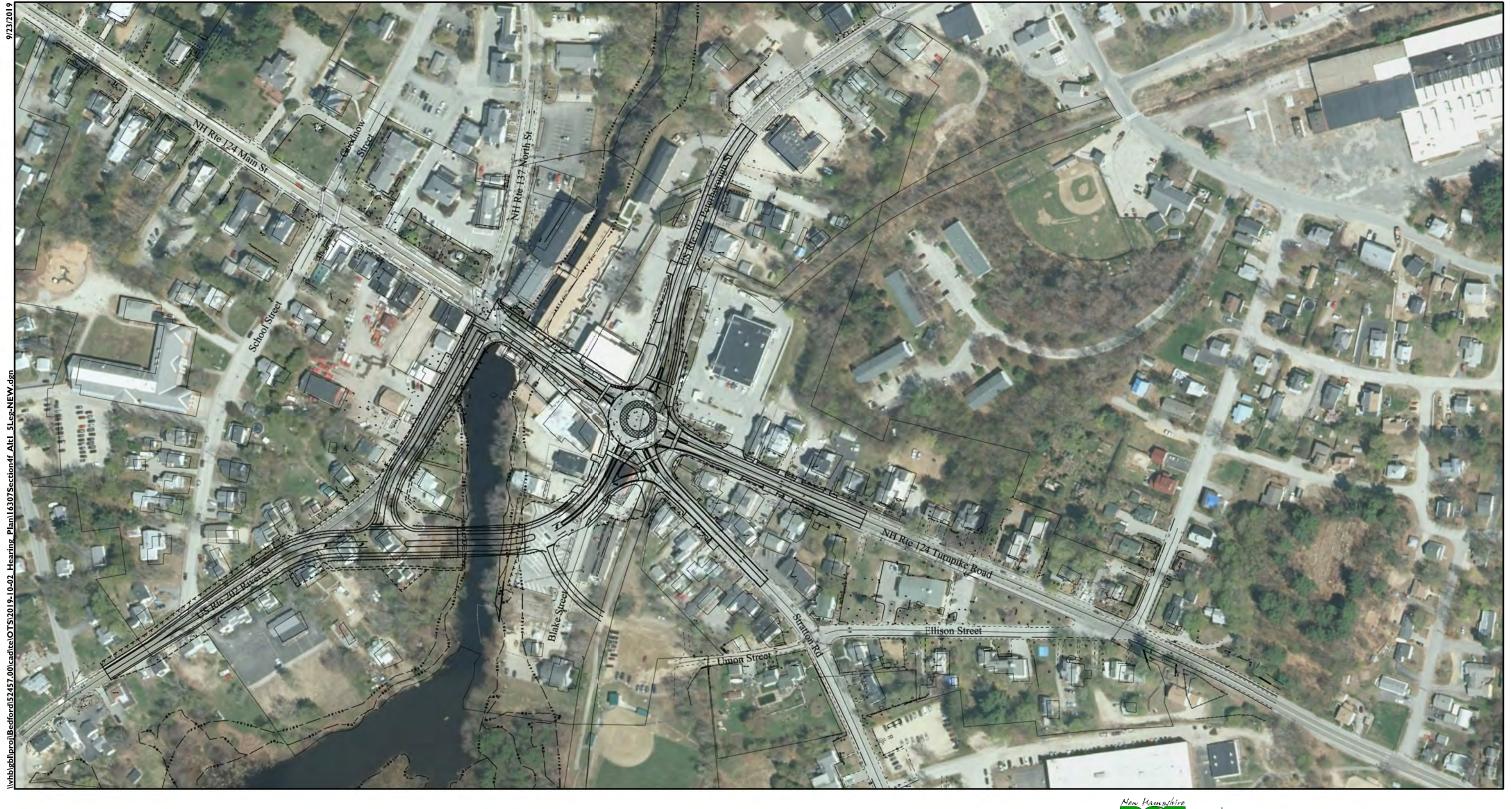


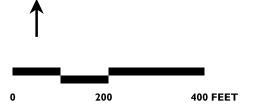














Jaffrey, New Hampshire

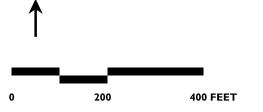
CONCEPTUAL PLANS

SUBJECT TO CHANGE DATE 9/23/2019

Figure 2.6-1
Alignment Alternative 1
T-Intersection







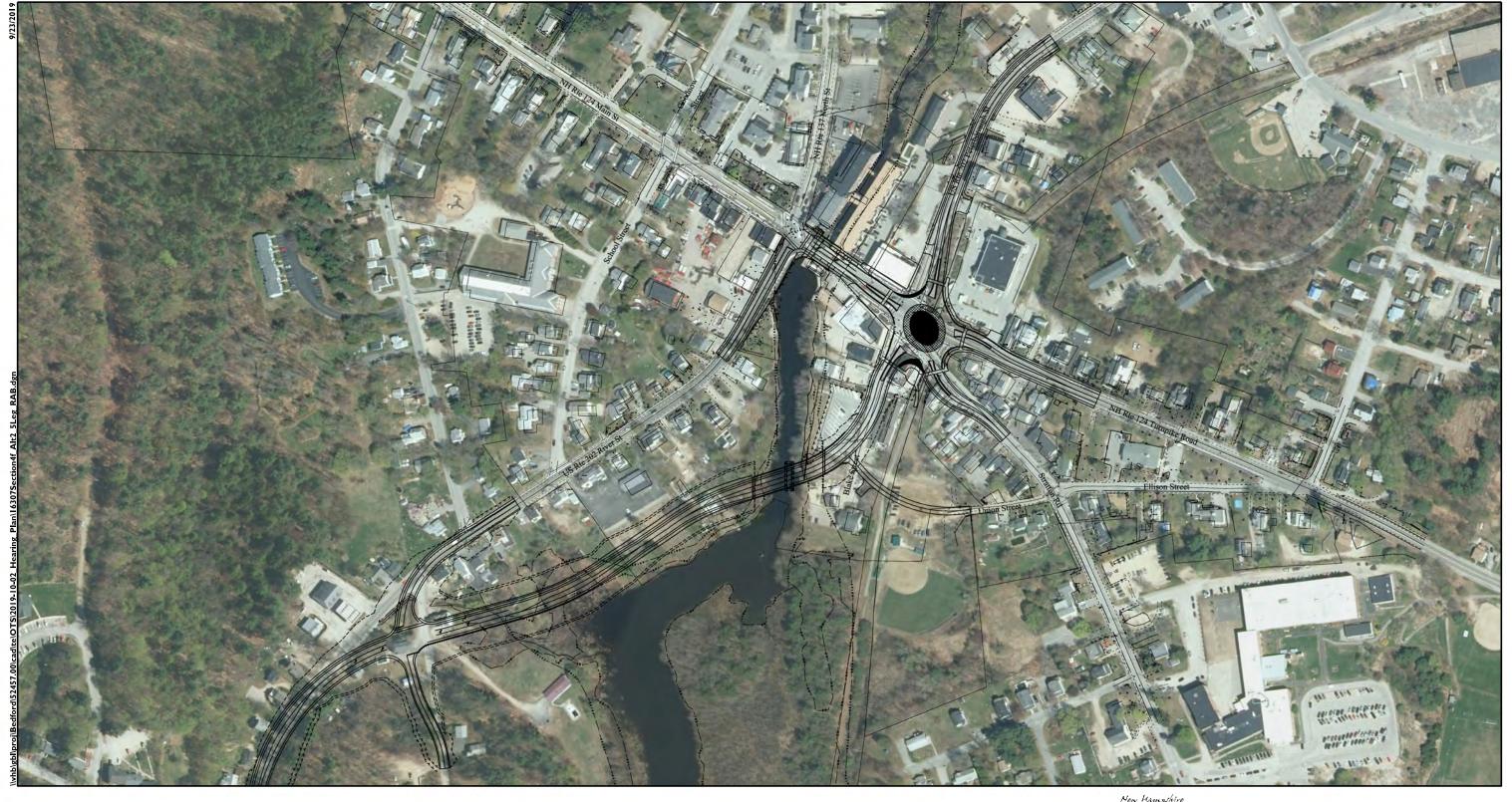


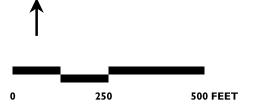
Jaffrey, New Hampshire

CONCEPTUAL PLANS

SUBJECT TO CHANGE DATE 9/23/2019

Figure 2.6-2
Alignment Alternative 1
Roundabout
(Proposed Alignment)







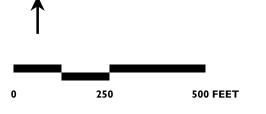
Jaffrey, New Hampshire

Figure 2.6-3 Alignment Alternative 2



CONCEPTUAL PLANS SUBJECT TO CHANGE DATE 9/23/2019







Jaffrey, New Hampshire

Figure 2.6-4 Alignment Alternative 3







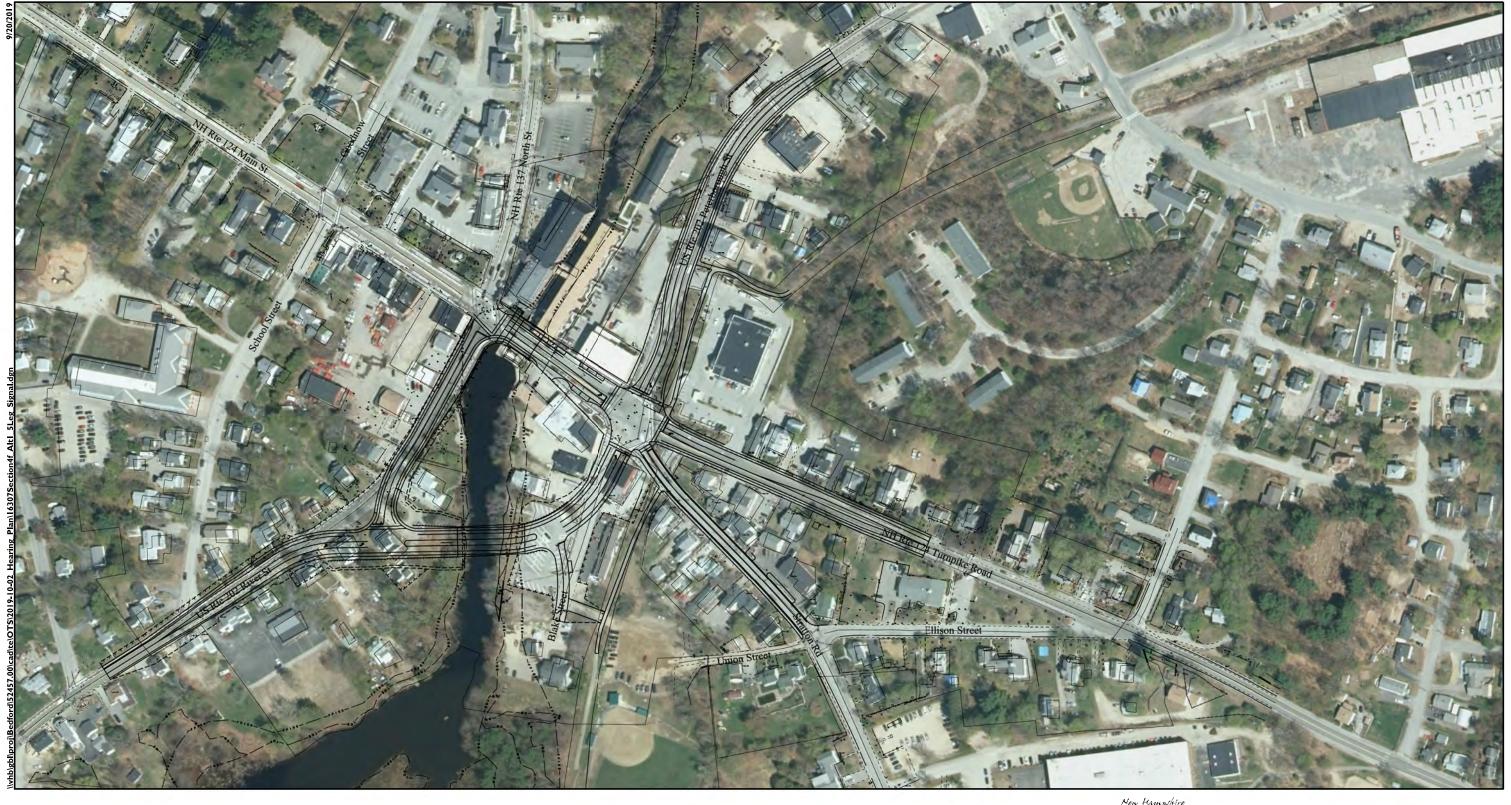


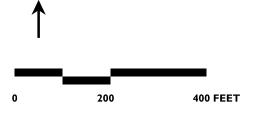
Jaffrey, New Hampshire

CONCEPTUAL PLANS SUBJECT TO CHANGE DATE 9/20/2019

Figure 2.6-5
Four-Way Traffic Signal
Controlled Intersection









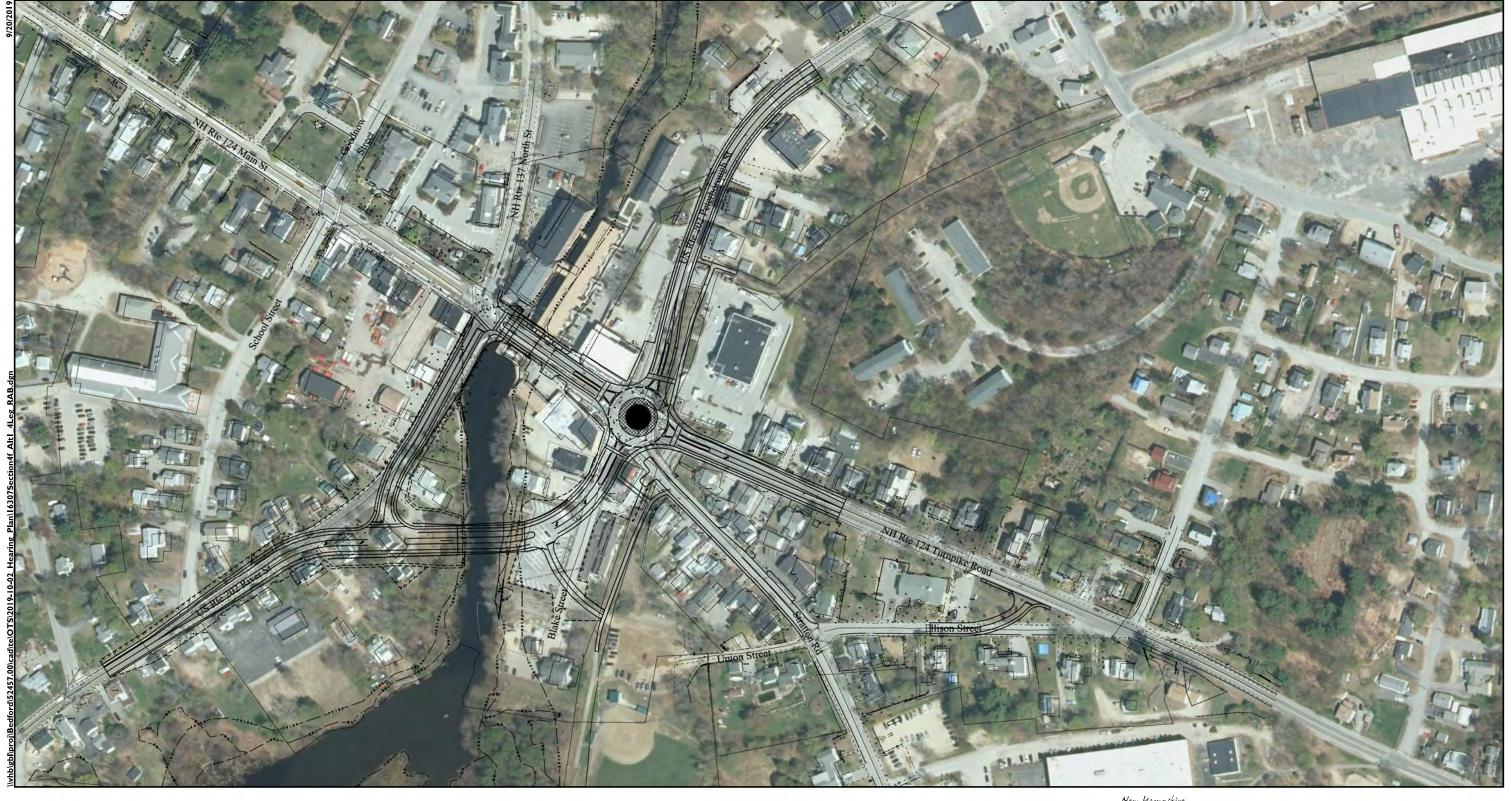
Jaffrey, New Hampshire

CONCEPTUAL PLANS

SUBJECT TO CHANGE DATE 9/20/2019

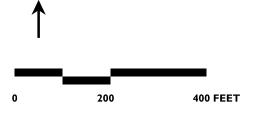
Figure 2.6-6

Five-Way Traffic Signal Controlled Intersection



CONCEPTUAL PLANS

SUBJECT TO CHANGE DATE 9/20/2019



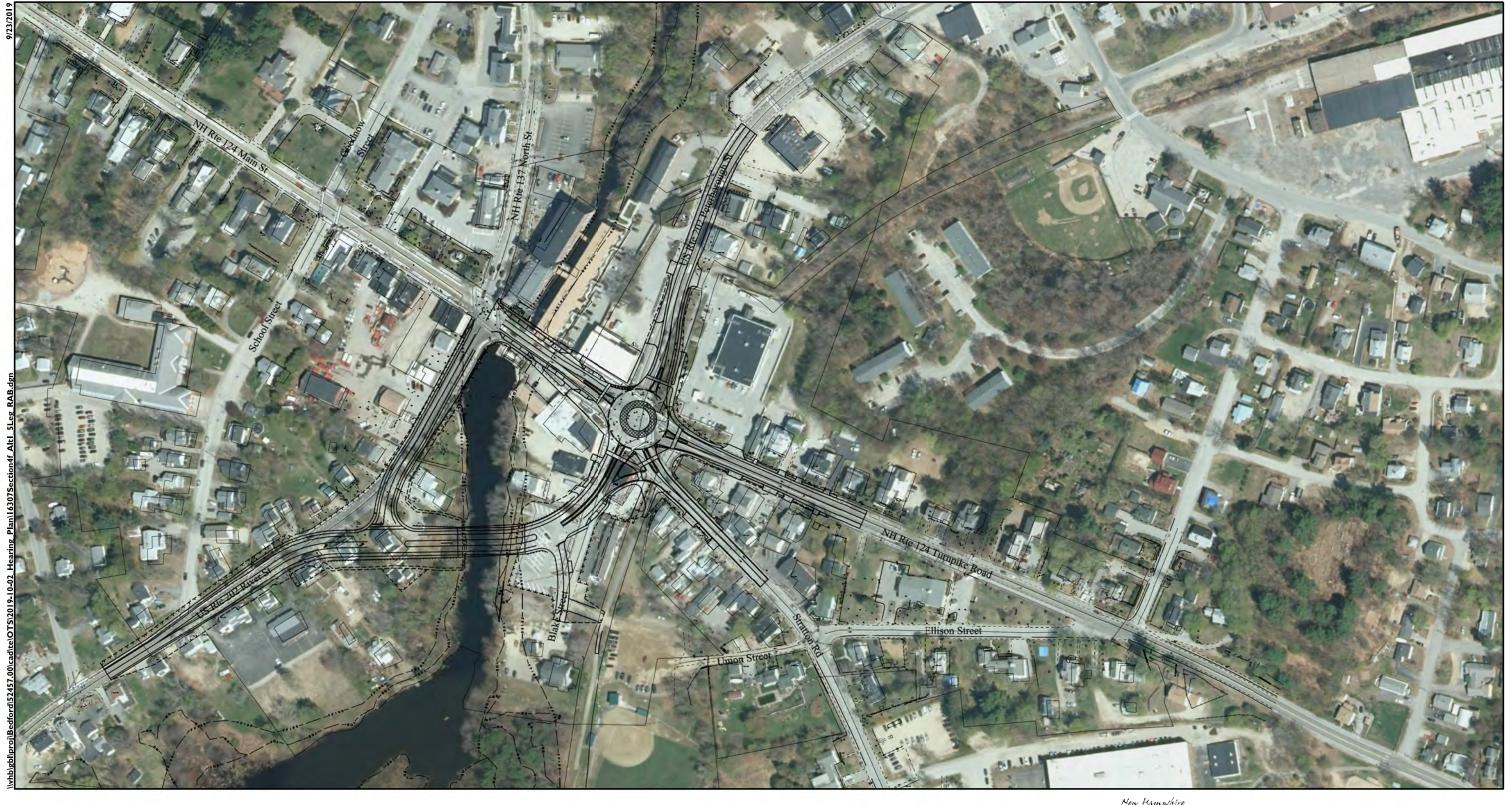
Jaffrey 16307



Jaffrey, New Hampshire

Figure 2.6-7 Four-Way Roundabout









Jaffrey, New Hampshire

CONCEPTUAL PLANS

SUBJECT TO CHANGE DATE 9/23/2019

Figure 2.6-8
Five-Way Roundabout (Proposed Action)



List of Appendices

| Appendix A | Representative Site Photographs |
|------------|---|
| Appendix B | General Plan |
| Appendix C | Alternatives Evaluation |
| Appendix D | Agency Coordination |
| Appendix E | Floodplain Memo |
| Appendix F | Essential Fish Habitat Worksheet |
| Appendix G | Threatened and Endangered Species Correspondence |
| Appendix H | Section 6(f) and Conservation Lands Correspondences |
| Appendix I | Cultural Resource Documentation |
| Appendix J | Contaminated Sites Data |
| Appendix K | Environmental Justice Population Analysis |
| Appendix L | Public Hearing Documentation |

Appendix A – Representative Site Photographs



Photo 1: View south of the existing signal-controlled five-way intersection where a five-way roundabout is proposed. View toward Blake Street (right), Stratton Road (center), and NH 124 (left). The Lab N' Lager restaurant located at 4 Stratton Road (center, red building) is proposed to be removed to make room for the roundabout. 09/20/2018.



Photo 2: View south east along Main Street (US 202/NH 124), looking toward the five-way intersection. 09/20/2018.



Photo 3: View of traffic congestion backing up from the four-way signal-controlled intersection of River Street/Main Street/NH 124/NH 137 into the signal-controlled five-way intersection where the roundabout is proposed to be constructed. 10/10/2017.



Photo 4: View south of the benches located within Bissell Alderman Park. 06/25/2019.



Photo 5: View north of Bissell Alderman Park, located between Peterborough Street and Rite Aid. 06/25/2019.



Photo 6: View east of the octagonal granite watering trough located within Bissell Alderman Park. 06/25/2019.



Photo 7: View southeast of the intersection of Main Street/North Street/River Street. 06/07/2019.



Photo 8: View north from Main Street of Jaffrey Mills, located at the northeast corner of the intersection of Main Street and North Street. 01/19/2018.



Photo 9: View north toward the Main Street Dam. Contoocook River flows south to north under Main Street/NH 202. Jaffrey Mills in center of photo. 09/07/2017.



Photo 10: View south of the Contoocook River from the Main Street bridge. 09/07/2017.



Photo 11: View southwest of the Jaffrey War Memorial Park located along River Street. 06/07/2019.



Photo 12: View south of the Jaffrey War Memorial Park located along River Street. 06/07/2019.



Photo 13: View north from the Jaffrey War Memorial Park toward the Contoocook River and Jaffrey Mills. 05/05/2018.



Photo 14: View northeast of the location of the proposed three-way intersection along River Street. 15 River Street in center of photo. 06/07/2019.



Photo 15: View of apartment building located at 15 River Street, proposed to be removed to make room for the new three-way intersection. 09/20/2018.



Photo 16: View of house located at 21 River Street. The new three-way intersection would be located northeast of the house. 09/20/2018.



Photo 17: View south toward the public parking lot off Blake Street. Contoocook River to right of photo. 09/07/2017.



Photo 18: View northeast of the public parking lot off Blake Street, looking toward Blake Street. 09/07/2017.



Photo 19: View south along the Monadnock Recreational Rail Trail, near trail's crossing of NH 124 (Turnpike Road). 09/20/2018.



Photo 20: View north along the Monadnock Recreational Rail Trail, looking north toward the trail's crossing of NH 124 (Turnpike Road). 09/20/2018.



Photo 21: View east from western bank of Contoocook River looking toward the public parking lot located off Blake Street. This is the general vicinity where the new bridge would be constructed. 09/07/2017.



Photo 22: View south along the western bank of the Contoocook River. This is the general area where the new bridge would be constructed. 09/07/2017.

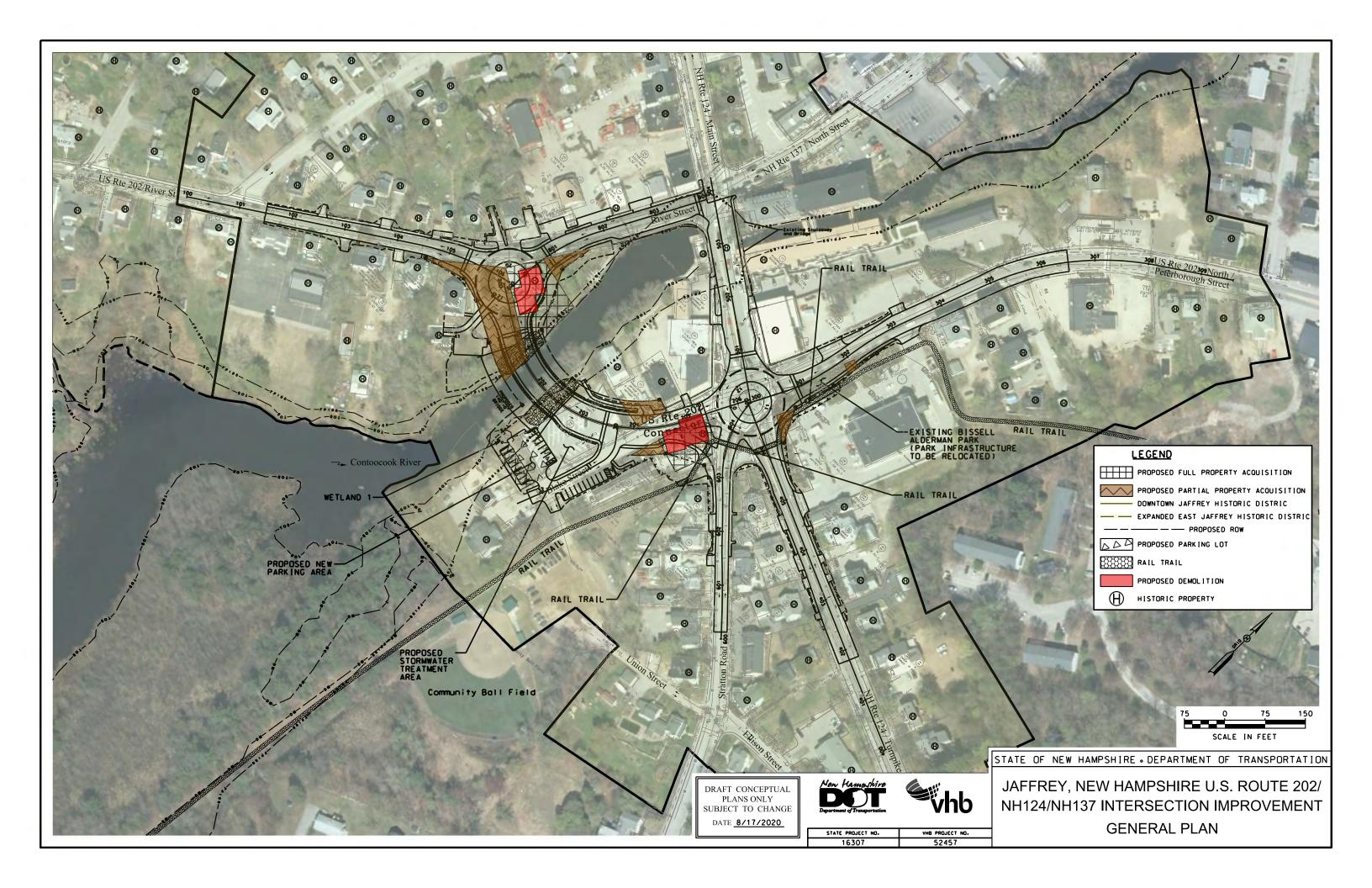


Photo 23: View south within Wetland #1 between public parking lot off Blake Street and apartment building at end of Blake Street. 09/07/2017.



Photo 24: View south of Wetland #1 between the public parking lot off Blake Street and the apartment building at end of Blake Street. 09/07/2017.

Appendix B – General Plan



Appendix C – Alternatives Evaluation



To: Victoria Chase, PE Date: March 21, 2018 Memorandum

Project #: 52457.00

From: Martin Kennedy, PE

Peter Walker

Re: Jaffrey 16307

US 202 Dogleg Intersection Alternatives Screening

To assist in the selection of a proposed action for the Jaffrey 16037 project, we conducted a preliminary impact assessment for the alternatives currently under consideration. This assessment is based on conceptual horizontal and vertical alignments, conceptual limits of pavement, and preliminary conceptual grading. The resulting impacts are therefore approximate and subject to change. They do, however, provide insight into the relative impacts that would result from each alternative. The results are presented in the attached "Alternatives Screening Matrix."

Key findings are summarized below.

US 202 RIVER CROSSING ALIGNMENT ALTERNATIVES

The results of the preliminary screening show that although all three of the alignment alternatives address the project purpose by eliminating the US 202 dogleg configuration, the environmental impacts and costs for Alternatives 2 and 3 are substantially greater than Alternative 1, and therefore suggest that Alternative 1 should be advanced as the proposed action.

- Alternative 1 would have substantially less impact on natural resources than Alternative 2 or Alternative 3, including impacts to:
 - Wetlands (estimated, based on conceptual grading)
 - o Floodplain (area of fill within mapped 100-year floodplain)
 - o Water quality (assessed based on the creation of new impervious surface)
 - o Groundwater resources (aquifers and a mapped Well Head Protection Area)
 - o Tree clearing (indicative of potential impacts to the northern long-eared bat)
- Alternatives 2 and 3 would require impacts in the floodway, because bridges over the Contoocook River at
 these locations would likely require a center pier or multiple piers. Floodway impacts would raise concerns
 under the NHDES stream crossing rules, would trigger the need to develop a detailed hydraulic model in
 support of a Conditional Letter of Map Revision, and would very likely require floodplain compensatory
 mitigation.
- Regarding cultural resources:
 - All three alternative alignments would impact areas identified by our subconsultant IAC as being archaeological sensitive. However, Alternative 1 would have substantially less impact than Alternatives 2 or 3.
 - Alternatives 1 and 2 involve demolition of three structures on properties that are identified as contributing elements to the East Jaffrey Historic District; Alternative 3 impacts two such contributing elements
- All three alternatives would have right-of-way impacts. Based on the conceptual plans, Alternative 2 would have direct impact to 17 or more parcels. Alternative 1 would impact at least 10 parcels, and Alternative 3

Ref: Jaffrey 16307 March 21, 2018 Page 2

would impact at least 7 properties. These impacts are preliminary counts – they are based on conceptual alignments, in the absence of right-of-way plans.

- Alternative 3 directly impacts a property owned by the Town of Jaffrey (Tax Map 239 Lot 225). This parcel was acquired with Land and Water Conservation Funds (LWCF), and therefore any impacts to this parcel are regulated under Section 6(f) of the LWCF Act. This represents a critical constraint, since LWCF regulations would require full replacement by a property of similar value.
- The estimated preliminary construction costs for Alternatives 2 and 3 (\$9.4 M and \$14.8 M, respectively) are substantially more than the estimated preliminary construction cost for Alternative 1 (\$4.8 M).

INTERSECTION ALTERNATIVES

Separate from the decision on the "proposed action" for the new river crossing, a decision needs to be made as to the preferred traffic control at the Main St./Peterborough St./Turnpike Rd./Stratton Rd./Blake St. intersection. From a traffic operations perspective, acceptable operations can be attained with either the traffic signal control option or the roundabout option and in either case, operations would be improved over existing conditions.

Closing the Stratton Road connection to the intersection would provide additional efficiency by converting the 5-leg intersection to a more standard 4-leg intersection. Closing Stratton Road, however, would require another connection from Stratton Road to Turnpike Road. If the decision is to pursue the closing of Stratton Road, additional impacts and costs would result. These additional costs and impacts have not been quantified at this point.

Except for the 5-leg roundabout option, which would involve a higher number of property impacts, the impacts for all four intersection alternatives are similar. The 5-leg roundabout alternative would require the demolition of three structures, two of which are contributing elements to the East Jaffrey Historic District. The other intersection alternatives involve the demolition of one structure (the Lab and Lager), which is also a contributing property to the Historic District. Additionally, the 5-leg roundabout alterative would impact at least 12 parcels, whereas the other three alternatives only impact seven to eight parcels.

The estimated preliminary construction costs for each of the intersection alternatives are similar ranging from \$1.9 M to \$2.4 M.

Because the operations, costs, and impacts, again except for the 5-leg roundabout, are similar, the Department should look to Town officials for guidance as to which type of intersection traffic control they would prefer.

SUMMARY

In summary, the results of our preliminary screening of impacts and costs suggest that Alternative 1 (the new river crossing located closest to Main Street) be advanced as the proposed action. The Department should look to the Town for input on their preference as to the configuration and type of traffic control to be put in place at the Main St./Peterborough St./Turnpike Rd./Stratton Rd./Blake St. intersection.

Jaffrey 16307

Project Purpose: The purpose of the project is to address the traffic congestion and safety related deficiencies associated with the current configuration of the US 202 dogleg intersections of Main Street with Peterborough Street and Main Street with River Street while enhancing pedestrian mobility and supporting the quality of life and the economic vitality of Jaffrey's downtown.

Alternatives Screening Matrix

| | | No Build Alignment Alternatives | | | Intersection Alternatives | | | | |
|--|---|---------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|---|---|---|--|
| | | | Alt 1 | Alt 2 | Alt 3 | Five-Leg Signal | Four-Leg Signal | Five-Leg Roundabout | Four-Leg Roundabout |
| Meets Project Purpose? | | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Construction Cost (2018 Dollars) | | | \$4.8 M | \$9.4 M | \$14.8 M | \$2.4 M | \$2.4 M | \$ 2.1 M | \$1.9 M |
| Impacts | Metric | | | | • | | | • | |
| | Wetland Impact (acres) | 0 | 0.0 | 0.9 | 1.2 | 0 | 0 | 0 | 0 |
| Wetlands | Contoocook River Bank Impacts (lin ft) | 0 | 15 | 292 | 38 | 0 | 0 | 0 | 0 |
| | Other Stream Impacts (lin ft) | 0 | 0 | 393 | 392 | 0 | 0 | 0 | 0 |
| Water Quality | New Impervious Surface (acres) | 0 | 0.5 | 2.0 | 2.0 | 0.2 | 0.3 | 0.2 | 0.2 |
| Flooduloin | 100-year Floodplain Fill (acres) | 0 | 0.0 | 0.9 | 1.3 | 0 | 0 | 0 | 0 |
| Floodplain | Floodway Impacts? | No | No | Yes | Yes | No | No | No | No |
| Groundwater Resources | New Impervious Surface - Stratified Drift (acres) | 0 | 0.3 | 0.5 | 0.7 | 0.3 | 0.4 | 0.3 | 0.3 |
| | New Impervious Surface - WHPA (acres) | 0 | 0.0 | 0.1 | 0.4 | 0.0 | 0.1 | 0.0 | 0.1 |
| Threatened and Endangered Species/Habitat | Tree Clearing -Potential NLEB Impact (acres) | 0 | 0.1 | 1.8 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | # State-Listed Populations Potentially Impacted | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Public Parks & Recreation | LWCF Property Impacts (acres) | 0 | 0 | 0 | 1.1 (Community Park) | 0 | 0 | 0 | 0 |
| | # of Recreation Sites Impacted | 0 | 0 | 0 | 1 (Community Park) | 2 (Jaffrey War Memorial Park; Bissell Alderman Park) | 2 (Jaffrey War Memorial Park; Bissell Alderman Park) | 2 (Jaffrey War Memorial Park; Bissell Alderman Park) | 2 (Jaffrey War Memoria Park; Bissell Alderman Park) |
| Disht of War | # of Parcels Impacted (Full or Partial) | 0 | 10 | 17 | 7 | 8 | 8 | 12 | 7 |
| Right-of-Way | Structure Impacts | 0 | 4 - Residential 0 - Commercial | 8 - Residential 0 - Commercial | 6 - Residential 0 - Commercial | 0 - Residential 1 - Commercial | 0 - Residential 1 - Commercial | 2 - Residential 1 - Commercial | 0 - Residential 1 - Commercial |
| Cultural Resources | # of Known Individually- Eligible Historic Properties Directly Affected | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | # of Contributing Elements Directly Affected | 0 | 3 | 3 | 2 | 1 | 1 | 2 | 1 |
| | Archaeologically-Sensitive Area (acres) | 0 | 0.3 | 3.1 | 2.0 | 0.1 | 0.1 | 0.1 | 0.1 |

Appendix D – Agency Coordination

Matras, Lindsay

From: Walker, Steve <Steve.Walker@osi.nh.gov>
Sent: Monday, October 02, 2017 2:40 PM

To: Matras, Lindsay **Subject:** RE: Request for Review

Hi Lindsay, There are no LCIP properties in the project area. Thanks Steve

From: Matras, Lindsay [mailto:lmatras@vhb.com]

Sent: Monday, October 2, 2017 1:46 PM

To: Walker, Steve

Cc: Walker, Peter; Laurin, Marc; Kennedy, Marty; Chase, Victoria

Subject: Request for Review

Hello Mr. Walker,

Please see the attached letter requesting information regarding any Conservation Land Stewardship (CLS) properties or Land Conservation Investment Program (LCIP) properties located within the vicinity of the described proposed project. Any information provided by your office will be used for planning purposes and future permitting efforts for the described project.

Thank you for your assistance,

Lindsay Matras, WSA

Environmental Scientist



2 Bedford Farms Drive Suite 200 Bedford, NH 03110-6532 **P** 603.391.3916 | **F** 603.518.7495 Imatras@vhb.com

Engineers | Scientists | Planners | Designers www.vhb.com

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Vanasse Hangen Brustlin, Inc. | info@vhb.com

Matras, Lindsay

From: Tim Murphy <tmurphy@swrpc.org>
Sent: Friday, October 06, 2017 12:18 PM

To: Walker, Peter

Cc: Matras, Lindsay; vchase@dot.state.nh.us; 'J.B.Mack'

Subject: Jaffrey 16307

Dear Peter,

Thank you for your correspondence date 10/2/17 regarding the NEPA environmental study for the above-referenced project. We will conduct internal coordination in our consideration of providing feedback for this effort. As an initial question, can you provide a sense of the timeframe in which feedback will be most useful?

Best Regards,

Tim

Tim Murphy, Executive Director Southwest Region Planning Commission 37 Ashuelot Street Keene, NH 03431 (603) 357-0557



Town of Jaffrey

10 Goodnow Street Jaffrey, NH 03452 Telephone (603) 532-7880 Fax (603) 532-7862

Select Board

Franklin W. Sterling, Jr., Chair James A. Weimann Bonnie Mitchell

www.townofjaffrey.com

March 27, 2018

Victoria Chase
NH Department of Transportation
John O. Morton Building
PO Box 483
7 Hazen Drive
Concord, NH 03302-0483

Dear Ms. Chase:

The Jaffrey Select Board, during its March 26, 2018 meeting, met with Marty Kennedy of VHB and you to review options for the Route 202 traffic project. The Board was presented three options for river crossings and four options for intersection traffic control. Following review, the Board consensus was to pursue the river crossing closest to the downtown with a 5-way intersection controlled by a smaller roundabout.

We thank you for your assistance on this project and look forward to working with you in the future.

Sincerely,

Jaffrey Select Board

Iamas A. Waiman

Bonnie Mitchell

Matras, Lindsay

From: Walker, Peter

Sent: Saturday, November 18, 2017 11:36 AM

To: Matras, Lindsay

Cc: mlaurin@dot.state.nh.us

Subject: FW: Intersection Improvements Project, Jaffrey, New Hampshire

FYI

Peter J. Walker

Principal, Environmental Services

P 603.391.3942 www.vhb.com

From: Dykstra, Eliese [mailto:eliese_dykstra@fws.gov]

Sent: Friday, November 17, 2017 2:34 PM **To:** Walker, Peter <PWalker@VHB.com>

Subject: Re: Intersection Improvements Project, Jaffrey, New Hampshire

Dear Mr. Walker,

Thank you for reaching out to us regarding the Intersection Improvement Project in Jaffrey, NH. We have no comments at this time.

Later in the project planning and design process, you can visit IPaC (https://ecos.fws.gov/ipac/) for a species list and make any determinations for listed species under the Endangered Species Act. Please let us know if you have any questions regarding IPaC or the consultation process.

Sincerely, Eliese

--

Eliese Dykstra
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301

Phone: 603-227-6427

Email: eliese_dykstra@fws.gov



Southwest Region Planning Commission

37 Ashuelot Street,

Keene, NH 03431

603-357-0557 Voice

603-357-7440 Fax

January 24, 2018

Peter J. Walker, Principal, Environmental Services VHB 2 Bedford Farms Drive, Suite 200 Bedford, NH 03110

Re: Jaffrey 16307 / X-A001(234)

US 202 / NH 124 / NH 137 Intersection Improvements Project, Jaffrey, New Hampshire

NEPA Environmental Study

Dear Mr. Walker:

Thank for the opportunity to provide input to the environmental review process relative to Jaffrey project #16307. Our input includes information from planning and policy documents as well as information and data which may be of value to conducting the environmental study.

Citations from various policy documents can be reviewed in Attachment 1 included with this correspondence. You will note links available for each policy document referenced. In reviewing these documents, you may find useful information beyond that which is specified in Attachment 1. Feel free to make use of such information as you see fit.

More specific data sources are described in Attachment 2. This directory of data sources is organized roughly by category as listed in your correspondence dated October 2, 2017. You will find links available to access the specific data.

Finally, a listing of additional studies, plans, and other resources which may be relevant to your work can be found in Attachment 3. Several of these resources are referenced more specifically in Attachment 1. However, Attachment 3 also includes additional resources that may be available from the Town of Jaffrey, SWRPC or other sources.

If you feel it would be helpful to meet with SWRPC staff, please let us know. Also, for specific questions you may have regarding the information contained in this submittal, please contact J.B. Mack jbmack@swrpc.org or Henry Underwood hunderwood@swrpc.org – or feel free to call the office.

Sincerely,

Tim Murphy

Executive Director

tron Murphy

 $\label{lem:c:sws} $$C:\Users\\ensuremath{\content.Outlook\Q66WC1EC\pwalker_vhb_swrpcingut_012418_docx}$$$

Applicable Citations from Various Policy Documents

Monadnock Region Future - The Regional Plan for Southwest New Hampshire (2015) http://swrpc.org/files/MonadnockRegionFuture_RegionalPlan_FINAL.pdf

Economic Prosperity

Maintain Adequate Infrastructure:

- High performing and reliable infrastructure is a vital component of a robust regional economy.
 Without functioning roads and bridges, businesses would be unable to transport materials to markets,
 employees would not be able to travel to and from work, and consumers would be less able to
 purchase goods. (p. 43)
- Mobility is one of the most fundamental and important characteristics of economic activity as it satisfies the basic need of going from one location to another a need shared by passengers, freight and information. (p. 43)
- Identify and advocate for community transportation needs and pursue funding solutions which may include the New Hampshire Ten Year Transportation Improvement Plan, federal funding programs, vehicle registration fees, etc. (p. 48)

Stewardship

In the Monadnock Region . . .

- We are fortunate to have abundant natural resources and well preserved historic features. However, these assets should not be taken for granted. (p. 50)
- If our resources were to disappear or degrade, much of what is valued about the Region would be threatened. There would also be significant impacts on public health and the regional economy. For these reasons and many others, it is important to care for and protect our natural and cultural resources to ensure that future generations can experience the same benefits from them as we do today. (p. 50)

Protect & Conserve Important Resources:

• Some Resources need to be protected from certain human development activities in order to maintain their integrity, ecological function, and/or cultural values. Inventories and monitoring can help identify which resources or areas in the Region are most sensitive or vulnerable to these activities, and which warrant protection. (p. 56)

Promote Use of Best Management Practices:

• Best Management Practices (BMPs) are techniques and strategies that have been proven effective at reducing or preventing the pollution or impairment of natural resources. (p. 59)

 $Z: Transportation \ VPWP\ 2018-2019\ 200_Policy \& Planning\ 202_Land Use \& Environ\ Jaffrey\ 16307\ NEPA\ Documentation\ pwalker_vhb_swrpc\ input_012418.docx$

Implementation

- Goal 2: A competitive and prospering regional economy will create diverse opportunities for current and future residents and workers.
 - Objective 2c: Maintain high quality infrastructure that will safely and reliably connect people with and provide convenient access to employment, goods, services, and other resources within and outside the Region. (p. 81)
- Goal 3: The Region's natural, historic, and cultural resources will be cared for and protected for the use and enjoyment of present and future generations.
 - Objective 3b: Preserve and protect the integrity and availability of important resources through conservation, regulation and the use of best management practices.
 - Objective 3c: Manage natural, cultural and historic resources through planning and collaboration among communities, organizations, and landowners in the Region. (p. 81)

Comprehensive Economic Development Strategy for Southwest New Hampshire - The Region's CEDS (2015)

http://swrpc.org/files/CEDS_2015_Final.pdf

• Vision:

Private and public activity will foster equally economic enterprise, environmental protection, and conservation of our cultural heritage – not seeking to transform the landscape, but preserve our greatest assets. (p. viii)

- Goal B: Prepare for future development
 - Objective: Support a quality transportation system, both regionally and locally, to provide capacity for economic development.
 - ✓ Task: In collaboration with NHDOT and other entities, support a system of diverse transportation modes by incorporating sidewalks and bicycle lanes in street and highway design, as well as by developing a regional public transportation system.
 - ✓ Task: In collaboration with NHDOT and other entities, improve road conditions and access management to support safe and efficient movement of people and goods. (p. x)

Southwest Connects: Southwest Region Transportation Plan 2014-2035 (2015)

http://www.swrpc.org/files/data/trans/TransportationPlan/Southwest%20Connects%20Southwest%20Region%20Transportation%20Plan%20FINAL RTIPUpdate 121316 0.pdf

- Regional Transportation Improvement Plan (pp. 7-14)
 - Note project #16307 (p. 9)

 $Z: Transportation \ VPWP\ 2018-2019\ 200_Policy \& Planning\ 202_Land Use \& Environ\ Vaffrey\ 16307\ NEPA\ Documentation\ pwalker_vhb_swrpc\ input_012418.docx$

- Various Goals and Objectives (pp. 5-6)
- U.S. 202 South Corridor (pp. 124-136)
 - The Jaffrey dog-leg area in downtown Jaffrey remains a significant challenge for this corridor. The intersection has a number of issues including high delays at traffic lights, limited maneuverability for trucks negotiating the intersections, extra wide streets making it difficult for pedestrian crossings, a lack of parking, confusing routing, and other concerns. (p. 124).

Southwest New Hampshire Natural Resources Plan (2014)

http://swrpc.org/files/Southwest%20New%20Hampshire%20Natural%20Resources%20Plan%20FINAL.pdf

• Water Resources: This section of the plan discusses the impacts of impervious surface and the need to implement best management practices. (pp. 20-22)

Contoocook and North Branch Rivers Corridor Management Plan (2011)

 $\frac{https://www.des.nh.gov/organization/divisions/water/wmb/rivers/documents/management_plan_contoocoooloo.pdf}{ok.pdf}$

- Executive Summary Plan Goals
 - Goal 1: Protect water quality and quantity for current and future uses.
 - Goal 2: Maintain proper stream channel integrity to ensure high water quality, stable flow patterns, and intact riparian habitat.
 - Goal 3: Identify, remove, minimize, and prevent the spread of invasive plant species along the rivers.
 - Goal 4: Preserve and enhance wildlife habitat dependent upon the river so as to support present and future wildlife populations.
 - Goal 5: Maintain and encourage safe and responsible public access and use of the rivers' resources.
 - Goal 6: Minimize impacts of development within the river corridor.
 - Goal 7: Protect and preserve important historical and cultural resources.
 - Goal 8: Implement a workable River Corridor Management Plan. (p. vi)
- Strategies
 - Coordination among CNBRLAC, local boards, regional planning commissions, NHDES, and other State agencies.

- **Educational outreach efforts** to advocate for improved stewardship of the river with regard to issues such as habitat protection, stormwater runoff, litter, invasive species, and impacts of various land uses on water quality.
- **Engagement with riverfront and other watershed communities** to involve as many stakeholders as possible in protection and management efforts. (p. vi)

Various

- The Contoocook River watershed provides a host of resources for its human and non-human inhabitants. The Contoocook and North Branch rivers have been recognized for their outstanding natural and cultural resources under the New Hampshire Department of Environmental Services' (NHDES) Rivers Management and Protection Program (RMPP). These rivers provide water resources for the communities they pass through, aquatic and riparian habitat for numerous plant and animal species, recreational opportunities, and a variety of river-oriented land uses. Because the rivers have been important travel and settlement corridors over the centuries, many historic and cultural resources can also be found along their banks. (p.11)
- The Jaffrey Natural Resource Inventory (2009) identifies the Jaffrey downtown from Contoocook Lake to Cheshire Pond and to the Mountain Brook Reservoir as one of the top five conservation priorities. (p. 27)
- Land Use and Development Goal: Minimize impacts of development within the river corridor. (p. 42)
- Objective 20. Project Review: Work with local Planning Boards, Conservation Commissions, and regulatory agencies in the continued review of projects relating to development within the river corridor. (p. 47)

Specific Data Sources

| Theme | Subtheme | Source | Format(s) | Visit/Contact |
|---------------|-------------------|---------------------|---------------|-------------------------|
| Land Use | | Town of Jaffrey | ✓ GIS | Town of Jaffrey |
| | | Assessing | ✓ Tabular | Assessing |
| | | Department; NH | | Department; NH |
| | | Parcel Mosaic | | GRANIT ; Jaffrey |
| | | Project; Jaffrey | | Master Plan |
| | | Master Plan | | |
| Farm Land | Farms | Town of Jaffrey | Unknown | Town of Jaffrey |
| | | Assessing | | Assessing |
| | | Department | | <u>Department</u> |
| Farm Land | Prime Farm Land | United States | ✓ Interactive | Web Soil Survey |
| | Soils | Department of | ✓ GIS | |
| | | Agriculture Natural | ✓ Tabular | |
| | | Resources | | |
| | | Conservation | | |
| | | Service Cheshire | | |
| | | County Soil Survey | | |
| Protected | Conservation Land | NH GRANIT | ✓ Interactive | NH GRANIT; |
| Properties | | Conservation Land | ✓ GIS | GRANITView |
| | | Basemap | | |
| Protected | Additional | Town of Jaffrey | Unknown | Town of Jaffrey |
| Properties | Conservation Land | | | Conservation |
| | | | | Commission |
| Floodplains | Special Flood | Federal Emergency | ✓ Interactive | FEMA Flood Map |
| | Hazard Areas | Management | ✓ GIS | Service Center |
| | | Agency Flood | | |
| | | Insurance Rate Map | | |
| Water Quality | Impaired Waters | New Hampshire | Unknown | NH DES Surface |
| | (Section 303(d) | Department of | | Water Quality |
| | List) | Environmental | | Assessment |
| | | Services Surface | | Program; NHDES |
| | | Water Quality | | GIS; Accessing |
| | | Assessment | | Mapping Layers for |
| | | Program | | the Draft 2016 |
| | | | | 303(D) List |
| Wetlands | | U.S. Fish & | ✓ Interactive | U.S. Fish & |
| | | Wildlife Service | ✓ GIS | Wildlife Service |
| | | National Wetlands | | National Wetlands |
| | | Inventory (Version | | <u>Inventory</u> |
| | | 2 and/or NWI-Plus) | | |

| Theme | Subtheme | Source | Fo | rmat(s) | Visit/Contact |
|---|--|--|-------------|-------------------------------|--|
| Surface Water | | United States Geological Survey National Hydrography Dataset (NHDPlus High Resolution Beta and/or NHD High Resolution) | ✓ ✓ | Interactive GIS | NHDPlus High Resolution; National Hydrography Dataset |
| Surface Water | Dams | New Hampshire Department of Environmental Services Dam Bureau | √ ✓ | Interactive GIS | New Hampshire Department of Environmental Services Dam Bureau |
| Threatened and Endangered Species | | New Hampshire Division of Forests and Lands Natural Heritage Bureau | ✓ | GIS | Natural Heritage Bureau; Natural Heritage Bureau Datacheck Tool |
| Socioeconomic Conditions | Employers and employment by Census Block | U.S. Census Bureau OnTheMap | ✓ ✓ | Interactive Tabular | U.S. Census Bureau OnTheMap; U.S. Census Bureau Census Business Builder Regional Analyst |
| Socioeconomic Conditions | NH Social Vulnerability Index | New Hampshire Department of Health and Human Services | ✓ | Interactive | NH Social Vulnerability Index |
| Socioeconomic Conditions | Housing and Transportation Affordability | Center for Neighborhood Technologies H+T Index | √ √ | Interactive GIS | Center for Neighborhood Technologies H+T Index |
| Socioeconomic Conditions | Income, Poverty Rate, Educational Attainment | U.S. Census Bureau | ✓ ✓ ✓ | Interactive GIS Tabular | U.S. Census Bureau American Factfinder |
| Socioeconomic Conditions | Labor Force, Employment, Unemployment, and Unemployment Rates | New Hampshire Employment Security | √ | Tabular | New Hampshire Employment Security Economic and Labor Market Information Bureau |
| Socioeconomic Conditions | Environmental Justice (Environmental and Demographic) Indicators | U.S. Environmental Protection Agency | ✓ ✓ | Interactive Tabular | EPA's Environmental Justice Screening and Mapping Tool |

| Theme | Subtheme | Source | Format(s) | Visit/Contact |
|--|--|---|---|--|
| Hazardous Materials and Contaminated Properties | EPA Brownfields Program | Southwest Region Planning Commission Brownfields Assessment Program | Various | Southwest Region Planning Commission |
| Hazardous Materials and Contaminated Properties | Aboveground Storage Tank, Hazardous Waste Generator, Remediation Sites, Underground Storage Tank | New Hampshire Department of Environmental Services | ✓ Interactive✓ GIS✓ Tabular | New Hampshire Department of Environmental Services One Stop |
| Air and Noise Quality | Air Quality | Environmental Protection Agency | ✓ Interactive ✓ Tabular | United States Environmental Protection Agency Air Quality System Data Mart |
| Historical Features and Aesthetics | Historic Districts, Sites, and Buildings | Town of Jaffrey; National Park Service National Register of Historic Places | ✓ GIS | Town of Jaffrey; National Register of Historic Places |
| Historic Features and Aesthetics | New Hampshire State Register of Historic Places | New Hampshire Division of Historical Resources | Unknown | New Hampshire State Register of Historic Places |
| Other | Wildlife Habitat | New Hampshire Fish and Game Wildlife Action Plan | ✓ GIS | New Hampshire Fish and Game |
| Other | Various | Town of Jaffrey Natural Resources Inventory | ✓ GIS | Town of Jaffrey |

Additional Studies, Plans, and Other Resources

| Theme | Title/Link | Author | Description |
|----------------|----------------------------|--------|--|
| SWRPC | Monadnock Region | SWRPC | As set forth in NH RSA 36:47, the |
| Policy | Future: A Plan for | | Southwest Region Planning Commission |
| • | Southwest New | | has prepared "a comprehensive plan for the |
| | Hampshire | | development of the region." The Regional |
| | | | Plan provides a vision and set of goals for |
| | | | the Region's future. It is intended to serve |
| | | | as a resource for communities and others to |
| | | | consider and use in their own planning. |
| SWRPC | Southwest New | SWRPC | The Comprehensive Economic |
| Policy | Hampshire | | Development Strategy describes the |
| • | Comprehensive | | existing economic conditions of the region, |
| | Economic | | identifies priority projects, and includes |
| | Development | | goals and objectives to guide the |
| | Strategy | | document's implementation. |
| SWRPC | Southwest New | SWRPC | The document contains many strategies |
| Policy | Hampshire Natural | | relevant to the project, including |
| • | Resources Plan | | consideration for the impacts of impervious |
| | | | surface and the need to implement best |
| | | | management practices (pgs. 20-22). |
| SWRPC | Southwest | SWRPC | Southwest Connects is the region's long |
| Policy | Connects: | | range transportation plan. The study area is |
| | Southwest Region | | located within the US 202 South Corridor, |
| | Transportation Plan | | one of eight corridors in Southwest NH. |
| Transportation | US 202 Corridor | SWRPC | The purposes of the US 202 Corridor Study |
| | Study (2002) | | are to develop: a schedule of local roadway |
| | | | capacity and safety improvements on US |
| | | | 202; recommendations for local land use |
| | | | controls and economic development |
| | | | approaches which are consistent with the |
| | | | protection of highway capacity and public |
| | | | safety (with attention to highway impacts |
| | | | on community life) in the existing US 202 |
| | | | Corridor; and, a comprehensive strategy |
| | | | shared by state and local decision-makers |
| | | | for the development and use of US 202 |
| | | | between the New Hampshire / |
| | | | Massachusetts state line in Rindge to NH 9 |
| | | | in Hillsborough – a strategy which |
| | | | addresses US 202 as a shared public |
| | | | resource. |

| Theme | Title/Link | Author | Description |
|----------------|--|---------------------------------|---|
| Transportation | Complete Streets Policy | Town of Jaffrey | In 2017, the Town of Jaffrey adopted a Complete Streets Resolution. The Resolution includes a vision, best practices, information about implementation, and key components of community support. |
| Transportation | Complete Streets Design Guidelines and Typology | Town of Jaffrey | The guidelines, which describe design considerations as part of a town-wide street typology were developed as part of a Complete Streets Resolution. The study area includes the typology "Slow Streets." See the resource for information on roadway and roadside considerations like parking, bicycle lanes, shoulders, sidewalks, lighting, etc. |
| Transportation | Safe Routes to School Action Plan (JGS) | Jaffrey Grade School | During the 2016/2017 school year, Principal Shaw-Sarles worked with SWRPC to develop the plan. The Plan documents existing conditions, recommended strategies, and includes survey results and relevant traffic data. |
| Transportation | Safe Routes to School Action Plan (JRMS) | Jaffrey-Rindge Middle School | During the 2016/2017 school year, Principal Clark and the Jaffrey-Rindge Cooperative School District Wellness Committee worked with SWRPC to develop the plan. The Plan documents existing conditions, recommended strategies, and includes survey results and relevant traffic data. |
| Transportation | PlanNH Charrette (2011) | Various | The Town of Jaffrey applied for and received design assistance in 2010 from Plan NH. The project involved a brainstorming session with local citizens and professionals focused on the downtown area of Jaffrey. |
| Transportation | SWRPC Special Request Traffic Study (2017) | SWRPC | The report provides a summary of data collected in the vicinity of the dog-leg intersection for the purposes of informing Safe Routes to School Action Plans developed by the elementary and middle schools. |
| Transportation | SWRPC Bike/Ped Counts | SWRPC | In 2017, SWRPC conducted two bike counts of the Monadnock Branch Rail Trail bike counts (South of Union Street and at Rindge town line). |

| Theme | Title/Link | Author | Description |
|----------------|---------------------|-----------------|---|
| Transportation | Pedestrian | SWRPC | As part of the New Hampshire Statewide |
| | Infrastructure | | Asset Data Exchange System, SWRPC |
| | Assessment | | collected information on the location and |
| | | | attributes of sidewalks, crosswalks, and |
| | | | curb stops throughout the Town of Jaffrey. |
| Natural | Contoocook and | The | The Plan documents a variety of goals |
| Resources | North Branch Rivers | Contoocook and | relevant to the project relative to: water |
| | <u>Corridor</u> | North Branch | quality, invasive plant species, wildlife |
| | Management Plan | Rivers Local | habitat, historical and cultural resources, |
| | | Advisory | addressing development impacts, and |
| | | Committee | coordination with State and local entities. |
| Natural | Natural Resources | Town of Jaffrey | Among other findings, the Jaffrey Natural |
| Resources | <u>Inventory</u> | | Resource Inventory (2009) identifies the |
| | | | Jaffrey downtown from Contoocook Lake |
| | | | to Cheshire Pond and to the Mountain |
| | | | Brook Reservoir as one of the top five |
| | | | conservation priorities. |
| Human Health | NH State Health | New Hampshire | Health priorities around obesity/diabetes |
| | Improvement Plan | Department of | and asthma suggest collaboration as part of |
| | | Health and | the transportation planning process to |
| | | Human Services | improve health outcomes in these areas. |
| Human Health | Greater Monadnock | Greater | Obesity is a regional health priority |
| | Public Health | Monadnock | (especially that of youth) with a |
| | <u>Network</u> | Public Health | relationship to active transportation. |
| | Community Health | Network | |
| | Improvement Plan | | |

Matras, Lindsay

From: Paula Bellemore <pbellemore@lchip.org>
Sent: Thursday, February 22, 2018 11:40 AM

To: Matras, Lindsay

Subject: [External] RE: Request for Review

Hi Lindsay,

My apologies for the delay. LCHIP has not assisted with the protection of any natural, cultural or historic resources in the project area described.

Best,

Paula Bellemore Natural Resource Specialist

NH Land and Community Heritage Investment Program

13 West Street, Suite 3 Concord, NH 03301 (603) 224-4113

From: Matras, Lindsay [mailto:lmatras@vhb.com] Sent: Tuesday, February 20, 2018 8:24 AM

To: Paula Bellemore **Cc:** Walker, Peter

Subject: Request for Review

Hello Paula,

A letter requesting review was mailed on October 2, 2017, inquiring as to whether there were nearby Land and Community Heritage Investment Program (LCHIP) parcels to the proposed Intersection Improvement Project (NHDOT #16307). Attached is the letter which includes the proposed project information as well as a USGS map of the location of the proposed alignments. Please let us know if any LCHIP properties are located nearby or adjacent to the proposed alignments. Any information provided will be incorporated into our study and future permitting efforts.

Thank you,

Lindsay Matras, WSA

Environmental Scientist



2 Bedford Farms Drive Suite 200 Bedford, NH 03110-6532 **P** 603.391.3916 | **F** 603.518.7495 Imatras@vhb.com



JAFFREY WAR MEMORIAL COMMITTEE P.O. Box 565 JAFFREY, NEW HAMPSHIRE 03452

Statement of the Jaffrey War Memorial Committee

THE JAFFREY WAR MEMORIAL COMMITTEE has met and communicated with the NH Department of Transportation (NHDOT) and the Town of Jaffrey regarding the major traffic changes proposed for downtown Jaffrey including a new river crossing, realignment of travel ways and the introduction of two roundabouts.

This proposal would have a major impact on the Jaffrey War Memorial Park which the Committee developed in 1984 and maintains to this day for the benefit of all the public—veterans, Jaffrey citizens and all those who come to our town. The Committee is a not-for-profit 501c3 organization whose members live in Jaffrey and care for its present and future.

The Committee supports the improvement of downtown Jaffrey, its infrastructure, its commercial life, its townscape, and its traffic flow and pedestrian safety. Improvement indeed is called for and the Committee, as a significant presence in the downtown, is willing and eager to assist in the best way it can in this effort.

It has been proposed that a portion of the present park be carved off to make the present proposal possible and that in return some land be made available to be added to the existing park.

In general the Committee is receptive to this as it agrees that an improvement of the park and downtown Jaffrey will result and be a benefit to all.

However, we are concerned on several points and wish to make these clear to the NHDOT and the Town of Jaffrey:—

The portion of the parkland that is proposed to be used for the project contains
utilities, granite bollards, walkways, landscaping and other landscape elements. These
will all be relocated elsewhere in a consistent manner in a way agreed to by the
Committee, according to a mutually agreeable plan, and at no cost to the Committee.



JAFFREY WAR MEMORIAL COMMITTEE P.O. Box 565 JAFFREY, NEW HAMPSHIRE 03452

• Land taken for the project by NHDOT abutting but not presently within the bounds of the park shall be added to the present park and developed at no cost to the Committee in accordance with a plan developed and approved by the NHDOT, the Town, and the Committee. Among other things this will include extending/altering the retaining wall along the riverfront to be consistent to the present park retaining wall. The desire of the Committee is that as a result of this project the park will become more visible and accessible from both the north and the south.

The Committee is open to discussion of these points and is confident that a satisfactory arrangement can be reached that benefits the NHDOT, the Town of Jaffrey, and the Jaffrey War Memorial Park.

September 17, 2018

Rick Lambert, President

Rick Lambut

Jaffrey War Memorial Committee

Matras, Lindsay

From: Matt Lundsted <mlundsted@ceiengineers.com>

Sent: Monday, April 1, 2019 8:23 PM

To: Matras, Lindsay

Cc: Walker, Peter; Laurin, Marc

Subject: RE: [EXTERNAL] US 202 / NH 124 / NH 137 Intersection Improvements Project (Jaffrey) - Contoocook

Local River Advisory Committee

Hi Lindsay-

We discussed at our last meeting and comments at this time without seeing detailed plans were pretty general as follows:

- 1. Please provide overall timeline for design/permitting/construction.
- 2. With increase in impervious surfaces within the river's watershed please consider the use of LID stormwater management principles as much as possible. We understand this can be challenging given NHDOT/transportation design requirements but anything "green" that can be done AND can act as demonstration would be greatly appreciated. If our group could at all be involved in the development of any LID BMPs or locations we would be glad to be involved.
- 3. When considering span length please consider allowing clear bank spans which include vegetated, flat wildlife corridors on both banks. The river is quite segmented in this area with the downstream dam but we hate to add more habitat disconnection.
- 4. Sidewalk(s) with opportunity to view the river corridor from the bridge.
- 5. It goes without saying but proper erosion controls during construction.

Thank you for the opportunity to comment,

Matthew Lundsted Chairman CNBRLAC

From: Matras, Lindsay [mailto:lmatras@vhb.com]

Sent: Thursday, March 14, 2019 4:49 PM

To: Matt Lundsted <mlundsted@ceiengineers.com>

Cc: Walker, Peter < PWalker@VHB.com>; Laurin, Marc < Marc.Laurin@dot.nh.gov>

Subject: RE: [EXTERNAL] US 202 / NH 124 / NH 137 Intersection Improvements Project (Jaffrey) - Contoocook Local River

Advisory Committee

Hi Matt,

If you could provide comments within 30 days that would be great. Please note that we are preparing a NEPA Categorical Exclusion for the project and have not yet entered the permitting phase.

Thank you,

Lindsay Matras

Environmental Scientist

P 603.391.3916 www.vhb.com

Matras, Lindsay

From: Kennedy, Marty

Sent:Thursday, September 19, 2019 7:25 AMTo:Walker, Peter; Matras, Lindsay; Hilton, JasonSubject:Jaffrey - Input from NH Bureau of Trails

See below for input from Chris Camanche regarding the trail.

Marty

Martin F. Kennedy, PE, ENV SP

Senior Principal



2 Bedford Farms Drive Suite 200 Bedford, NH 03110-6532 **P** 603.391.3902 **| M** 603.548.9822 **| F** 603.518.7495 mkennedy@vhb.com

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From: Gamache, Christopher

Sent: Wednesday, September 18, 2019 12:51 PM

To: Stamnas, Peter **Cc:** Violette, Shawn

Subject: FW: Upcoming Public Hearing for Jaffrey 16307 project

Good Afternoon Peter, and Chairman Wheeler;

Please accept this email as initial comments on the proposed Jaffrey Project, 16307, X-A001 (234).

Our office previously met with Victoria Chase regarding this project and its potential impacts on the Monadnock Branch Rail Trail, owned by the Department of Natural and Cultural Resources. We are supportive of the Department of Transportation's plans to improve safety and traffic flow at the intersection of Routes 124 and 202 in Jaffrey. Our concerns would be limited to safety of trail users crossing Stratton Road and NH Route 124 from the State-owned Monadnock Branch Rail Trail to the Town-owned section of rail trail.

This rail trail has had limited surface improvements for summer recreational use, however it is our goal to improve the surface of all of our recreational trails, to better accommodate recreational trail users. The proposed plan calls for sidewalks (purple areas) to be installed at the north end of the rail trail, at the junction of Stratton Road and Rte 124 and then on the north side of Rte 124. The connection to these sidewalk sections is proposed to be crosswalks; the southern portion being a crossing to an island before the rotary and then back to the junction of Rte 124 and Stratton Road. This

proposal would accommodate the majority of the permitted summer recreational trail users on this trail, however this would be problematic for winter snowmobile use.

We would like to propose that the sidewalks be tipped down to the street surface, in a direct line between the Monadnock Branch Rail Trail and the proposed sidewalk across Rte 124. This would allow for a straight crossing of Stratton Road and Rte 124 for snowmobiles and the trail groomer. Granite curbing is problematic for snowmobiles to get over and the machines do not turn well on pavement, as such we would request that the ability to continue the straight crossing of these roads, as is done today, be accommodated for the winter season.

Thanks you for the opportunity to comment on the proposed plans for this project in Jaffrey. If it would be helpful to you I can mark up the draft plans to show where we would like to have the sidewalks tipped down to accommodate winter snowmobile use.

Sincerely,

Chris

Chris Gamache, Chief
NH Bureau of Trails
Parks & Recreation Division, DNCR
172 Pembroke Road
Concord, NH 03301
603-271-3254
Chris.gamache@dncr.nh.gov



United States Department of the Interior

OFFICE OF THE SECRETARY

Office of Environmental Policy and Compliance 5 Post Office Square, Suite 18011 Boston, Massachusetts 02109-3572

November 12, 2019

9043.1 ER 19/0479

Jamison S. Sikora Federal Highway Administration New Hampshire Division 53 Pleasant Street, Suite 2200 Concord, NH 03301

Subject: Draft Section 4(f) Evaluation

US 202/NH 124/ NH 137 Intersection Improvements

Jaffrey X-A001 (234), 16307

Dear Mr. Sikora:

The U.S. Department of the Interior (Department) has reviewed the draft Section 4(f) Evaluation for the US 202/NH 124/ NH 137 Intersection Improvements in Jaffrey, New Hampshire. The purpose of the project is to address the traffic congestion and safety deficiencies associated with the current configuration of the US 202 "dog-leg" intersections of Main Street with Peterborough Street and Main Street with River Street. In addition, the project wants to enhance pedestrian mobility and support the quality of life and economic vitality of Jaffrey's downtown area. The following comments on this project are offered for your consideration.

Section 4(f) Evaluation Comments

The Department concurs that there is no prudent and feasible alternative to the proposed use of 4(f) lands. The proposed action will have an adverse effect on the Downtown Jaffrey Historic District, which constitutes a 4(f) use. To accommodate the proposed roundabouts, several contributing properties will need to be fully or partially acquired and demolished. In addition, a new bridge will be built over the Contoocook River that will visually affect the historic district. The Department notes that these assessments of adverse effect have been made in consultation with the New Hampshire Division of Historical Resources (NHDHR). The Department agrees with the finding that there will be no use of the additional 4(f) properties within the study area:

the Monadnock Recreational Rail Trail, Jaffrey Community Field and the Memorial Square Town Common.

The Department acknowledges that FHWA has been coordinating with the NHDHR, NHDOT, the town of Jaffrey, and an individual consulting party throughout the planning stages of the project as well as during the alternative analysis; and will continue through the execution of a Memorandum of Agreement (MOA) to document required mitigation measures. The Department would appreciate the opportunity to review the MOA that is developed and recommend that a signed copy be included in the Final Section 4(f) Evaluation.

Thank you for the opportunity to review and provide comments on this project. If you have questions regarding these comments, please contact Mark Eberle, National Park Service, at 215 597-1258 or mark-eberle@nps.gov. Please contact me at 617 223-8565 if I can be of further assistance.

Sincerely,

Andrew L. Raddant

Regional Environmental Officer

Chaple. fatt

cc: SHPO-NH (benjamin.wilson@dncr.nh.gov)



THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION



Victoria F. Sheehan Commissioner

August 04, 2020

Jon Frederick Jaffrey Town Manager 10 Goodnow Street Jaffrey, NH 03452

Subject: Request for Concurrence

FHWA Section 4(f) de minimis Impact Finding for the Jaffrey Community Field

Jaffrey, 16307, X-A001(234)

US 202 / NH 124 / NH 137 Intersection Improvements Project, Jaffrey, New Hampshire

Dear Mr. Frederick:

The Federal Highway Administration (FHWA) and the New Hampshire Department of Transportation (NHDOT) have prepared an environmental study under the National Environmental Policy Act (NEPA) for proposed improvements to the US Route 202 intersections with NH Route 124 and NH Route 137 in Jaffrey, NH. The FHWA is the lead federal agency for this effort. The environmental study for the Project includes completion of a NEPA Categorical Exclusion and a Section 4(f) Evaluation, under FHWA regulations (23 CFR 771.117).

The purpose of this letter is to request the concurrence of the Town of Jaffrey with FHWA's de minimis impact finding for the Jaffrey Community Field, a Section 4(f) property. The Proposed Action would involve a minor acquisition for new ROW on the northern edge of the Jaffrey Community Field. This impact was determined by FHWA to not adversely affect the activities, features, or attributes of the field.

Section 4(f) Background

Because the Project is receiving federal funding from FHWA, it is subject to review under Section 4(f), which requires an analysis of the potential impacts of transportation projects on publicly owned public parks, recreation areas, wildlife and waterfowl refuges, and historic sites. Under Section 4(f), FHWA, may find that the impacts are *de minimis* if, after opportunity for public review and comment and taking into account avoidance, minimization, and/or mitigation measures, FHWA finds that the transportation project will not adversely affect the activities, features, and attributes qualifying the property for protection under Section 4(f) [23 CFR 447.5(b)]. FHWA must also obtain written concurrence with its finding from the official(s) with jurisdiction over the Section 4(f) property [23 CFR 447.5(b)].

Potential Project Impacts to the Jaffrey Community Field

The Proposed Action involves a minor acquisition of approximately 230 square feet for new ROW on the northern edge of the Jaffrey Community Field. The acquisition would total less than 1 percent of the lot. The Town-owned Jaffrey Community Field is located south and east of the Proposed Action (refer to Figure 1). The Monadnock Recreational Rail Trail runs north to south parallel to the western side of the

ball field. Jaffrey Community Field features a ball field and associated parking areas and facilities. Jaffrey Community Field can be accessed off Stratton Road or Blake Street, and is within close proximity to the Conant High School. The northern parcel encompasses vacant land, a parking lot, and the northern most extent of the ball field. The minor acquisition would occur on the northern edge of the parcel directly adjacent to Stratton Road in an area not used for recreation (refer to **Figure 2**). It is important to note that this partial acquisition was identified as part of the preliminary conceptual engineering design and is not final. FHWA and/or NHDOT will notify the Town of Jaffrey if there are changes to the Proposed Action and/or impacts to the Jaffrey Community Field.

As described above, the Proposed Action will not adversely affect or permanently impact the activities, features, or attributes of the Jaffrey Community Field. Minor reconstruction of the access road from Blake Street leading to the field's parking area would improve access to the Jaffrey Community Field. Public access from Blake Street would remain during construction, though temporary restrictions to this access may be required during construction. Additionally, a second access road into the parking area from Union Street would be unaffected.

Mitigation is not required because the Proposed Action will not adversely affect the activities, features, or attributes of Jaffrey Community Field. Upon completion, the Proposed Action is anticipated to improve public access to the Jaffrey Community Field through the reconfiguration of the intersection of Blake Street and the driveway to the field.

Conclusion

FHWA finds that the Proposed Action would have a *de minimis* impact to the Jaffrey Community Field. NHDOT respectfully requests your consideration of the potential effects of the Proposed Action on the Jaffrey Community Field.

If you concur with the description of the potential impacts to the Jaffrey Community Field identified at this time, please sign below documenting your written concurrence as the official with jurisdiction over this resource. Please submit your concurrence to Mr. Jamison S. Sikora, NH Division Environmental Program Manager, Federal Highway Administration at Jamie.Sikora@dot.gov.

If you have questions, would like additional information, or wish to discuss this project, please contact me or Jamie Sikora at (603) 410-4870. We request that you please copy NHDOT on your response.

Sincerely

Marc G. Laurin

Senior Environmental Manager NH Department of Transportation Bureau of Environment

(603) 271-4044

marc.laurin@dot.nh.gov

Encl.

Attachment 1 - Jaffrey Community Field Figures

cc: Jamison Sikora, FHWA Loretta Doughty, P.E., Project Manager Jill Edelmann, Cultural Resources Manager Pete Walker, VHB

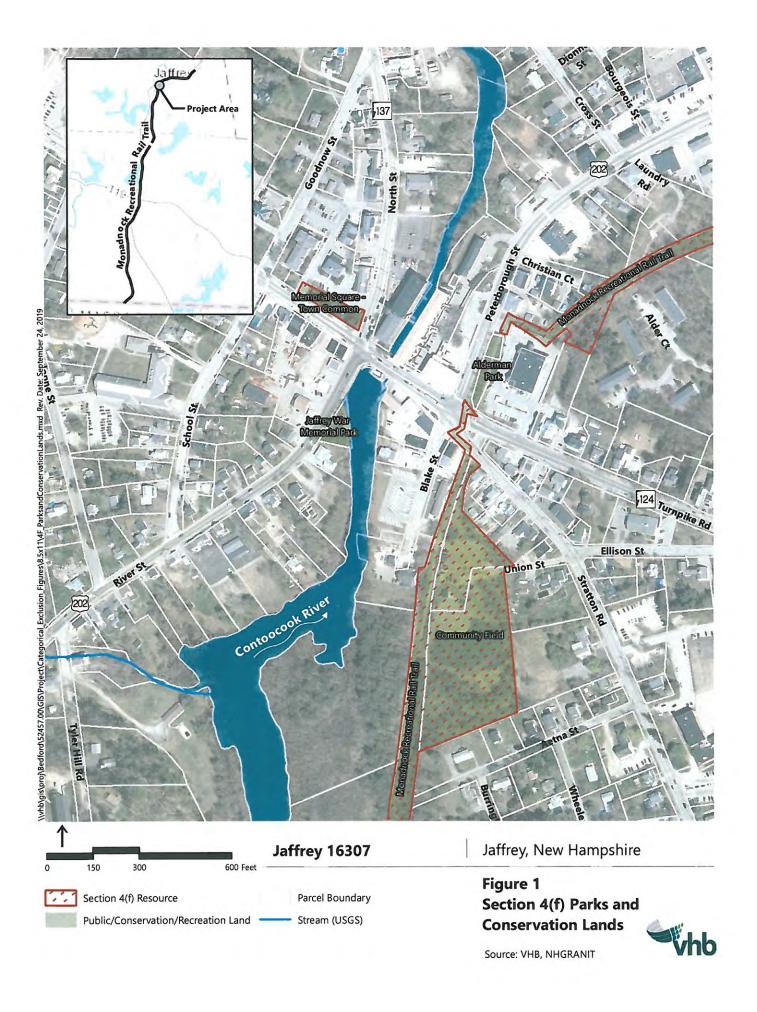
The Town of Jaffrey, as the Official with Jurisdiction over the Jaffrey Community Field in Jaffrey, NH, concurs with FHWA's *de minimis* impact finding and description of the potential impacts of the US 202 / NH 124 / NH 137 Intersection Improvements Project as described herein to the Jaffrey Community Field, a Section 4(f) property, as defined in 49 U.S.C. 303(d).

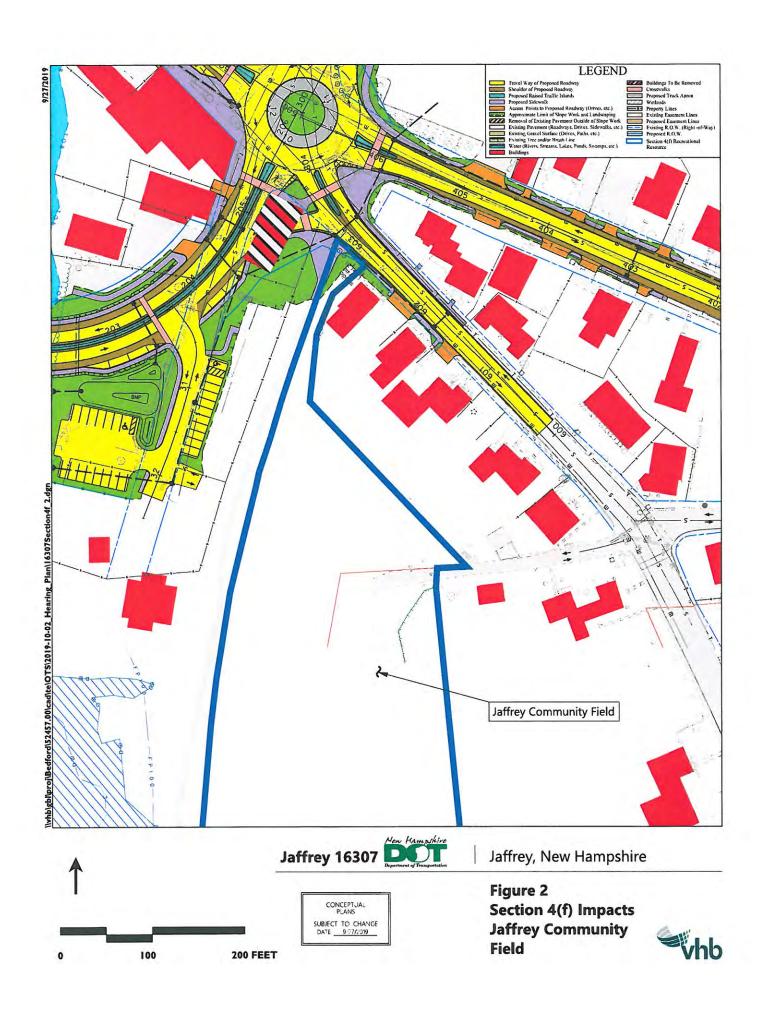
Signature:

Jon Frederick

Jaffrey Town Manager

Attachment 1 – Jaffrey Community Field Figures





Appendix E – Floodplain Memo



To: NHDOT Date: July 8, 2019 Memorandum

Project #: 52457.00

From: David Horner, EIT Re: Floodplain Impacts
Pete Walker Jaffrey 16307

This memorandum documents our preliminary estimate of floodplain impacts resulting from the US 202/NH 124/NH

This memorandum documents our preliminary estimate of floodplain impacts resulting from the US 202/NH 124/NH 137 Intersection Improvement Project in Jaffrey, New Hampshire. The Proposed Action is estimated to impact approximately 0.52 acre-feet of floodplain volume, as discussed below.

Methodology

To determine floodplain elevations within the Study Area, Flood Insurance Studies for Cheshire County, New Hampshire (All Jurisdictions, May 23, 2006) were obtained from NH GRANIT. Digital data from the FIRM for Cheshire County was also obtained from NH GRANIT. **Figure 1** shows the FEMA-defined limits of the 100-year floodplain within the Study Area, which are based on the flood elevations specified in the Cheshire County Flood Insurance Study.

Volumetric floodplain impacts were generated using an Average End Area Methodology which calculated the volume of cut and fill between the existing ground surface, the proposed ground surfaces for each alternative, and the floodplain elevation surface. Volumetric impacts were calculated using MicroStation.

Existing Conditions

According to the FIRMs produced for Cheshire County, portions of the Study Area are located within the 100-year floodplain of the Contoocook River. The Study Area is located within a Special Flood Hazard Area Zone AE of the Contoocook River, with a base flood elevation of 1,012 feet north of the Contoocook River Dam and 1,001 feet south of the dam, as shown on FIRM Panel No. 33005C0459E. Zone AE is defined as a one-percent annual chance flood that is determined in the Floodplain Insurance Study by detailed methods of hydraulic analysis. According to the Cheshire County Flood Insurance Study (FIS), no floodway was computed for the Contoocook River.

Portions of the Study Area are located within the Floodplain Development District designated by the Town of Jaffrey under the town's Zoning Ordinance, Section 12.20¹. This ordinance regulates floodplain impacts within FEMA's special flood hazard areas, which includes Zone AE.

Impacts

Under the Proposed Action, new construction and reconstruction would directly impact delineated floodplains through the addition/reduction of fill materials. Floodplain areas of the Contoocook River intersect the Project Area and would be directly impacted to varying degrees. Table 1 below presents estimated total direct impacts to the 100-year floodplain within the Project Area.

¹ Town of Jaffrey, Land Use Code, Town of Jaffrey, NH. 9 May 2017

Ref: 52457.00 July 8, 2019 Page 2

Table 1: Total Impacts of the Proposed Action to the 100-Year Floodplain

| Location | Impact Area (Acres) | Floodplain Impacts (Cubic Yards) | Floodplain Impacts (Acre-Feet) |
|--------------------------------|------------------------|-------------------------------------|-----------------------------------|
| A - River Street | 0.13 | 105.40 | 0.07 |
| B – NH Rte. 124 / Main Street | 0.05 | 38.30 | 0.02 |
| C - US 202 South Connector | 0.10 | 190.70 | 0.12 |
| D – Blake Street | 0.10 | 7.80 | 0.005 |
| D - Blake Street (Parking Lot) | 0.10 | 491.80 | 0.30 |
| TOTAL (Rounded) | 0.4 | 835.00 | 0.52 |

The Proposed Action would encroach within the Contoocook River floodplain in the following locations:

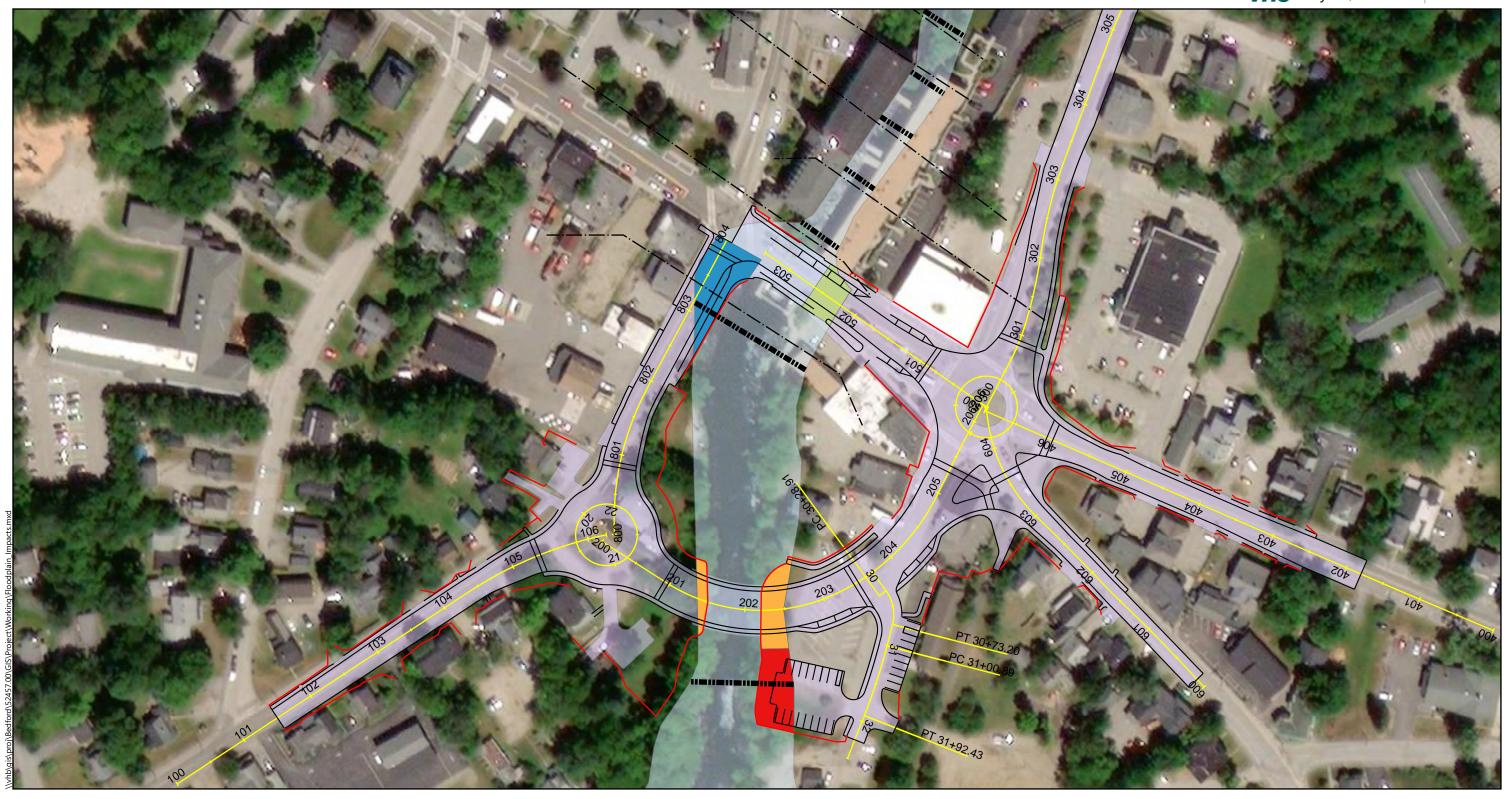
- River Street (Sta. 801+50 to Sta. 804+00)
- NH Rte. 124 / Main Street (Sta. 501+00 to Sta. 503+00)
- US 202 South Connector (Sta. 200+50 to Sta. 203+50)
- Blake Street (Sta. 31+50 to Sta. 32+00)
- Blake Street Parking Lot (Sta. 91+40 to Sta. 92+90)

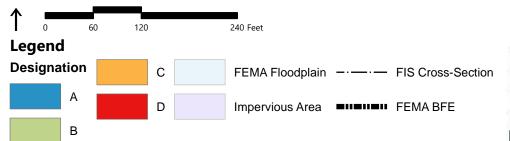
The Proposed Action would introduce a new bridge connector from US 202 to River Street over the Contoocook River upstream of the Contoocook River Dam. To meet stream crossing guidelines and minimize floodplain impacts caused by the bridge, the span will be designed to comply with NHDES stream crossing rules, using a span of approximately 110 feet, or the bankfull width of the river at the crossing multiplied by a factor of 1.2 plus two additional feet.² It should be noted that the western parking lot along Blake Street may be subject to design changes in order to reduce the proposed floodplain impacts.

Conclusion

Under the Proposed Action, the floodplain storage volume would be reduced by approximately 0.52 acre-feet. It should be noted that the Proposed Action design may be subject to change, therefore altering the potential floodplain impacts. As the design progresses, adjustments to the impacts will be made accordingly.

² Bankfull width in this reach is estimated to be 116.5 feet. See analysis conducted by Kristopher Wilkes dated 4/25/18.





| | Floodplain Impacts | | |
|-----------------|--------------------|------|--|
| | Acres Acre-Feet | | |
| A | 0.13 | 0.07 | |
| В | 0.05 | 0.02 | |
| c | 0.10 | 0.12 | |
| D | 0.10 | 0.30 | |
| Total (Rounded) | 0.40 | 0.52 | |

Jaffrey 16307

Jaffrey, New Hampshire

Proposed Floodplain Impacts

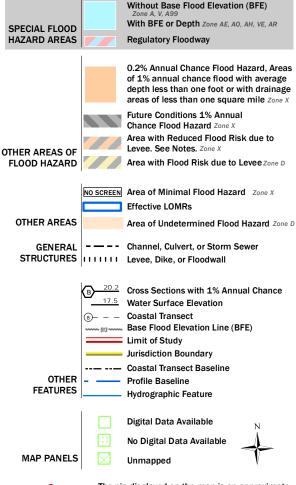
FEMA, NHGRANIT, VHB

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



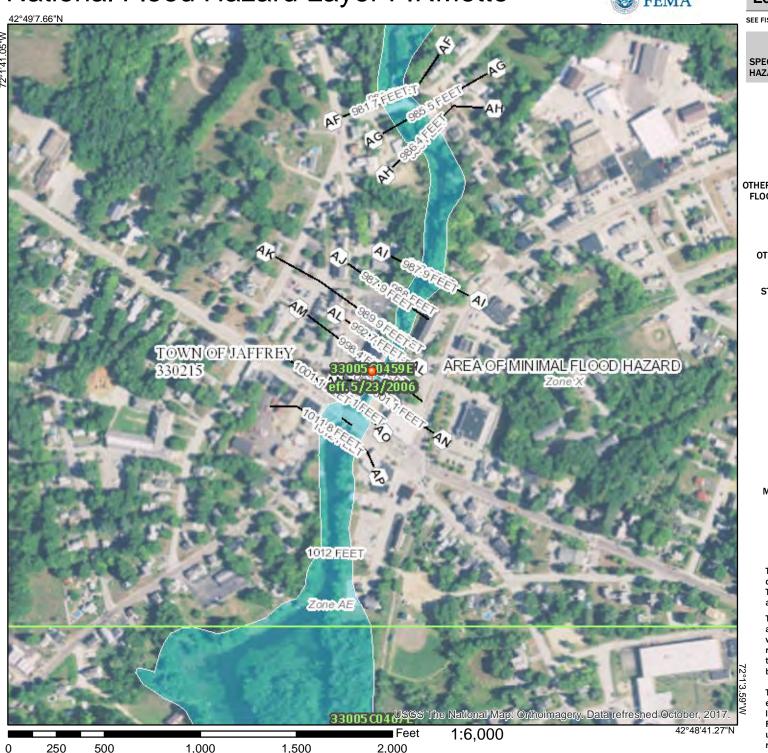


The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/1/2019 at 10:45:56 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



Computations



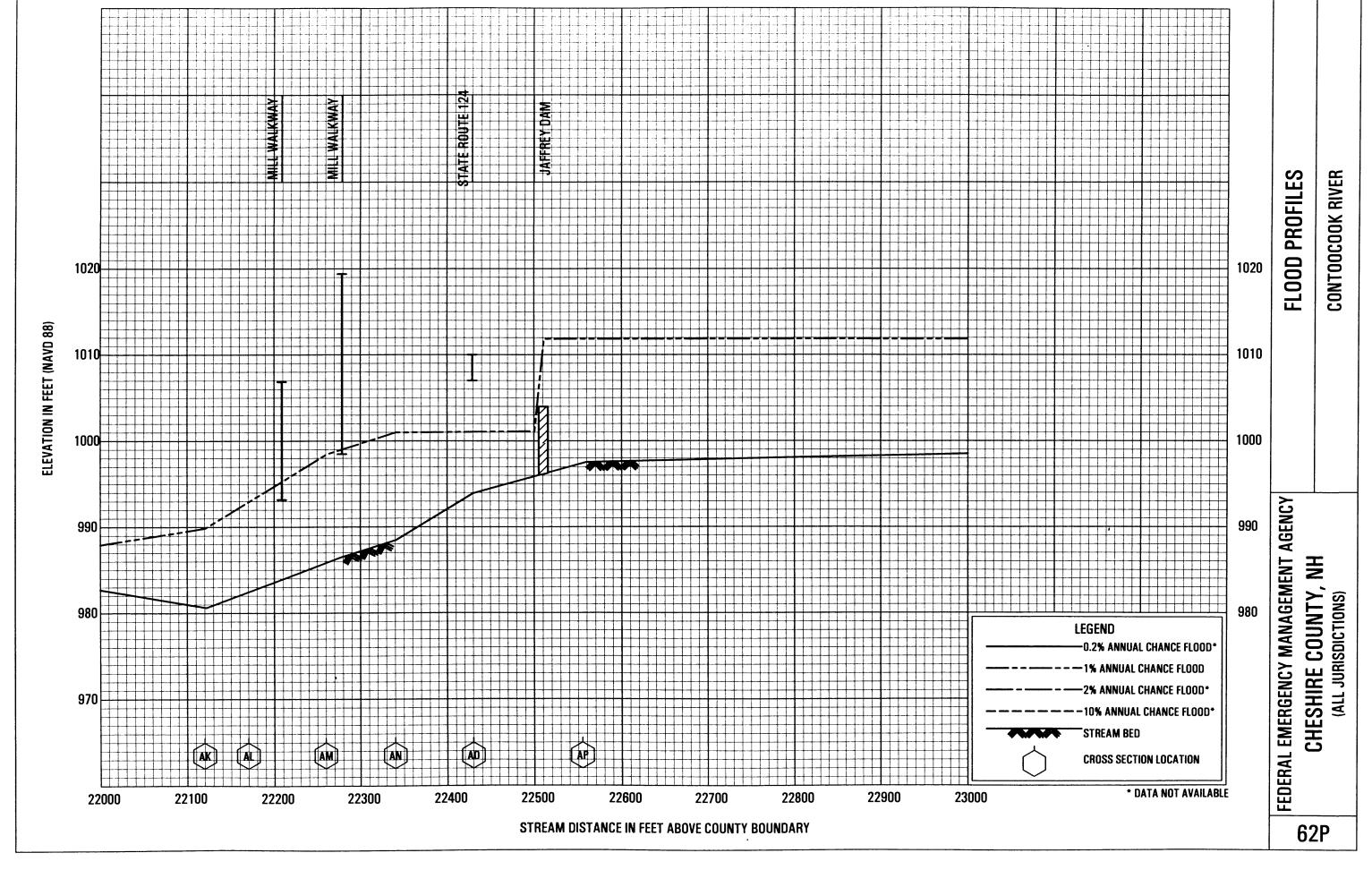
Total = 835 CY

| Project: Jaffrey | Project #: | 16307 |
|------------------------------|------------|------------|
| Location: Jaffrey, NH | Sheet: | 1 |
| Calculated by: DHH | Date: | 03/26/2019 |
| Checked by: CLC | Date: | 03/28/2019 |
| Title: Quantity Calculations | | |

FLOODPLAIN VOLUMES CY

SUMMARY SHEET

| PAGE NO. | DESCRIPTION | : | Sheet Totals (CY) | | Sheet Totals (AC-FT) |
|----------|----------------------------|-----------|-------------------|-------|----------------------|
| 2 | US 202 S Connector | | 190.70 | | 0.12 |
| | Sta. 200+50 to Sta. 203+50 | | | | |
| 3 | River Street | | 105.40 | | 0.07 |
| | Sta. 801+50 to Sta. 804+00 | | | | |
| 4 | NH Rte. 124 / Main Street | | 38.30 | | 0.02 |
| | Sta. 501+00 to Sta. 503+00 | | | | |
| 5 | Blake Street | | 7.80 | | 0.005 |
| | Sta. 31+50 to Sta. 32+00 | | | | |
| 6 | Blake Street PL | | 491.80 | | 0.30 |
| | Sta. 91+40 to Sta. 92+90 | | | | |
| | | Subtotal: | 834.0 | | |
| | | Rounding: | 1.0 | - | |
| | | TOTAL: | 835.0 | CY | |
| | | TOTAL: | 0.52 | AC-FT | |



FEMA Flood Insurance Study, Cheshire County, Volume 2 of 2, Contoocook River Flood Profile 62P

Appendix F – Essential Fish Habitat Worksheet



THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION



Victoria F. Sheehan Commissioner

April 17, 2019

Mr. Mike Johnson Marine Habitat Resource Specialist Habitat Conservation Division, NOAA Fisheries US Department of Commerce, Northeast Regional Office 55 Great Republic Drive Gloucester, MA 01930

RE: Jaffrey, X-A001(234), 16307

US 202/NH 124/NH 137 Intersection Improvements

Dear Mr. Johnson:

The New Hampshire Department of Transportation (NHDOT), together with the Federal Highway Administration (FHWA), is proposing the reconstruction and roadway improvements to US Route 202 at its intersections with NH Route 124 and NH Route 137 within the central business district of Jaffrey, New Hampshire (see USGS Site Location Map). The Purpose and Need of the project is to address traffic congestions and safety deficiencies associated with the current configuration of the US 202 "dog-leg" intersection of Main Street with Peterborough Street and Main Street with River Street, reduce the impact of highway traffic by enhancing pedestrian mobility and supporting the quality of life and economic vitality of Jaffrey's downtown. The Proposed Action will reconstruct the US 202/NH 124 intersection providing a five-leg roundabout, realign US 202 out of the downtown by constructing a new bridge to the south over the Contoocook River, and intersect River Street with a three-leg roundabout south of the existing US 202/NH 124/NH 137 intersection (see Proposed Action).

The Merrimack River and its tributaries has been identified as EFH for all life stages of Atlantic salmon (*Salmo salar*). In order to assess potential effects to this specie due to proposed work adjacent to and potentially within the Contoocook River, a tributary to the Merrimack River, the attached Essential Fish Habitat Assessment has been prepared on behalf of FHWA. Based upon the information in the EFH assessment, FHWA and NHDOT have determined that the proposed project would have no adverse effect on EFH for Atlantic salmon as the proposed project's work to construct a new bridge spanning the Contoocook River will be negligible. Under the provisions of Section 7 of the Endangered Species Act, FHWA and NHDOT respectfully request your concurrence with our finding. Please contact me should you have any questions.

Sincerely

Marc of Too

Senior Environmental Manager Room 109 - Tel. (603) 271-4044

E-mail - marc.laurin@dot.nh.gov

Encl

cc Jamison Sikora, FHWA; Michael Hicks, ACOE; Keith Cota, NHDOT s:\environment\projects\jaffrey\16307\efh\20190417lt-johnson.docx

EFH ASSESSMENT WORKSHEET FOR FEDERAL AGENCIES (modified 3/2016)

PROJECT NAME: US 202 / NH 124 / NH 137 Intersection Improvement Project (Downtown Jaffrey Improvements)

DATE: 06/25/2019

PROJECT NO.: NHDOT Jaffrey 16307

LOCATION (Water body, county, physical address):

The project is located in downtown Jaffrey and includes the five-way intersection of US 202 (Main Street/Peterborough Street) with Turnpike Road, Blake Street, and Stratton Road. The project also encompasses all of Blake Street, River Street, and the land between the two roadways. In order to safely realign US 202, a new bridge crossing of Contoocook River would be constructed as part of this project.

PREPARER: Lindsay Matras, VHB; Marc Laurin, NHDOT

Step 1: Use NOAA's EFH Mapper to generate the list of designated EFH for federally-managed species and life stages for the geographic area of interest. Use this list as part of the initial screening process to determine if EFH for those species occurs in the vicinity of the proposed action. The list can be included as an attachment to the worksheet. Make a preliminary determination on the need to conduct an EFH consultation.

| 1. INITIAL CONSIDERATIONS | | |
|---|----------|----|
| EFH Designations | Yes | No |
| Is the action located in or adjacent to EFH designated for eggs? List the species: Atlantic salmon | ✓ | |
| Is the action located in or adjacent to EFH designated for larvae? List the species: Atlantic salmon | ✓ | |
| Is the action located in or adjacent to EFH designated for juveniles? List the species: Atlantic salmon | ✓ | |

| Is the action located in or adjacent to EFH designated for adults or spawning adults? List the species: Atlantic salmon | ✓ | |
|--|----------|--|
| | | |

If you answered 'no' to all questions above, then an EFH consultation is not required - go to Section 5.

If you answered 'yes' to any of the above questions, proceed to Section 2 and complete the remainder of the worksheet.

Step 2: In order to assess impacts, it is critical to know the habitat characteristics of the site before the activity is undertaken. Use existing information, to the extent possible, in answering these questions. Identify the sources of the information provided and provide as much description as available. These should not be yes or no answers. Please note that there may be circumstances in which new information must be collected to appropriately characterize the site and assess impacts. Project plans that show the location and extent of sensitive habitats, as well as water depths, the HTL, MHW and MLW should be provided.

| 2. SITE CHARACTERISTICS | | | | |
|--|---|--|--|--|
| Site Characteristics | Description | | | |
| Is the site intertidal, sub- tidal, or water column? | The US 202 / NH 124 / NH 137 Intersection Improvement Project is located along the freshwater portion of the Contoocook River within the vicinity of the Contoocook River Dam (#124.03) in Jaffrey NH. Some work is anticipated to occur within and adjacent to the banks of the Contoocook River to construct a new bridge structure across the river. | | | |
| What are the sediment characteristics? | The project is located within the impounded portion of the Contoocook River in Jaffrey where the sediment is primarily an unconsolidated bottom composed of sand or mud. Finer sediments settle out within this portion of the river upstream of the dam. | | | |
| Is there submerged aquatic vegetation (SAV) at or adjacent to project site? If so describe the SAV species and spatial extent. | Planning for the proposed project did not include a survey for SAV within the Contoocook River. However, some SAV and emergent vegetation (e.g., pickerel weed) was observed during the field work conducted as part of project planning where a bridge is proposed to be constructed. | | | |
| Are there wetlands present on or adjacent to the site? If so, describe the spatial extent and vegetation types. | A small, circular wetland was delineated along the Contoocook River within the vicinity of the project. The wetland is classified as Palustrine, Scrub Shrub, Broad-Leaved Deciduous, Seasonally Flooded (PSS1C). This small wetland receives water from a 24-inch concrete pipe with a flared end, and the wetland drains toward the Contoocook River. Vegetation observed in this wetland include glossy buckthorn (Rhamnus frangula), multiflora rose (Rosa multiflora), red maple (Acer rubrum), deer tongue (Dichanthelium clandestinum), beggars tick (Bidens frondosa), meadowsweet (Spiraea alba), reed canary grass (Phalaris arundinaceae), and speckled alder (Alnus incana). This wetland would be impacted by the project. | | | |

| Is there shellfish present at or adjacent to the project site? If so, please describe the spatial extent and species present. | A field survey for shellfish has not been completed for the proposed project. However, the NH Natural Heritage Bureau DataCheck report for the project did not indicate the presence of any rare, threatened, or endangered shellfish species located near the project area. Because this reach of the river is impounded, its suitability as habitat for shellfish is limited. |
|---|---|
| Are there mudflats present at or adjacent to the project site? If so please describe the spatial extent. | The project is located within a freshwater impoundment of the Contoocook River upstream of the Contoocook River dam. Mudflats are not present in this area. |
| Is there rocky or cobble bottom habitat present at or adjacent to the project site? If so, please describe the spatial extent. | The Contoocook River does not have rocky or cobble bottom habitat in the vicinity of the project area. The substrate is primarily sand or mud with finer sediments that settle out upstream of the dam. |
| Is Habitat Area of Particular Concern (HAPC) designated at or near the site? If so for which species, what type habitat type, size, characteristics? | No HAPC is designated at or near the project area. |
| What is the typical salinity, depth and water temperature regime/range? | The Contoocook River is a freshwater river. The project area is located within the impounded portion of the river behind the Contoocook River Dam. The dam structure is located approximately 350 feet north of the proposed bridge. Water depth of the river is about 9 feet at the center of the channel, but water depth varies within the vicinity of the project depending on the time of year. Based on data collected in 1991 and 2004 (obtained from the NHDES Environmental Monitoring Database), the Contoocook River has an average temperature of 24 degrees Celsius in the summer months (June through August). |
| What is the normal frequency of site disturbance, both natural and man-made? | The project area is relatively developed, with the area mainly composed of existing roadways, residential and commercial development typical of a New England town center. The land use near the Contoocook River is primarily residential backyards to the west and walking paths and a public parking lot to the east. Additionally, retaining walls are located on both sides of the Contoocook River around the dam. Natural disturbances within the river are primarily related to flood flows; flows in this reach of the river are regulated by several large dam impoundments upstream (e.g., Contoocook Lake), so this effect is limited. |
| What is the area of proposed impact (work footprint & far afield)? | Some impacts are proposed within the bank of the Contoocook River as a result of the construction of the new bridge structure over the river. Impacts would be limited to a relatively small area to construct the bridge, including grading and shaping around the bridge abutments and footings, and rip-rap on the banks to protect these features. The footings and abutments themselves would be constructed above and outside of the bank of the river. Total impact areas have yet to be finalized, but the current conceptual plans indicate that total bank impacts would be approximately 1,800 square feet along approximately 220 linear feet of river bank (110 feet on both the east and west banks). Rip-rap protection near the bridge features would be keyed into the river bed, but would extend only a few feet into the river bed. |

<u>Step 3</u>: This section is used to describe the anticipated impacts from the proposed action on the physical/chemical/biological environment at the project site and areas adjacent to the site that may be affected.

| 3. DESCRIPTION OF IMPACTS | | | | |
|--|---|--------------|--|--|
| Impacts | Y | N | Description | |
| Nature and duration of activity(s). Clearly describe the activities proposed and the duration of any disturbances. | | | The anticipated duration of construction for the proposed project is approximately 2.5 years. The project would involve modifying the existing five-leg signal-controlled intersection to a five-leg roundabout at the intersection of Main Street, Peterborough Street, Turnpike Road, Stratton Road, and Blake Street. Along with improving the five-leg intersection, US 202 would be realigned along a new segment of roadway would be constructed between Blake Street and River Street across the Contoocook River, requiring the construction of a new bridge. This realignment would redirect traffic along US 202 from Peterborough Street through the five-leg intersection onto Blake Street for a short distance before turning west onto a new bridge crossing the Contoocook River. The new bridge would tie into a smaller three-leg roundabout west of the Contoocook River that would reconnect US 202 with River Street. The proposed improvements would also include new accommodations for pedestrians, adding bike lanes on both roadway edges and a sidewalk for pedestrians on the northern side of the alignment. The Monadnock Recreational Rail Trail would be maintained and improved north and south of the intersection. | |
| Will the benthic community be disturbed? If no, why not? If yes, describe in detail how the benthos will be impacted. | | √ | The benthic community within the Contoocook River would not be significantly impacted by the proposed project. During construction of the proposed bridge, some disturbance of the river bank would occur associated with grading and shaping around the footings and abutment of the new bridge structure. A portion of the river bank would be impacted by riprap for bank armoring. The riprap would be keyed into the river bed, but would extend only a few feet into the river bed. | |
| Will SAV be impacted? If no, why not? If yes, describe in detail how the SAV will be impacted. Consider both direct and indirect impacts. Provide details of any SAV survey conducted at the site. | | \checkmark | Existing SAV within the river is not anticipated to be significantly impacted by the proposed project. No formal SAV survey was conducted during project planning. Some SAV was observed in the Contoocook River in the vicinity of the proposed project, which may be temporarily impacted during construction. Additionally, once the new bridge structure over the Contoocook River is complete, indirect impacts to SAV may occur due to shading from the presence of the bridge. However, these impacts are not anticipated to result in long-term, significant impact to SAV. | |
| Will salt marsh habitat be impacted? If no, why not? If yes, describe in detail how wetlands will be impacted. What is the aerial extent of the impacts? Are the effects temporary or permanent? | | \checkmark | No salt marsh habitat is located within the vicinity of the project, therefore this habitat type would not be impacted. | |

| Will mudflat habitat be impacted? If no, why not? If yes, describe in detail how mudflats will be impacted. What is the aerial extent of the impacts? Are the effects temporary or permanent? | No mudflat habitat is located within the vicinity of the project, therefore this habitat type would not be impacted. |
|--|--|
| Will shellfish habitat be impacted? If so, provide in detail how the shellfish habitat will be impacted. What is the aerial extent of the impact? Provide details of any shellfish survey conducted at the site. | Impact to shellfish is unlikely. The NH Natural Heritage Bureau DataCheck report generated for this project did not identify any rare, threatened, or endangered shellfish occurring within or near the project area, and shellfish habitat in this reach of the river is limited. |
| Will hard bottom (rocky, cobble, gravel) habitat be impacted at the site? If so, provide in detail how the hard bottom will be impacted. What is the aerial extent of the impact? | The substrate of the Contoocook River within the vicinity of the project area is mainly composed of mud and sand, since it is within an impounded area upstream of the Contoocook River dam; therefore, no impacts to hard bottom habitat is anticipated as part of the proposed project. |
| Will sediments be altered and/or sedimentation rates change? If no, why not? If yes, describe how. | Sediments and sedimentation rates within the Contoocook River are not anticipated to change as part of the proposed project. Limited work below the bank of the Contoocook River may occur from grading and shaping around the footings for the bridge structure, however this work is limited to the vicinity of the bridge structure and is not anticipated to change flow or sedimentation rates within the river. Additionally, appropriate BMPs would be used throughout the duration of the proposed project to protect the Contoocook River from erosion and sedimentation. For long-term sedimentation and erosion control measures, stormwater BMPs (detention basins and tree wells) are proposed to be constructed as part of the project to capture and treat stormwater runoff from around the project area before it discharges into the Contoocook River. |
| Will turbidity increase? If no, why not? If yes, describe the causes, the extent of the effects, and the duration. | Turbidity is not anticipated to increase within the Contoocook River as part of the proposed project. BMPs would be used throughout the duration of project construction to protect the Contoocook River and wetlands near the project area from sedimentation or erosion. |

| Will water depth change? What are the current and proposed depths? | The conceptual design of the proposed bridge complies with NHDES stream rules regarding geomorphic compatibility, which will limit hydraulic impacts. Therefore, no measurable changes in water depths under normal flows would result from the project. Hydraulic modeling would be conducted during final design to further assess the hydraulic effects and ensure that the project would not change water depths. |
|---|---|
| Will contaminants be released into sediments or water column? If yes, describe the nature of the contaminants and the extent of the effects. | The project would use appropriate BMPs to protect the Contoocook River and adjacent wetlands near the proposed project from erosion, sedimentation, pollutants, and contaminants. Any disturbance of sediment along the bank of the Contoocook River would be contained by appropriate erosion controls to prevent release into the water column. Additionally, a Soils Management Plan will be prepared for the project to provide guidance for the identification, handling, storage, reuse, and disposal of limited reuse soils and other hazardous materials that may be generated during construction. |
| Will tidal flow, currents, or wave patterns be altered? If no, why not? If yes, describe in detail how. | Tidal flow, currents, and wave patterns would not be altered since the proposed project does not occur within coastal areas. Additionally, minimal work would occur within the bed of the Contoocook River; most of the work would occur along the bank of the river and areas above. |
| Will water quality be altered? If no, why not? If yes, describe in detail how. If the effects are temporary, describe the duration of the impact. | The project includes implementation of a stormwater management plan. The plan calls for construction of one or two stormwater BMPs, with optional porous pavement and low impact development tree wells. While the project would increase the amount of impervious areas within the vicinity of the Contoocook River (net change of approximately 0.3 acres of new impervious surface), the stormwater BMPs would detain and treat stormwater generated by this additional pavement area. |
| Will ambient noise levels change? If no, why not? If yes, describe in detail how. If the effects are temporary, describe the duration and degree of impact. | No. Ambient noise levels within the waters of the Contoocook River would not change as a result of the project. Some temporary impacts (construction phase) may result from the installation of riprap in the river bank, but these temporary impacts are not expected to result in negative impacts to fish species. |
| Does the action have the potential to impact prey species of federally managed fish with EFH designations? | Water flows, water quality, benthic habitat, and other functions of the river are anticipated to remain unchanged or would only be temporarily impacted as a result of the proposed project. Therefore, Atlantic salmon prey species are unlikely to be impacted. |

<u>Step 4</u>: This section is used to evaluate the consequences of the proposed action on the functions and values of EFH as well as the vulnerability of the EFH species and their life stages. Identify which species (from the list generated in Step 1) will be adversely impacted from the action. Assessment of EFH impacts should be based upon the site characteristics identified in Step 2 and the nature of the impacts described within Step 3.

NOAA's EFH Mapper should be used during this assessment to determine the ecological parameters/ preferences associated with each species listed and the potential impact to those parameters.

| 4. EFH ASSESSMENT | | | |
|---|---|----------|--|
| Functions and Values | Υ | N | Describe habitat type, species and life stages to be adversely impacted |
| Will functions and values of EFH be impacted for: | | | |
| Spawning If yes, describe in detail how, and for which species. Describe how adverse effects will be avoided and minimized. | | ✓ | Negligible changes to water quality, hydrology, and benthic communities are anticipated as part of the proposed project, therefore functions and values for spawning habitat would not be impacted. Additionally, the impact area is adjacent to an impounded reach of the river; it is therefore very unlikely that Atlantic salmon would spawn in this location. |
| Nursery If yes, describe in detail how and for which species. Describe how adverse effects will be avoided and minimized. | | √ | Negligible changes to water quality, hydrology, and benthic communities are anticipated as part of the proposed project, therefore functions and values for nursery habitat would not be impacted. |
| Forage If yes, describe in detail how and for which species. Describe how adverse effects will be avoided and minimized. | | ✓ | Negligible changes to water quality, hydrology, and benthic communities are anticipated as part of the proposed project, therefore functions and values for forage habitat would not be impacted. |
| Shelter If yes, describe in detail how and for which species. Describe how adverse effects will be avoided and minimized. | | ✓ | Negligible changes to water quality, hydrology, and benthic communities are anticipated as part of the proposed project, therefore functions and values for shelter habitat would not be impacted. |

| Will impacts be temporary or permanent? Please indicate in description box and describe the duration of the impacts. | | Temporary impacts along the bed and permanent and temporary impacts along the bank of the Contoocook River may occur from the construction of a new bridge structure. The footings and abutments of the new bridge structure would be located outside of the bank of the river, and limited shaping and grading would occur around the footings at or below bank of the river. The duration of construction for the proposed project is anticipated to last approximately 2.5 years, which would include the construction of the bridge structure. |
|--|----------|--|
| Will compensatory mitigation be used? If no, why not? Describe plans for mitigation and how this will offset impacts to EFH. Include a conceptual compensatory mitigation plan, if applicable. | ✓ | Compensatory mitigation for EFH is not anticipated at this time since limited, temporary impacts are anticipated to occur within the bed of the Contoocook River. The proposed project would construct a bridge structure that would span the impounded portion of the Contoocook River just south of the dam structure. Based on the current conceptual plans, direct impacts would be approximately 220 linear feet within the banks of the Contoocook River (110 feet on both the east and west banks). Rip-rap will also be keyed into the bank and bed of the riever, but would extend only a few feet into the river bed. Additionally, no indirect impacts to the Contoocook River are anticipated due to the use of BMPs throughout the duration of the project that would protect the Contoocook River and adjacent surface waters and wetlands from sedimentation, erosion, pollution, and contaminants. |

<u>Step 5</u>: This section provides the federal agency's determination on the degree of impact to EFH from the proposed action. The EFH determination also dictates the type of EFH consultation that will be required with NOAA Fisheries.

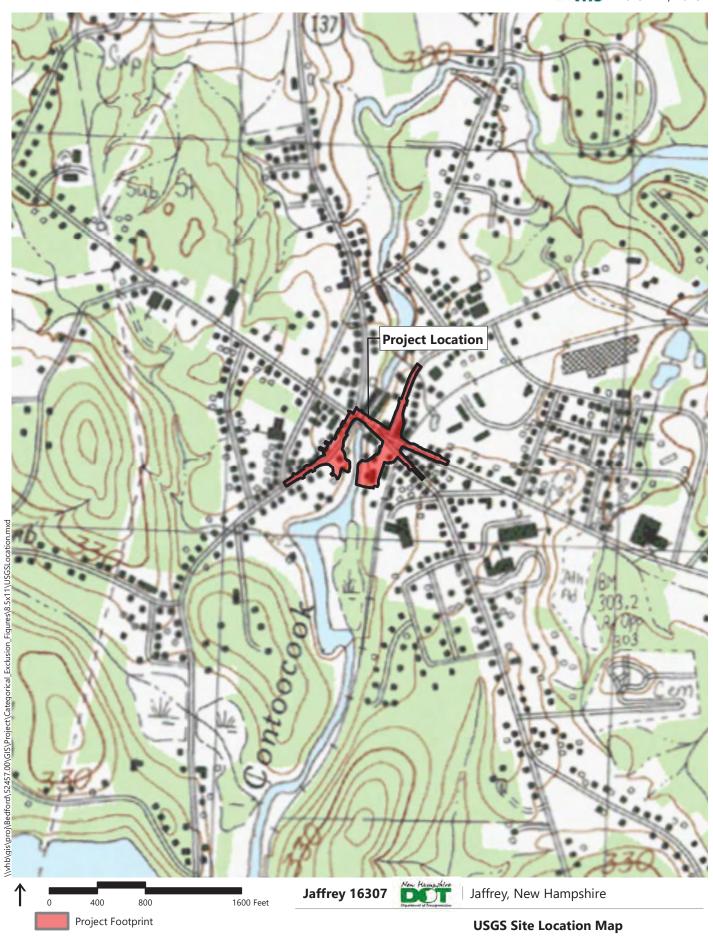
Please note: if information provided in the worksheet is insufficient to allow NOAA Fisheries to complete the EFH consultation additional information will be requested.

DETERMINATION OF IMPACT 5. Federal Agency's EFH Determination There is no adverse effect on EFH or no EFH is designated at the project site. Overall degree of adverse effects on EFH Consultation is not required. **EFH** (not including compensatory The adverse effect on EFH is not substantial. This means that the adverse mitigation) will be: effects are either no more than minimal, temporary, or that they can be alleviated with minor project modifications or conservation recommendations. (check the appropriate statement) This is a request for an abbreviated EFH consultation. The adverse effect on EFH is substantial. This is a request for an expanded EFH consultation.

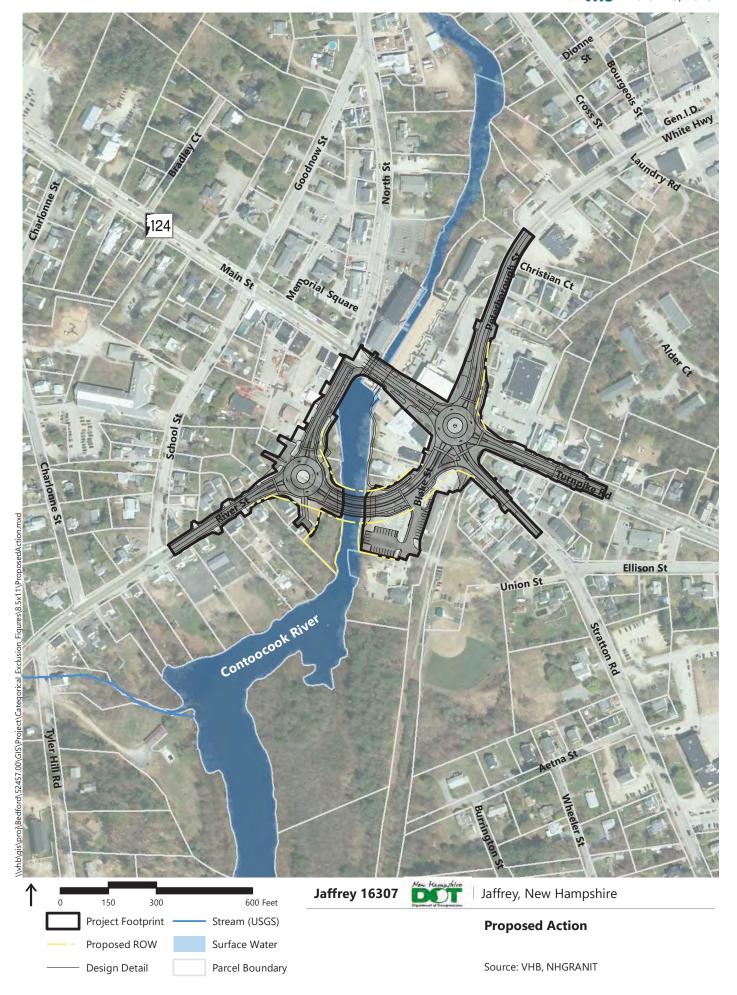
Step 6: Consultation with NOAA Fisheries may also be required if the proposed action results in adverse impacts to other NOAA-trust resources, such as anadromous fish, shellfish, crustaceans, or their habitats as part of the Fish and Wildlife Coordination Act Some examples of other NOAA-trust resources are listed below. Inquiries regarding potential impacts to marine mammals or threatened/endangered species should be directed to NOAA Fisheries' Protected Resources Division.

| 6. OTHER NOAA-TRUST RESOURCES IMPACT ASSESSMENT | | | | |
|---|--|--|--|--|
| Species known to occur at site (list others that may apply) | Describe habitat impact type (i.e., physical, chemical, or biological disruption of spawning and/or egg development habitat, juvenile nursery and/or adult feeding or migration habitat). Please note, impacts to federally listed species of fish, sea turtles, and marine mammals must be coordinated with the GARFO Protected Resources Division. | | | |
| alewife | No | | | |
| American eel | No | | | |
| American shad | No | | | |
| Atlantic menhaden | No | | | |
| blue crab | No | | | |
| blue mussel | No | | | |
| blueback herring | No | | | |

| Eastern oyster | No |
|------------------|----|
| | |
| | |
| | |
| horseshoe crab | No |
| | |
| | |
| | |
| | |
| quahog | No |
| | |
| | |
| | |
| | |
| soft-shell clams | No |
| | |
| | |
| | |
| striped bass | No |
| striped bass | |
| | |
| | |
| | |
| | |
| other species: | No |
| | |
| | |
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| | |



Source: VHB, NHGRANIT



Matras, Lindsay

From: Laurin, Marc <Marc.Laurin@dot.nh.gov>
Sent: Tuesday, June 25, 2019 10:18 AM
To: 'Mike R Johnson - NOAA Federal'

Cc: Jamie Sikora; Michael Hicks; Cota, Keith; Walker, Peter; Doughty, Loretta

Subject: RE: Jaffrey, 16307 - EFH Assessment

Attachments: assessworksheetfinal_Jaffrey16307_06-25-2019 Final Revised.pdf

Mike,

Thanks for your comments. I have changed the Determination of Impact to indicate that the project will have an adverse effect on EFH that is not substantial. Attached is the revised worksheet with that conclusion for your records.

Marc

From: Mike R Johnson - NOAA Federal [mailto:mike.r.johnson@noaa.gov]

Sent: Friday, June 21, 2019 8:52 AM

To: Laurin, Marc

Cc: Jamie Sikora; Michael Hicks; Cota, Keith **Subject:** Re: Jaffrey, 16307 - EFH Assessment

Marc,

Based on the information in the EFH assessment, we cannot concur with your determination that the project would not adversely affect EFH. According to the assessment, the "current conceptual plans indicate that total bank impacts would be approximately 1,800 square feet along approximately 220 linear feet of river bank (110 feet on both the east and west banks). Rip-rap protection near the bridge features would be keyed into the river bed, but would extend only a few feet into the river bed."

This suggests to me that there will be impacts to the river bank and bed, albeit minimal amount of impacts. Let me know if the project scope and design has changed.

That said, because the impacts to the Contoocook River are minimal, we do not have any EFH conservation recommendations to provide for the project.

Thanks,

MIke

On Wed, Apr 17, 2019 at 3:06 PM Laurin, Marc < Marc.Laurin@dot.nh.gov > wrote:

Mike,

Attached for your review is the EFH Assessment Worksheet that assesses the potential effects to EFH in the vicinity of the project, the reconstruction and improvements to the US Route 202 intersection with NH Route 124 and NH Route 137 in the Town of Jaffrey, NH.

Please review for concurrence on the determination of no adverse effect on EFH. Contact me if you have any questions or need more information.

Thanks,

Marc

--

Michael R. Johnson
U.S. Department of Commerce
NOAA Fisheries
Greater Atlantic Regional Fisheries Office
Habitat Conservation Division
55 Great Republic Drive
Gloucester, MA 01930
978-281-9130
mike.r.johnson@noaa.gov
http://www.greateratlantic.fisheries.noaa.gov/



Web <u>www.nmfs.noaa.gov</u>

Facebook <u>www.facebook.com/usnoaafisheriesgov</u>

Twitter <u>www.twitter.com/noaafisheries</u>

YouTube www.youtube.com/usnoaafisheriesgov

Appendix G – Threatened and Endangered Species Correspondence

To: Lindsay Matras Date: 2/25/2019

2 Bedford Farms Drive Suite 200 Bedford, NH 03110-6532

From: NH Natural Heritage Bureau

Re: Review by NH Natural Heritage Bureau of request dated 2/25/2019

NHB File ID: NHB19-0664 Applicant: NHDOT

Location: Tax Map(s)/Lot(s):

Jaffrey

Project Description: NHDOT proposes to improve the intersection of US 202

with NH 124 in the Town of Jaffrey, NH. The project includes improving the five-way intersection by re-routing US 202 through the town center of Jaffrey. Additionally, the five-way intersection would be converted to a five-leg

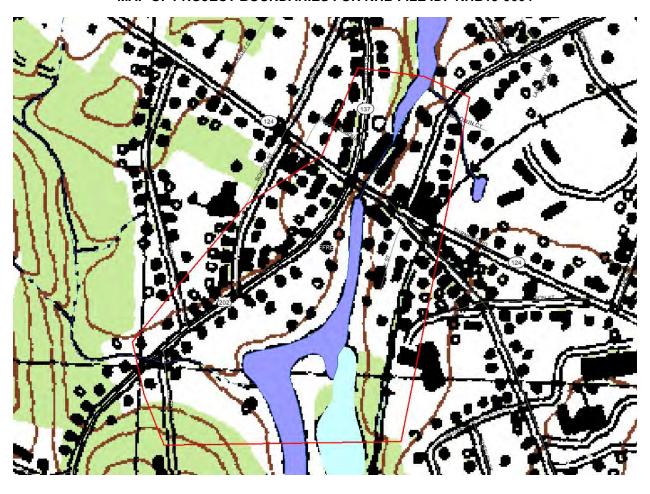
roundabout.

The NH Natural Heritage database has been checked for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government. We currently have no recorded occurrences for sensitive species near this project area.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

This report is valid through 2/24/2020.

MAP OF PROJECT BOUNDARIES FOR NHB FILE ID: NHB19-0664





United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Ecological Services Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5094 Phone: (603) 223-2541 Fax: (603) 223-0104

http://www.fws.gov/newengland



In Reply Refer To: November 12, 2018

Consultation Code: 05E1NE00-2018-SLI-0899

Event Code: 05E1NE00-2019-E-00720

Project Name: Jaffrey NH 202 Traffic Intersection Improvement Project

Subject: Updated list of threatened and endangered species that may occur in your proposed

project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5094 (603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2018-SLI-0899

Event Code: 05E1NE00-2019-E-00720

Project Name: Jaffrey NH 202 Traffic Intersection Improvement Project

Project Type: TRANSPORTATION

Project Description: The NHDOT proposes to improve the intersection of US 202 with NH

124 in the town of Jaffrey, NH. The project includes improving the five-way intersection by re-routing US 202 through the town center of Jaffrey.

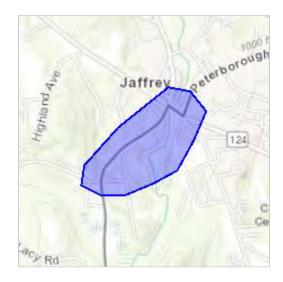
Additionally, the five-way intersection could be converted to a

roundabout. This project is in the preliminary stages, therefore project

alternatives are still being considered.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.81279669163864N72.0249096988281W



Counties: Cheshire, NH

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME STATUS

Northern Long-eared Bat Myotis septentrionalis

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Ecological Services Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5094 Phone: (603) 223-2541 Fax: (603) 223-0104

http://www.fws.gov/newengland



IPaC Record Locator: 063-15536544 March 06, 2019

Subject: Consistency letter for the 'US 202 / NH 124 / NH 137 Intersection Improvement Project' project (TAILS 05E1NE00-2018-R-0899) under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated to verify that the US 202 / NH 124 / NH 137 Intersection Impr ovement Pr oject (Proposed Action) may rely on the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, and is <u>likely to adversely affect</u> the endangered Indiana bat (Myotis sodalis) and/or the threatened Northern longeared bat (Myotis septentrionalis). Consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) is required.

This "may affect - likely to adversely affect" determination becomes effective when the lead Federal action agency or designated non-federal representative uses it to ask the Service to rely on the PBO to satisfy the agency's consultation requirements for this project. Please provide this consistency letter to the lead Federal action agency or its designated non-federal representative with a request for its review, and as the agency deems appropriate, transmittal to this Service Office for verification that the project is consistent with the PBO.

This Service Office will respond by letter to the requesting Federal action agency or designated non-federal representative within 30 calendar days to:

- verify that the Proposed Action is consistent with the scope of actions covered under the PBO;
- verify that all applicable avoidance, minimization, and compensation measures are included in the action proposal;
- identify any action-specific monitoring and reporting requirements, consistent with the monitoring and reporting requirements of the PBO, and
- identify anticipated incidental take.

ESA Section 7 compliance for this Proposed Action is not complete until the Federal action agency or its designated non-federal representative receives a verification letter from the Service.

For Proposed Actions that include bridge/structur e removal, replacement, and/or maintenance activities: If your initial bridge/structure assessments failed to detect Indiana bats, but you later detect bats during construction, please submit the Post Assessment Discovery of Bats at Bridge/Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species and/or designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please advise the lead Federal action agency for the Proposed Action accordingly.

Project Description

The following project name and description was collected in IPaC as part of the endangered species review process.

Name

US 202 / NH 124 / NH 137 Intersection Improvement Project

Description

The NHDOT proposes to improve the intersection of US 202 with NH 124 in the town of Jaffrey, NH. The project includes improving the five-way signal-controlled intersection to a roundabout. Additionally, US 202 would be re-realigned along a new segment of roadway proposed to be constructed between Blake Street and River Street across the Contoocook River, requiring the construction of a new bridge. The new bridge would tie into a smaller three-leg roundabout west of the Contoocook River that would reconnect US 202 with River Street.

Determination Key Result

Based on your answers provided, this project is likely to adversely affect the endangered Indiana bat and/or the threatened Northern long-eared bat. Therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 et seq.) is required. However, also based on your answers provided, this project may rely on the conclusion and Incidental Take Statement provided in the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

Qualification Interview

1. Is the project within the range of the Indiana bat^[1]?

```
[1] See <u>Indiana bat species profile</u>
Automatically answer ed
No
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- 2. Is the project within the range of the Northern long-eared bat^[1]?
 - [1] See Northern long-eared bat species profile

Automatically answer ed Yes

- 3. Which Federal Agency is the lead for the action?
 - A) Federal Highway Administration (FHWA)
- 4. Are all project activities limited to non-construction^[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)
 - [1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting. No
- 5. Does the project include any activities that are greater than 300 feet from existing road/rail surfaces^[1]?
 - [1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

- 6. Does the project include any activities within 0.5 miles of a known Indiana bat and/or NLEB hibernaculum^[1]?
 - [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

7. Is the project located within a karst area?

No

- 8. Is there any suitable^[1] summer habitat for Indiana Bat or NLEB within the project action area^[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)
 - [1] See the Service's <u>summer survey guidance</u> for our current definitions of suitable habitat.
 - [2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the national consultation FAQs.

Yes

- 9. Will the project remove any suitable summer habitat^[1] and/or remove/trim any existing trees within suitable summer habitat?
 - [1] See the Service's <u>summer survey guidance</u> for our current definitions of suitable habitat. Yes
- 10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

- 11. Have presence/probable absence (P/A) summer surveys^{[1][2]} been conducted^{[3][4]} within the suitable habitat located within your project action area?
 - [1] See the Service's <u>summer survey guidance</u> for our current definitions of suitable habitat.
 - [2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.
 - [3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.
 - [4] Negative presence/probable absence survey results obtained using the <u>summer survey guidance</u> are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

No

- 12. Does the project include activities within documented NLEB habitat [1][2]?
 - [1] Documented roosting or foraging habitat for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)
 - [2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

- 13. Will the removal or trimming of habitat or trees occur within suitable but undocumented NLEB roosting/foraging habitat or travel corridors?
 Yes
- 14. What time of year will the removal or trimming of habitat or trees within suitable but undocumented NLEB roosting/foraging habitat or travel corridors occur?
 - C) During both the active and inactive seasons

| 15. | Will any tree trimming or removal occur within | 100 feet of existing road/rail surfaces? |
|-----|--|--|
| | Yes | |

- 16. Will more than 10 trees be removed between 0-100 feet of the road/rail surface during the active season^[1]?
 - [1] Areas containing more than 10 trees will be assessed by the local Service Field Office on a case-by-case basis with the project proponent.

Yes

17. Will the tree removal alter any documented Indiana bat or NLEB roosts and/or alter any surrounding summer habitat within 0.25 mile of a documented roost?

No

18. Will any tree trimming or removal occur between 100-300 feet of existing road/rail surfaces?

Yes

19. Are all trees that are being removed clearly demarcated?

Yes

20. Will the removal of habitat or the removal/trimming of trees involve the use of temporary lighting?

No

21. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing permanent lighting?

Yes

22. Does the project include maintenance of the surrounding landscape at existing facilities (e.g., rest areas, stormwater detention basins)?

No

23. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

No

24. Does the project include slash pile burning?

No

- 25. Does the project include any bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

 No
- 26. 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.)

Yes

- 27. Is there any suitable habitat^[1] for Indiana bat or NLEB within 1,000 feet of the structure? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)
 - [1] See the Service's current <u>summer survey guidance</u> for our current definitions of suitable habitat. Yes
- 28. Has a structure assessment^[1] been conducted within the last 24 months^[2] to determine if bats are using the structure(s)?
 - [1] Structure assessment for occupied buildings means a cursory inspection for bat use. For abandoned buildings a more thorough evaluation is required (See <u>User Guide Appendix D</u> for bridge/abandoned structure assessment guidance).
 - [2] Assessments must be completed no more than 2 years prior to conducting any work on the structures, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that structure in subsequent years.

Yes

SUBMITTED DOCUMENTS

- 2019-02-28_Walker_Ash Telephone Note.pdf
 PVESERZ4DFG63N4DII4YEXE264/
 projectDocuments/15627195
- 2019-03-04 Walker Cummings Telephone Note.pdf https://ecos.fws.gov/ipac/project/PVESERZ4DFG63N4DII4YEXE264/
 projectDocuments/15627198

29. Did the structure assessment detect any signs of Indiana bats and/or NLEBs roosting in/under the structure (bats, guano, etc.)^[1]?

[1] If bridge assessment detects signs of any species of bats, coordination with the local FWS office is needed to identify potential threatened or endangered bat species. Additional studies may be undertaken to try to identify which bat species may be utilizing the bridge prior to allowing any work to proceed.

No

30. Will the structure removal, replacement, and/or maintenance activities include installing new or replacing existing permanent lighting?

Yes

- 31. Will the project involve the use of temporary lighting during the active season? No
- 32. Will the project install any new or replace any existing permanent lighting in addition to the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities?

 Yes
- 33. Is there any suitable habitat within 1,000 feet of the location(s) where permanent lighting (other than the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities) will be installed or replaced?

Yes

34. Does the project include percussives or other activities (not including tr ee removal/trimming or bridge/structur e work) that will increase noise levels above existing traffic/background levels?

Yes

- 35. Will the activities that use percussives (not including tr ee removal/trimming or bridge/structur e work) and/or increase noise levels above existing traffic/background levels be conducted during the active season^[1]?
 - [1] Coordinate with the local Service Field Office for appropriate dates.

Yes

- 36. Will any activities that use percussives (not including tr ee removal/trimming or bridge/ structur e work) and/or increase noise levels above existing traffic/background levels be conducted during the inactive season^[1]?
 - [1] Coordinate with the local Service Field Office for appropriate dates.

Yes

37. Are all project activities that are not associated with habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

Examples: lining roadways, unlighted signage, rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

No

38. Will the project raise the road profile above the tr ee canopy?

No

39. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answer ed

Yes, because the activities are within 300 feet of the existing road/rail surface, gr eater than 0.5 miles from a hibernacula, conducted during the active season, and ar e not within documented habitat

40. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) and/or increase noise levels above existing traffic/background levels consistent with a No Effect determination in this key?

Automatically answer ed

Yes, because the activities are within 300 feet of the existing pad/rail surface, gr eater than 0.5 miles from a hibernacula, and conducted during the inactive season

41. Is the habitat removal portion of this project consistent with a Likely to Adversely Affect determination in this key?

Automatically answer ed

Yes, because tree removal that occurs during the active season occurs within 100 feet from the existing road/rail surface, is not in documented NLEB roosting/foraging habitat or travel corridors, and a visual survey has not been conducted

42. Is the habitat removal portion of this project consistent with a Likely to Adversely Affect determination in this key?

Automatically answer ed

Yes, because tree removal that occurs during the active season is 100-300 feet from the existing road/rail surface and is not in documented NLEB roosting/foraging habitat or travel corridors

43. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answer ed

Yes, because the tree removal/trimming that occurs outside of the active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demar cation of the trees that are to be removed, and does not alter documented roosts and/or surr ounding summer habitat within 0.25 miles of a documented roost

44. Is the habitat removal portion of this project consistent with a Likely to Adversely Affect determination in this key?

Automatically answer ed

Yes, because the tree removal that occurs during the winter is 100-300 feet from the existing road/rail surface, and is not in documented roosting/foraging habitat or travel corridors

45. Is the structure removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

Automatically answer ed

Yes, because the structure has been assessed using the criteria documented in the BA and no signs of bats were detected

46. General AMM 1

Will the project ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

Yes

47. Tree Removal AMM 1

Can all phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal^[1] in excess of what is required to implement the project safely?

Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

[1] The word "trees" as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS' current summer survey guidance for our latest definitions of suitable habitat.

Yes

48. Tree Removal AMM 3

Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

Yes

49. Lighting AMM 1

Will all temporary lighting used during the removal of suitable habitat and/or the removal/trimming of trees within suitable habitat be directed away from suitable habitat during the active season?

Yes

50. Lighting AMM 2

Does the lead agency use the BUG (Backlight, Uplight, and Glare) system developed by the Illuminating Engineering Society^{[1][2]} to rate the amount of light emitted in unwanted directions?

- [1] Refer to Fundamentals of Lighting BUG Ratings
- [2] Refer to The BUG System—A New Way To Control Stray Light

No

51. Lighting AMM 2

Will all permanent lighting used during removal of suitable habitat and/or the removal/trimming of trees within suitable habitat use downward-facing, full cut-off^[1] lens lights (with same intensity or less for replacement lighting)?

[1] Refer to Luminaire classification for controlling stray light

Yes

52. Lighting AMM 2

Will all permanent lighting used during removal of suitable habitat and/or the removal/ trimming of trees within suitable habitat be directed away from all areas with suitable habitat?

Yes

53. Lighting AMM 2

Does the lead agency use the BUG (Backlight, Uplight, and Glare) system developed by the Illuminating Engineering Society^{[1][2]} to rate the amount of light emitted in unwanted directions?

- [1] Refer to Fundamentals of Lighting BUG Ratings
- [2] Refer to The BUG System—A New Way To Control Stray Light

No

54. Lighting AMM 2

Will all permanent lighting (other than any lighting already indicated for tree clearing or bridge/structure removal, replacement or maintenance activities) use downward-facing, full cut-off^[1] lens lights (with same intensity or less for replacement lighting)?

[1] Refer to Luminaire classification for controlling stray light

Yes

55. Lighting AMM 2

Will the permanent lighting (other than any lighting already indicated for tree clearing or bridge/structure removal, replacement or maintenance activities) be directed away from all areas with suitable habitat?

Yes

- 56. For Indiana bat, if applicable, compensatory mitigation measures are required to offset adverse effects on the species (see Section 2.10 of the BA). Please select the mechanism in which compensatory mitigation will be implemented:
 - 6. Not Applicable

Project Questionnaire

1. Have you made a No Effect determination for all other species indicated on the FWS IPaC generated species list?

Yes

2. Have you made a May Affect determination for any other species on the FWS IPaC generated species list?

No

- 3. How many acres^[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?
 - [1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

0.4

- 4. How many acres^[1] of trees are proposed for removal between 100-300 feet of the existing road/rail surface?
 - [1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

0.6

5. Please verify:

All tree removal will occur greater than 0.5 mile from any hibernaculum.

Yes, I verify that all tree removal will occur greater than 0.5 miles from any hibernaculum.

- 6. Is the project location 0-100 feet from the edge of existing road/rail surface? Yes
- 7. Is the project location 100-300 feet from the edge of existing road/rail surface? Yes
- 8. Please verify:

No documented NLEB roosts or surrounding summer habitat within 150 feet of documented roosts will be impacted between June 1 and July 31.

Yes, I verify that no documented NLEB posts or surrounding summer habitat within 150 feet of documented posts will be impacted during this period.

9. Please describe the proposed structure work:

The project would involve modifying the existing five-leg signal-contolled intersection to a five-leg roundabout at the intersection of Main Street, Peterborough Street, Turnpike Road, Stratton Road, and Blake Street. Additionally, US 202 would be realigned along a new segment of roadway proposed to be constructed between Blake Street and River Street across the Contoocook River, requiring the construction of a new bridge. The new bridge would tie into a smaller three-leg roundabout west of the Contoocook River that would reconnect US 202 with River Street.

- 10. Please state the timing of all proposed structure work:
 - Currently unknown
- 11. You have indicated that the following Avoidance and Minimization Measures (AMMs) will be implemented as part of the proposed project:
 - General AMM 1
 - Lighting AMM 1
 - Lighting AMM 2
 - Tree Removal AMM 1
 - Tree Removal AMM 3

Avoidance And Minimization Measures (AMMs)

These measures were accepted as part of this determination key result:

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

LIGHTING AMM 2

When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable.

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

Determination Key Description: FHW A, FRA, FTA Programmatic Consultation For T ransportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on March 16, 2018. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered Indiana bat (Myotis sodalis) and the threatened Northern long-ear ed bat (NLEB) (Myotis septentrionalis).

This decision key should <u>only</u> be used to verify project applicability with the Service's <u>February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects</u>. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is <u>not</u> intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.



United States Department of the Interior



FISH AND WILDLIFE SERVICE

New England Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5087 http://www.fws.gov/newengland

April 9, 2019

Marc G. Laurin Bureau of Environment NH Department of Transportation 7 Hazen Drive, P.O. Box 483 Concord, New Hampshire 03302-0483

Re: NH DOT Project 16307, Jaffrey, NH

TAILS: 05E1NE00-2018-F-0899

Dear Mr. Laurin:

The U.S. Fish and Wildlife Service (Service) is responding to your request, dated March 22, 2019, to verify that the New Hampshire Department of Transportation (NHDOT) Project 16307, proposed improvements to the intersection of U.S. Route 202 with State Route 124 (Project) in Jaffrey, New Hampshire may rely on the December 15, 2016, Programmatic Biological Opinion (BO) for federally funded or approved transportation projects that may affect the northern long-eared bat (*Myotis septentrionalis*) (NLEB). We received your request and the associated LAA Consistency Letter on March 25, 2019. This letter provides the Service's response as to whether the Federal Highway Administration may rely on the BO to comply with section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; U.S.C. 1531 *et seq.*) for the Project's effects to the NLEB.

The NHDOT, as the non-Federal agency representative for the Federal Transportation Agency, has determined that the Project may affect, and is likely to adversely affect the NLEB. The Project consists of the construction of a roundabout at the intersection of Route 202 and Route 124, and realignment of Route 202 that includes the construction of a new bridge. Approximately 1 acre of tree clearing will occur which may be implemented during the bat active season.

NHDOT also determined the Project may rely on the programmatic BO to comply with section 7(a)(2) of the ESA, because the Project meets the conditions outlined in the BO and all tree clearing related to the proposed work will occur farther than 0.25 mile from documented roosts and farther than 0.5 mile from any known hibernacula. The Service reviewed the LAA Consistency Letter and concurs with NHDOT's determination. This concurrence concludes your ESA section 7 responsibilities relative to this species for this Project, subject to the Reinitiation Notice below.

Marc G. Laurin April 9, 2019

Conclusion

The Service has reviewed the effects of the proposed Project, which include the NHDOT's commitment to implement the impact avoidance, minimization, and compensation measures as indicated on the LAA Consistency Letter. We confirm that the proposed Project's effects are consistent with those analyzed in the BO. The Service has determined that the Project is consistent with the BO's conservation measures, and the scope of the program analyzed in the BO is not likely to jeopardize the continued existence of the NLEB. In coordination with your agency, the Federal Highway Administration, and the other sponsoring Federal Transportation Agencies, the Service will reevaluate this conclusion annually in light of any new pertinent information under the adaptive management provisions of the BO.

Incidental Take of the Northern Long-eared Bat

The Service anticipates that tree removal associated with the proposed Project will cause incidental take of the NLEB. However, the Project is consistent with the BO, and such projects will not cause take of NLEBs that is prohibited under the final 4(d) rule for this species (50 CFR §17.40(o)). Therefore, this taking does not require exemption from the Service.

Reporting Dead or Injured Bats

The NHDOT, the Federal Highway Administration, its State/local cooperators, and any contractors must take care when handling dead or injured NLEBs that are found at the project site, in order to preserve biological material in the best possible condition and to protect the handler from exposure to diseases, such as rabies. Project personnel are responsible for ensuring that any evidence about determining the cause of death or injury is not unnecessarily disturbed. Reporting the discovery of dead or injured listed species is required in all cases to enable the Service to determine whether the level of incidental take exempted by this BO is exceeded, and to ensure that the terms and conditions are appropriate and effective. Parties finding a dead, injured, or sick specimen of any endangered or threatened species must promptly notify the Service's New England Field Office.

Reinitiation Notice

This letter concludes consultation for the proposed Project, which qualifies for inclusion in the BO issued to the Federal Transportation Agencies. To maintain this inclusion, a reinitiation of this project-level consultation is required where the Federal Highway Administration's discretionary involvement or control over the Project has been retained (or is authorized by law) and if:

- 1. new information reveals that the Project may affect listed species or critical habitat in a manner or to an extent not considered in the BO;
- 2. the Project is subsequently modified in a manner that causes an effect to listed species or designated critical habitat not considered in the BO; or
- 3. a new species is listed or critical habitat designated that the Project may affect.

In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease, pending reinitiation.

We appreciate your continued efforts to ensure that this Project is fully consistent with all applicable provisions of the BO. If you have any questions regarding our response, or if you need additional information, please contact Susi von Oettingen of this office at 603-227-6418.

Sincerely yours,

Thomas R. Chapman

Supervisor

New England Field Office

Appendix H – Section 6(f) and Conservation Lands Correspondences

Matras, Lindsay

From: Walker, Steve <Steve.Walker@osi.nh.gov>
Sent: Monday, October 02, 2017 2:40 PM

To: Matras, Lindsay **Subject:** RE: Request for Review

Hi Lindsay, There are no LCIP properties in the project area. Thanks Steve

From: Matras, Lindsay [mailto:lmatras@vhb.com]

Sent: Monday, October 2, 2017 1:46 PM

To: Walker, Steve

Cc: Walker, Peter; Laurin, Marc; Kennedy, Marty; Chase, Victoria

Subject: Request for Review

Hello Mr. Walker,

Please see the attached letter requesting information regarding any Conservation Land Stewardship (CLS) properties or Land Conservation Investment Program (LCIP) properties located within the vicinity of the described proposed project. Any information provided by your office will be used for planning purposes and future permitting efforts for the described project.

Thank you for your assistance,

Lindsay Matras, WSA

Environmental Scientist



2 Bedford Farms Drive Suite 200 Bedford, NH 03110-6532 **P** 603.391.3916 | **F** 603.518.7495 Imatras@vhb.com

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Matras, Lindsay

From: Paula Bellemore <pbellemore@lchip.org>
Sent: Thursday, February 22, 2018 11:40 AM

To: Matras, Lindsay

Subject: [External] RE: Request for Review

Hi Lindsay,

My apologies for the delay. LCHIP has not assisted with the protection of any natural, cultural or historic resources in the project area described.

Best,

Paula Bellemore Natural Resource Specialist

NH Land and Community Heritage Investment Program

13 West Street, Suite 3 Concord, NH 03301 (603) 224-4113

From: Matras, Lindsay [mailto:lmatras@vhb.com] Sent: Tuesday, February 20, 2018 8:24 AM

To: Paula Bellemore **Cc:** Walker, Peter

Subject: Request for Review

Hello Paula,

A letter requesting review was mailed on October 2, 2017, inquiring as to whether there were nearby Land and Community Heritage Investment Program (LCHIP) parcels to the proposed Intersection Improvement Project (NHDOT #16307). Attached is the letter which includes the proposed project information as well as a USGS map of the location of the proposed alignments. Please let us know if any LCHIP properties are located nearby or adjacent to the proposed alignments. Any information provided will be incorporated into our study and future permitting efforts.

Thank you,

Lindsay Matras, WSA

Environmental Scientist



2 Bedford Farms Drive Suite 200 Bedford, NH 03110-6532 **P** 603.391.3916 | **F** 603.518.7495 Imatras@vhb.com

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Matras, Lindsay

From: DNCR: Land & Water Conservation Fund <LWCF@dncr.nh.gov>

Sent: Monday, February 26, 2018 5:02 PM

To: Matras, Lindsay

Subject: RE: [External] RE: Request for Review

Attachments: 33-00655 Tax Map.pdf

Hi Lindsay,

I've confirmed with NPS that parcel #225 <u>is</u> encumbered under section 6(f) of the LWCF Act. Implementation of alternative 3A would subject the Town of Jaffrey to a conversion scenario of needing to provide substitute property of similar value to the displace designated public outdoor recreation land. Please let me know if you need any further information.

Bill

Bill Gegas, Program Specialist NH Department of Natural and Cultural Resources Division of Parks and Recreation 172 Pembroke Road Concord, NH 03301-5767

Tel: 603-271-3556 Fax: 603-271-3553 bill.gegas@dncr.nh.gov www.nhstateparks.org

From: Matras, Lindsay [mailto:Imatras@vhb.com]
Sent: Wednesday, February 21, 2018 10:31 AM
To: DNCR: Land & Water Conservation Fund

Cc: Walker, Peter

Subject: RE: [External] RE: Request for Review

Hi Bill,

Here are some preliminary alternative maps with parcel information. Yes, it appears that Alternative 3A would impact the parcel you indicated. Please keep us updated regarding this parcel.

Thank you,

Lindsay Matras

Environmental Scientist

P 603.391.3916 www.vhb.com

From: DNCR: Land & Water Conservation Fund [mailto:LWCF@dncr.nh.gov]

Sent: Wednesday, February 21, 2018 10:14 AM

To: Matras, Lindsay < !matras@vhb.com">"> DNCR: Land & Water Conservation Fund < LWCF@dncr.nh.gov>

Cc: Walker, Peter < PWalker@VHB.com > Subject: [External] RE: Request for Review

Hi Lindsay,

I apologize for the delay. Do you have a parcel map with an overlay of the proposed alternatives? I'll need to confirm with the NPS what they have on file as a LWCF section 6(f) encumbrance area, but in my assessment it seem lot 225, map 239, is likely protected under section 6(f). This parcel looks like it would be directly impacted by Alternative 3-A (purple). However further confirmation with NPS, and a review of the alternatives compared against a parcel map is necessary.

Let us know if you have any other questions.

Bill Gegas, Program Specialist NH Department of Natural and Cultural Resources Division of Parks and Recreation 172 Pembroke Road Concord, NH 03301-5767

Tel: 603-271-3556 Fax: 603-271-3553 bill.gegas@dncr.nh.gov www.nhstateparks.org

From: Matras, Lindsay [mailto:lmatras@vhb.com]
Sent: Tuesday, February 20, 2018 8:25 AM
To: DNCR: Land & Water Conservation Fund

Cc: Walker, Peter

Subject: Request for Review

Dear Mr. Gegas,

A letter requesting review was mailed on October 2, 2017, inquiring as to whether there were nearby Land and Water Conservation Fund (LWCF) parcels to the proposed Intersection Improvement Project (NHDOT #16307). Attached is the letter which includes the proposed project information as well as a USGS map of the location of the proposed alignments. Please let us know if any LCHIP properties are located nearby or adjacent to the proposed alignments. Any information provided will be incorporated into our study and future permitting efforts.

Thank you!

Lindsay Matras, WSA

Environmental Scientist

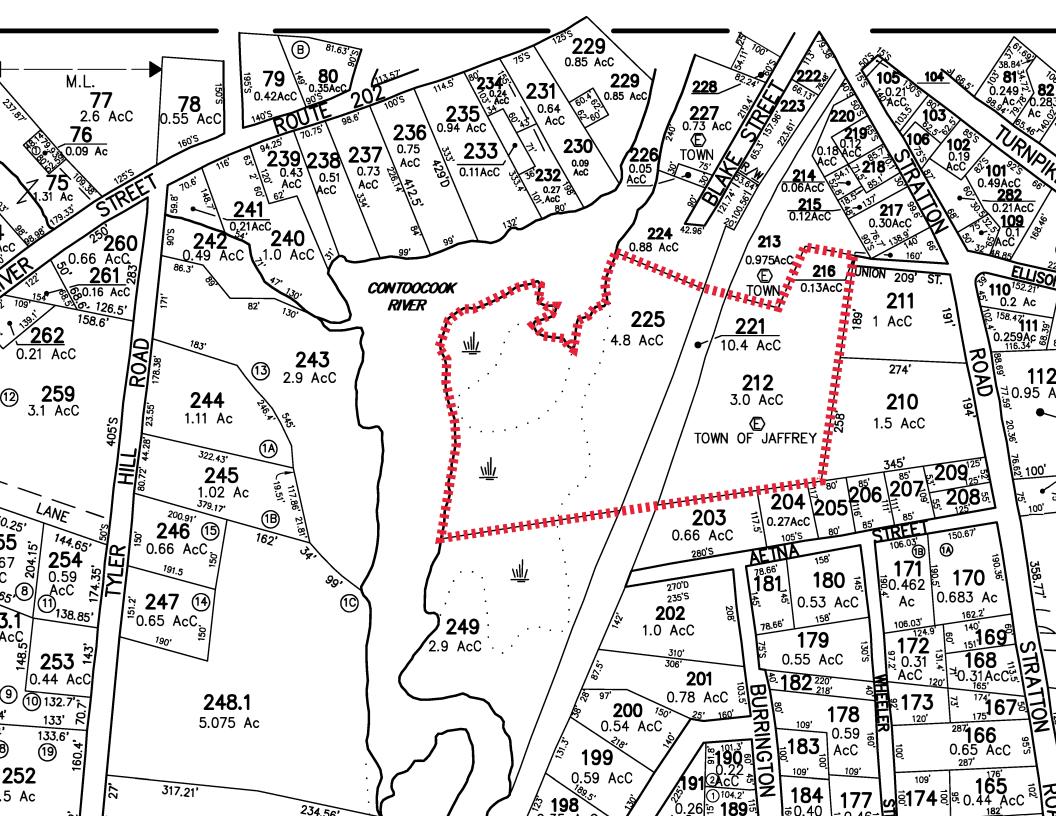


2 Bedford Farms Drive Suite 200 Bedford, NH 03110-6532 **P** 603.391.3916 | **F** 603.518.7495 Imatras@vhb.com

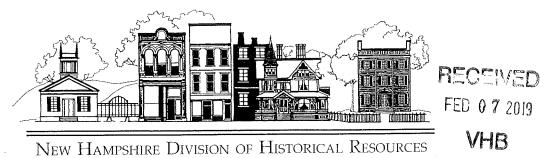
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Appendix I – Cultural Resources Documentation



State of New Hampshire, Department of Cultural Resources 19 Pillsbury Street, Concord, NH 03301-3570 TDD Access: Relay NH 1-800-735-2964 www.nh.gov/nhdhr 603-271-3483 603-271-3558 FAX 603-271-3433 preservation@dcr.nh.gov

January 30, 2019

Jillian Edelmann Bureau of Environment NH Department of Transportation Hazen Drive Concord NH 03302-0483

Re:

DOT/FHWA X-001(234), 16307, RPR 9564

Dear Jill:

Thank you for requesting a determination of National Register eligibility for the area listed below. As requested, the Division of Historical Resources' Determination of Eligibility Committee has reviewed the *DHR Historic District Area Form* prepared by Vanesse Hangen Brustlin; based on the information available, the DOE Committee's evaluation of National Register eligibility is:

TOWN/CITY A

Jaffrey

AREA
NR Listed Downtown Jaffrey Historic District Boundary Increase

DETERMINATION

Eligible

A copy of the DHR evaluation form is attached for your use. The inventory data and the evaluation will also be added to the statewide survey database for historic properties in New Hampshire.

Please contact Megan Rupnik at 271-6435 or Megan.Rupnik@DNCR.NH.gov if you have questions.

Sincerely,

Christina St.Louis Program Specialist

Enclosure

cc: Elizabeth Muzzey / State Historic Preservation Officer

Jamison Sikora, FHWA

Vanesse Hangen Brustlin, Inc.



NH Division of Historical Resources Determination of Eligibility (DOE)

| Date received: 1/15/19 | Inventory # | t: JAF_DJHD |
|--|-----------------|--|
| Date of group review 1/23/19 | | affrey/Downtown Jaffrey Historic District lary increase) |
| DHR staff: Nadine | Town/City: | Jaffrey |
| Property name: | County: Cl | neshire |
| Address: multiple | | |
| · | D [10.magar] | 104har |
| Reviewed for: [X]R&C []PTI []NR []SI FHWA | K []Survey [| jourer |
| Individual Properties | Dis | stricts |
| NR SR | NF. | |
| [] []Eligible | [X] | |
| | | |
| [] []Eligible, also in district | [] | []Not eligible |
| [] []Eligible, in district | [] | []More information needed |
| [] []Not eligible | [] | []Not evaluated @ district |
| [] []More information needed | | |
| [] []Not evaluated for individual eligibility | / | |
| 1.4 14 15.41 41 15.45 | **** | |
| Integrity: [X]Location [X]Design | [X]Setting | [X]Materials |
| []Workmanship []Feeling [] |]Association | |
| Criteria: [X]A. Event []B. Person [X]D. Archaeology []E. Exception | ۲]C. Architectu | re/Engineering |
| Level: [X]Local []State []Nationa | 1 | |
| | | |
| STATEMENT OF SIGNIFICANCE: IF THIS PROPERTY IS REVIEWED IN THE | E FUTURE, A | DDITIONAL DOCUMENTATION WILL BE NEEDED. |
| In 2002, the East Jaffrey Historia District (also I | Downtown lof | froy Historia District) was listed in the National Deviator of |
| Listoria Places, significant under Community D | Jowntown Jai | frey Historic District) was listed in the National Register of |
| Historic Places, significant under Community P | lanning and L | Development and Architecture (A and C). An updated form |
| was prepared in 2018/19 that increases the bo | undary to incli | ude a neighborhood to the southwest of the original district, |
| bring the period of significance up to the 50-year | ar cut off (201 | 9), and reassess contributing/non-contributing resources |
| | IR concurs wi | th the consultants' recommendations except for the following |
| properties: | | |
| 50 Charlonne Street/Contributing | | |
| 49 Charlonne Street/Contributing (garage non- | contributing) | |
| 16 Charlonne Street/Contributing | | |
| 39 River Street/Contributing | | |
| 49 River Street/Contributing | | |
| Monandnock Railroad: concur with recommend | dations within | district as full assessment of railroad is not complete |
| 21 Stratton Road/Contributing | | · · |
| 6 Blake Street/Contributing | | |
| 15 River Street/Contributing | | |
| ☑ ENTERED INTO DATABASE | | |
| ACREAGE: approx. 75 + 17.5 boundary increa | se | |
| PERIOD OF SIGNIFICANCE: 1840-1968 | | • |
| AREA OF SIGNIFICANCE: Community planning | ng and develo | pment, architecture |
| BOUNDARY: see attached for original bound | lary and boun | dary increase (location map, page 1) |
| SURVEYOR: Quinn R. Stuart and Corinne E | | |
| FOLLOW-UP: Notify appropriate parties. | | |

Final DOE approved by:

Please mail 2 copies of the completed form and required material to:

Cultural Resources Staff Bureau of Environment NH Department of Transportation 7 Hazen Drive Concord, NH 03302

This is a new submittal.



| DHR Use Only | R. Full |
|---------------|---------|
| R&C# | 9564 |
| Log In Date | // |
| Response Date | // |
| Sent Date | ii |

Request for Project Review by the New Hampshire Division of Historical Resources for Transportation Projects

| This is additional information relating to DHR Review and Compliance (R&C)#: |
|---|
| GENERAL PROJECT INFORMATION |
| DOT Project Name & Number Jaffrey 16307 |
| Brief Descriptive Project Title US 202 / NH 124 / NH 137 Intersection Improvement Project |
| Project Location Intersection of River Street (US 202) and Main Street (NH 124) |
| City/Town Jaffrey |
| Lead Federal Agency and Contact (if applicable) (Agency providing funds, licenses, or permits) Federal Highway Administration (FHWA) Permit Type and Permit or Job Reference # X-001(234) |
| DOT Environmental Manager (if applicable) Marc Laurin |
| PROJECT SPONSOR INFORMATION |
| Project Sponsor Name NH Department of Transportation |
| Mailing Address PO Box 483 Phone Number 603-271-4044 |
| City Concord State NH Zip 03302-0483 Email Marc.Laurin@dot.nh.gov |
| CONTACT PERSON TO RECEIVE RESPONSE |
| Name/Company Peter J. Walker/VHB |
| Mailing Address 2 Bedford Farms Drive, Suite 200 Phone Number 603-391-3900 |
| City Bedford State NH Zip 03110-6532 Email pwalker@vhb.com |

This form is updated periodically. Please download the current form at http://www.nh.gov/nhdhr/review. Please refer to the Request for Project Review for Transportation Projects Instructions for direction on completing this form. Submit 2 copies of this project review form for each project for which review is requested. Include 1 self-addressed stamped envelope to expedite review response. Project submissions will not be accepted via facsimile or e-mail. This form is required. Review request form must be complete for review to begin. Incomplete forms will be sent back to the applicant without comment. Please be aware that this form may only initiate consultation. For some projects, additional information will be needed to complete the Section 106 review. All items and supporting documentation submitted with a review request, including photographs and publications, will be retained by the DOT and the DHR as part of its review records. Items to be kept confidential should be clearly identified. For questions regarding the DHR review process and the DHR's role in it, please visit our website at: http://www.nh.gov/nhdhr/review or contact the R&C Specialist at christina.st.louis@nh.gov or 603.271.3558.

| | PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION |
|-------------|---|
| Project | Boundaries and Description |
| | Attach the relevant portion of a 7.5' USGS Map (photocopied or computer-generated) indicating the proposed area of potential effect (APE). (See RPR for Transportation Projects Instructions and R&C FAQs for guidance. Note that the APE is subject to approval by lead federal agency and SHPO.) |
| \boxtimes | Attach a detailed narrative description of the proposed project. Attach current engineering plans with tax parcel, landscape, and building references, and areas of |
| | proposed excavation, if available. Attach photos of the project area/APE with mapped photo key (overview of project location and area adjacent to project location, and specific areas of proposed impacts and disturbances.) (Blank photo logs are available on the DHR website. Informative photo captions can be used in place of a photo log.) A DHR file review must be conducted to identify properties within or adjacent to the APE. Provide file review results in Table 1. (Blank table forms are available on the DHR website.) File review conducted on 06/16/2017.* |
| | *The DHR recommends that all survey/National Register nomination forms and their Determination of Eligibility (green) sheets are copied for your use in project development. |
| Arc | itecture |
| Are | there any buildings, structures (bridges, walls, culverts, etc.) objects, districts or landscapes within the APE? Yes No If no, skip to Archaeology section. If yes, submit all of the following information: |
| | Attach completed Table 2 . Photographs of <i>each</i> resource or streetscape located within the APE. Add to the mapped photo key and photo log noted above. (Digital photographs are accepted. All photographs must be clear, crisp and focused.) |
| \boxtimes | Copies of National Register boundary (listed or eligible) mapping, and add National Register boundaries for listed and eligible properties to the 7.5' USGS project map (if applicable). |
| Arc | aeology |
| Doe | the proposed undertaking involve ground-disturbing activity? Yes No If yes, submit all of the following information: |
| \boxtimes | Description of current and previous land use and disturbances. Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.) |
| | Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process. |
| A | ENCY COMMENT This Space for DOT and Division of Historical Resources Use Only |
| Sent to | DHR; Authorized DOT Signature: Date: |
| | ufficient information to initiate review. |
| - | ditional information is needed in order to complete review. |
| Comm | a it is a first mainter Cuman |
| me | eury to provide informed comments. |
| 41.4 | untern faffer that Dict was NR hated in 2002 with a genod of Significance ladery |
| | 50 yr cut by 2 1952. Note that there is interest in laffrey in updating the NR |
| addi | surp 18suls also cutical to this Sect 106 pigect. Continue consultation. |
| ASSE | is whether any properties proposed for talking warrant an individual MR |
| - | esulty determination. |
| Resour | change or resources are discovered in the course of this project, you must contact the Division of Historical res as required by federal law and regulation. Proceed with Consulting Party Coordination involvements of the Consulting Party Coordination involvements and Date: Livil 14, 2018 |
| | zed DHR Signature: Laura & Black Date: Lynt 18, 2018 |

BUREAU OF ENVIRONMENT, NHDOT REVIEW REQUEST TO THE NH DIVISION OF HISTORICAL RESOURCES

Return Prior to:

AND OF TOPO ED

| Date: | April 2, 2019 | Return Prior to: | |
|--|---|--|--|
| Project: | Results of Phase IB Intersection Improve | Intensive Archaeological Investigation: Jaffrey 16307, US 202/NH124 rements Project, NHDHR Bibliography Form & Short Report; by IAC 3 | /NH137 3.6.2019 <i>RPR</i> 9564 |
| The Phase Alt-1, whic 20 th century confirmed | t area comprises part IB completed investig h traverses the Conto y artifacts from fill co | of the Downtown Jaffrey Historic District along the Contoocook Regation of two areas of archaeological sensitivity identified in the Phaeocook River. Excavation of 32 STPs on both sides of the river yield ontexts on the west side of the Contoocook River. No site was identified land alternation on both sides of the river. No further investigates with this analysis. | iver. ase IA within ed 200 19 th and fied. IAC |
| and Sec. 10 relative to h | 6 of the NHPA require | NH DIVISION OF HISTORICAL RESOURCES for review and of the consultation with the SHPO to ensure the review of all actions cover properties. The review should focus on the project's impacts pertinent to the N CONTACT: Sheila Charles Cultural Resources Program Specialist/Arches Sheila.Charles@dot.nh.gov 603-271-4049 | o this act. |
| COMME | NTS: Please check or | ne. Additional comments should be included below or on a separ | ate sheet. |
| | CONCUR WITH | A result of survey and recommendation | |
| | CONCUR WITH CO | ONDITION (Indicate major reservations about the project and the specif changes or modifications desired.) | ìc substantive |
| | | | |
| | | | |
| | TECHNICAL COM | MENTS (No formal position, technical comments may be attached.) | |
| | | | |
| | | | |
| | | | |
| | NO COMMENTS | | |
| ** NON- | RECEIPT OF THI | IS REVIEW IMPLIES CONSENT PLEASE COPY AND RETURN THIS SHEET | |
| Date: 9 | 4-5-19 | | |
| Reviewer's | signature: Jasic | delauf Title: RIC CasesNATOR | |



THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

RECEIVEL SEP 18 2019

William Cass, P.E. Assistant Commissioner



JAFFREY 16307 X-A001(234) RPR 9564

Adverse Effect Memo

For the purpose of compliance with regulations of the National Historic Preservation Act, as amended, and the Advisory Council on Historic Preservation's *Procedures for the Protection of Historic Properties* (36 CFR 800), the NH Division of the Federal Highway Administration (FHWA) and the NH Division of Historical Resources (NHDHR) have coordinated regarding the identification and evaluation of historic and archeological properties potentially affected by plans to improve the intersection of US 202 (Main Street/Peterborough Street) with NH 124 (Turnpike Road), Stratton Road, and Blake Street in Jaffrey, New Hampshire. The Area of Potential Effect (APE) begins to the north along US 202 near Cross Street and continues southwest along US 202 to Tyler Hill Road. The APE also extends across the five-leg intersection from US 202 onto Blake Street, crossing the Contoocook River approximately 400 feet southwest of Main Street.

FHWA funds would be applied to the construction of the Proposed Action, and therefore FHWA is the lead federal agency for this consultation.

Project Description:

Intersection Improvements

The Proposed Action calls for the existing five-leg traffic signal controlled Main Street/Peterborough Street/Turnpike Road/Stratton Road/Blake Street intersection to be reconstructed to form a five-leg single-lane roundabout. The proposed roundabout would have an inscribed diameter (approximate outside curb-to-curb edge) of approximately 125 feet. Each approach to the roundabout would consist of only a single lane except for the northbound approach from a new connector roadway that would also provide a channelized right-turn lane.

US 202 Realignment

In addition to improving the five-leg intersection at Main Street, the Proposed Action calls for US 202 to be realigned by constructing a new 140-foot long bridge crossing the Contoocook River approximately 375 feet south of the Main Street bridge. A new segment of US 202 would extend south and west from the five-leg roundabout using portions of the current Blake Street alignment to cross the river to River Street. The new segment of US 202 would intersect River Street at a second proposed roundabout. The River Street roundabout would be a 3-leg single-lane roundabout with an inscribed diameter of approximately 125 feet.

Additional Improvements

In addition to the proposed improvements to traffic flow through the five-leg intersection and along US 202, the proposed improvements include new accommodations for pedestrians. The proposed connector roadway and Contoocook River bridge crossing would provide a 5.5-foot wide sidewalk and a 5- to 7-foot wide shoulder/bike lane on each side of the roadway. The two roundabouts would provide pedestrian crosswalks and pedestrian refuge islands on each approach to the roundabout, which would accommodate pedestrians crossing only one lane and one direction of traffic at a time. Access to the Monadnock Recreational Rail Trail located to the north and south of the intersection would also be maintained.

The Proposed Action also includes the implementation of a stormwater management plan to minimize water quality impacts. This plan would include the construction of a stormwater Best Management Practice (BMP) to treat the additional impervious area. This BMP would be constructed on the east side of the Contoocook River in the vicinity of the new proposed bridge structure and would drain to the Contoocook River. As the Project design progresses, the feasibility of constructing this BMP would be evaluated further as well as the potential use of porous pavers or asphalt in appropriate locations as a means of reducing the amount of impervious area. Additionally, use of other low impact measures such as tree planters would also be evaluated.

Identification:

Above-Ground Resources

In March 2018, a Request for Project Review (RPR) was submitted to NHDHR for the US 202 / NH 124 / NH 137 Intersection Improvement Project (Jaffrey 16307). NHDHR reviewed the RPR on April 18, 2018. In response to NHDHR request for additional information, an Area Form for the Downtown Jaffrey Historic District Boundary Increase was submitted to NHDHR in November 2018 to determine if the period of significance should be extended to 1968, the 50-year cut-off date in 2018, and to examine potential areas of expansion of the boundaries of the existing Downtown Jaffrey Historic District. The Area Form proposed to increase the Downtown Jaffrey Historic District to include Charlonne Street, which runs roughly parallel to the southwest boundary of the existing district, and a short portion of River Street terminating at Tyler Hill Road, as a directly related part of Downtown Jaffrey's development in the late nineteenth and early twentieth centuries. Field surveys for development of the Area Form within this area were conducted in January and September of 2018. A NHDHR determination of eligibility form dated January 30, 2019 indicated that NHDHR concurred with the extension of the period of significance to 1968 and the increased boundary of the Downtown Jaffrey Historic District, noting a number of new contributing resources.

Archaeological Resources

Independent Archaeological Consulting, LLC (IAC) conducted a Phase IA Archaeological Sensitivity Assessment of the Study Area in February 2018. The Phase IA Assessment report (IAC Report No. 1345), dated February 23, 2018, found archaeological sensitivity within the Study Area. Although a large extent of the investigated area has experienced ground disturbance in the past, the Phase IA found potential for intact archaeological resources below the modern areas of disturbance. Additionally, the project's proximity to the Contoocook River indicated sensitivity for Pre-Contact Archaeological sites. Therefore, field work for a Phase IB Intensive Archaeological Investigation was completed on

November 30 and December 3, 2018 in the area where construction would occur under the Proposed Action. The Phase IB Investigation report, dated March 6, 2019, reported that the project footprint was found to contain fill disturbance with no evidence of intact archaeological resources. Therefore, the Proposed Action would not result in impacts to archaeological resources, and no further archaeological testing was recommended.

Public Consultation:

Public informational meetings have been held on the following dates: October 17, 2107, February 20, 2018, and November 15, 2018. During these meetings, information regarding the Section 106 process and the role of consulting parties was included in the presentation and take-home materials. One individual, Robert Stephenson of Jaffrey, NH, was identified as a Section 106 Consulting Party. Mr. Stephenson was a former president of the Jaffrey Historical Society, former chairman of the Historic District Commission, former member of the New Hampshire State Historical Resources Council, and current member of the Jaffrey War Memorial Committee.

Determination of Effect:

Applying the criteria of effect at 36 CFR 800.5, we have determined that the Proposed Action would have an adverse effect on the Downtown Jaffrey Historic District and Boundary Increase Area (referred to as the "District"). Additionally, the Proposed Action is not considered an adverse effect on the Jaffrey Mills.

Downtown Jaffrey Historic District and Boundary Increase Area

The District was listed in the National Register of Historic Places in 2002 under Criterion A and C in the areas of Community Planning and Development and Architecture. A proposed boundary increase was determined eligible by NHDHR in 2019 under Criterion A and C in the areas of Community Planning and Development and Architecture. Both the District and the boundary increase retain integrity of location, design, setting, and materials.

Proposed impacts to the District would result in physical and visual effects. Proposed physical effects within the District includes construction of two new roundabouts, the US 202 realignment including the construction of a new bridge across the Contoocook River, and a stormwater BMP. Two contributing properties (4 Stratton Road and 15 River Street) would be fully acquired and demolished to accommodate the two roundabouts under the Proposed Action. Two contributing properties (21 River Street and 23 River Street) would be partially acquired under the Proposed Action to accommodate the three-way roundabout, with greater physical property impacts proposed to the parcel at 21 River Street. The joint driveway to 19 and 21 River Street, both contributing properties, would be reconfigured to accommodate the new three-way roundabout. These impacts would result in physical destruction or damage to part of the District resource [refer to 36 CFR Section 800.5(a)(2)(i)].

Visually, the Proposed Action would introduce multiple new transportation elements into the setting of the District including two roundabouts and a new bridge located at a new river crossing. At a minimum, views from the Main Street bridge south along the Contoocook River would be partially obstructed by the introduction of the proposed bridge structure. Although a sensitive design of the new bridge structure could minimize these visual impacts, the bridge would introduce a modern element into a natural

viewshed of the District's setting [36 CFR Section 800.5(a)(2)(v)] and change the character of a physical feature (the Contoocook River) within the District's setting [36 CFR 800.5(a)(2)(iv)].

Jaffrey Mills

The Jaffrey Mills, also known as the Stone Brothers and Curtis (White Brothers) Mill, was listed in the National Register of Historic Places in 1982 under Criterion A for Industry as being the most substantial and ambitious industrial complex ever built in Jaffrey, contributing to the economic base and cultural history of the town. In addition, the Mill is listed under Criterion C for Architecture as a complex that comprises intact representatives of Second Empire and Italianate-style industrial buildings. The Mill is also a contributing property to the Downtown Jaffrey Historic District.

The complex is located on the north side of Main Street at the intersection of North Street/NH 137. The National Register boundary for the Jaffrey Mills is defined as the property boundary of Jaffrey Tax Map 238 Lot 257. The Proposed Action would not require acquisition of any permanent or temporary right-of-way or easement from either of these parcels.

The Proposed Action would reduce the number of travel lanes along Main Street and would reconfigure on-street parking in front of the Jaffrey Mills. Roadway work includes new sub-base and pavement to the east of the Contoocook River (Main Street) bridge, and simple mill and overlay of existing pavement to the west of the bridge. No work on the bridge is proposed other than pavement rehabilitation.

Additionally, the Proposed Action would reconstruct the existing sidewalk adjacent to the East Building and Mill Office. The East Building directly abuts the existing sidewalk, whereas landscaping and shrub plantings are located between the Mill Office and the existing sidewalk. The proposed sidewalk reconstruction would occur within the existing footprint and would not impact the Jaffrey Mills buildings; the existing distance between the sidewalk and the mill buildings would be maintained. The reconstructed sidewalk would be configured so as to direct water flow away from the buildings. Additionally, a weather tight expansion joint would be installed between the East Building and the reconstructed sidewalk to prevent damage to the mill building.

No direct impacts to the mill buildings are proposed to occur as a result of the Proposed Action. However, dust, noise, and vibrations from the sidewalk replacement construction could cause minimal temporary impacts to the mill buildings. As project plans progress, the equipment and methods that would be implemented would be identified, and, if needed, a "Construction Vibration Assessment" would be developed. Methods for reducing construction vibrations are considered on a case-by-case basis, but they could include temporary construction monitoring and any adjustments to proposed machinery and methods of construction.

Overall, the Proposed Action would reduce traffic congestion, air quality, and noise along the portion of Main Street directly abutting the Mill. Additional improvements, including the reduction of the number

¹ The 1982 Jaffrey Mills National Register Nomination Form notes that the property boundary is defined as Tax Map #5E4 Parcel #157. That parcel was subdivided in 2008, and the Town of Jaffrey subsequently re-designated all tax parcels in the community using a new numbering system.

² Assessments will be made using the following guidance documents: "New Hampshire DOT Research Record: Ground Vibrations Emanating from Construction Equipment" (2012) and "NCHRP 25-25/Task 72: Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects" (2012).

of lanes, the introduction of additional street parking, and sidewalk improvements would also occur along Main Street.

Based on the impacts and benefits discussed above, the Proposed Action would have No Adverse Effect on Jaffrey Mills. Although limited construction within existing right-of-way would occur directly adjacent to the Mills, it would not affect the significance of the industrial history or architecture of the mill, from which it derives its significance.

Archaeological Resources

Based on archaeological assessments completed to date, there would be no effect on archaeological resources.

The result of identification and evaluation for the proposed US 202 / NH 124 / NH 137 Intersection Improvement Project is a finding of Adverse Effect.

Mitigation Measures

All mitigation will be recorded in a Memorandum of Agreement developed in consultation with FHWA, NHDHR, NHDOT, the Town and Consulting Parties.

| Finding per FHWA | Applies to Historic Resource |
|---------------------|------------------------------------|
| □ No 4(f) | |
| ☐ Programmatic 4(f) | |
| de minimis 4(f) | |
| ⊠ Full 4(f) | Downtown Jaffrey Historic District |

In accordance with the Advisory Council's regulations, consultation will continue, as appropriate, as this project proceeds.

been consulted and their concerns have been taken into account. Therefore, the requirements

9/17/2019

Patrick Bauer, Administrator

Date

Federal Highway Administrator

of Section 4(f) have been satisfied.

Cultural Resources Manager

Concurred with by the NH State Historic Preservation Officer:

Deputy State Historic Preservation Officer

NH Division of Historical Resources

Jamie Sikora, FHWA Marika Labash, NHDHR Loretta Girard Doughty, NHDOT Marc Laurin, NHDOT

Peter Walker, VHB

CC:

MEMORANDUM OF AGREEMENT

AMONG NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION,

and the

NEW HAMPSHIRE STATE HISTORIC PRESERVATION OFFICER

Regarding the project known as the Jaffrey NH 202 Traffic Intersection Improvement Project [NHDOT Project Jaffrey 16307, FHWA Project X-A001(234)] which plans to improve the five-way intersection of US 202 (Main Street/Peterborough Street) with NH 124 (Turnpike Road), Stratton Road, and Blake Street in the Town of Jaffrey.

WHEREAS, the Federal Highway Administration (FHWA) plans to provide funds for the New Hampshire Department of Transportation (NHDOT) for construction of the improved Route 202/124 intersection with a new 140-foot long bridge crossing the Contoocook River and two roundabouts in the Town of Jaffrey, New Hampshire; and

WHEREAS, FHWA has defined the undertaking's area of potential effect (APE) as 400 feet around the project area; and

WHEREAS, the undertaking would involve clearing, site work to construct the new bridge and new roadway segments as well as related transportation and stormwater infrastructure, would necessitate the acquisition and demolition of buildings at 5 Stratton Road and 15 River Street, as well as partial acquisitions at 21 and 23 River Street, all of which contribute to the Downtown Jaffrey Historic District; and

WHEREAS, FHWA has determined that the undertaking will have an adverse effect on the Downtown Jaffrey Historic District, which was listed in the National Register of Historic Places, and Boundary Increase Area, which was determined to be eligible for listing in the National Register; and

WHEREAS, FHWA has consulted with the NHDOT, the New Hampshire State Historic Preservation Officer (NHSHPO), and a Consulting Party (Robert B. Stephenson) pursuant to 36 C.F.R. part 800, of the regulations implementing Section 106 of the National Historic Preservation Act (54 USC §306108); and

WHEREAS, FHWA has held coordination meetings with NHDOT, NHSHPO, and the Consulting Party on April 11, 2019, July 11, 2019, and September 12, 2019; and

WHEREAS, NHDOT has coordinated with the Town of Jaffrey and other interested parties through Public Meetings held on October 17, 2017, February 20, 2018, November 15, 2018, and October 2, 2019; and

WHEREAS, in accordance with 36 CFR §800.6(a)(1), FHWA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified

JAFFREY X-A001(234) 16307 Page 2 of 5

documentation and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR §800.6(a)(1)(iii);

NOW, THEREFORE, FHWA, NHDOT and the NHSHPO agree that the undertaking shall be implemented in accordance with the following stipulations to take into account the effect of the undertaking on historic properties.

I. STIPULATIONS

FHWA and NHDOT shall ensure that the following measures are carried out:

1. The NHSHPO, FHWA, and the Town will be provided the opportunity to review and comment on the bridge design developed by NHDOT during the design process at the following milestones: 30% plans (30-day review) and 60% plans (30-day review).

- 2. NHDOT will prepare a Downtown Jaffrey National Register Historic District nomination update and boundary increase. The nomination will be prepared to meet the guidelines and requirements as set forth by the National Park Service (NPS) and NHSHPO. The draft text and information will be incorporated into the National Register nomination format and will also include the production of the required archival photographs. The nomination will be submitted to the Town of Jaffrey (through the Jaffrey Historic District Commission) and to the NHSHPO for review and comment (45-day review). Following receipt of any comments, the nomination will be revised and the final package, including two copies for the final nomination and associated archival photographs, will be submitted to the Town of Jaffrey for final action. If the Town wishes to proceed with submittal of the updated nomination following public notice and outreach, they will be responsible for submission to the NHSHPO for subsequent transmittal to the NPS.
- 3. To avoid impacts to the Jaffrey Mills during construction, the design of the reconstructed sidewalk along Main Street will be configured to direct water flow away from the East Building and Mill Office. Additionally, a weather tight expansion joint will be installed between the East Building and the reconstructed sidewalk to prevent damage to the mill building.
- 4. During final design, NHDOT will determine the likely construction equipment and methods to be used for sidewalk and roadway work along Main Street directly adjacent to the Jaffrey Mills East Building and Mill Office. If warranted, NHDOT will develop a Construction Vibration Assessment. Methods for reducing construction vibrations would be considered on a case-by-case basis, but they could include temporary construction monitoring and any adjustments to proposed machinery and methods of construction. Assessments will be made using the following guidance documents: "New Hampshire DOT Research Record: Ground Vibrations Emanating from Construction Equipment" (2012) and "NCHRP 25-25/Task 72: Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects" (2012).
- 5. NHDOT will commission three outside interpretive signs/panels about the Downtown

Jaffrey Historic District and its resources to be installed at a location or locations to be determined in consultation with the NHDOT and the Jaffrey Historic District Commission. Development of the panels will be overseen by a 36 CFR 61(Appendix A)-qualified Architectural Historian. The design and content of the panel will be subject to the review by the NHDOT, NHSHPO and the Jaffrey Historic District Commission, who will each be provided 30 days to review and comment on the draft text of each panel. The panel will be erected as part of the project construction contract.

The interpretive panels are anticipated to examine one or more of the following themes:

- Downtown Jaffrey Historic District: Topics for this panel may include the history of industrial or commercial development, infrastructure, and the roadway network as well as the architecture in the district. The panel would also include historic images that correlate the subject matter.
- Monadnock Railroad: Interpretation may include a history of the railroad line
 with a map of the route, with subtopics including major businesses that
 benefited from the railroad, former stations, railroad cars that used to operate
 along the route, or photographs from the construction of the railroad (if
 extant).
- Jaffrey Mills: The significance of the mill is derived from its contributions to the economic base and cultural of the Town of Jaffrey, as well as for its architecture. Information about the history of the mill, its impacts on the growth of the community, including images, would be depicted on the panel.
- Historic and Extant Contoocook River Crossings: Topics on such a sign may include historic images of the former and current bridge crossings within the Downtown Jaffrey Historic District, with information about the construction of those bridges, the bridge placement, and the significance of the crossing to the community.

II. UNANTICIPATED DISCOVERIES

The NHDOT will ensure that if additional previously unidentified architectural and / or archeological properties are discovered, which may be affected by the undertaking or known properties are affected in an unanticipated manner, it will notify FHWA and the NHSHPO. FHWA and the NHSHPO will apply the criteria of eligibility and consult pursuant to 36 CFR 800.13.

III. DURATION

This MOA will expire if its terms are not carried out within seven (7) years from the date of its execution. Prior to such time, FHWA may consult with the other signatories to reconsider the terms of the MOA and amend it in accordance with Item VI below.

IV. MONITORING AND REPORTING

Each year following the execution of this MOA until it expires, is terminated, or stipulations completed, NHDOT shall provide all parties to this MOA a summary report detailing work undertaken pursuant to its terms. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in FHWA's efforts to carry out the terms of this MOA.

V. DISPUTE RESOLUTION

Should any signatory to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, FHWA shall consult with such party to resolve the objection. If the FHWA determines that such objection cannot be resolved, FHWA will:

- Forward all documentation relevant to the dispute, including FHWA's proposed resolution, to the ACHP. The ACHP shall provide FHWA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. FHWA will then proceed according to its final decision.
- 2. If the ACHP does not provide its advice regarding the dispute within the thirty (30)-day time period, FHWA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, FHWA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA and provide them and the ACHP with a copy of such written response.
- 3. FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

VI. AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

VII. TERMINATION

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation V, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

JAFFREY X-A001(234) 16307 Page 5 of 5

Once the MOA is terminated, and prior to work continuing on the undertaking, FHWA must either (a) execute a MOA pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. FHWA shall notify the signatories as to the course of action it will pursue.

Execution of this MOA by FHWA, NHDOT and SHPO and implementation of its terms evidence that FHWA has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

| OT. | MET | | - | ~ ~ | ~~ |
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Appendix J – Contaminated Sites Data

Table 1 Summary of Hazardous Materials Review U.S. Route 202 Jaffrey, New Hampshire

| Parcel No(s) | Address | Site Name | NHDES ID | Regulatory Listings | Regulatory Status | File Review Notes | Site Reconnaissance Notes | VHB Review Findings | Location in Relation to Project Area |
|--------------------------------|--|---|------------------------------|--|---|---|---|--|---|
| 238-12 | 12 River Street | Reds of Jaffrey | 2367, 2366 | LUST, UST, AST, RCRA NonGen | Active RCRA-CESQG, Active and Inactive ASTs and USTs, Active Remediation Site | 7 active USTs and 12 closed USTs, 1 active AST. A release from a LUST was closed and achieved AGQS in 2002. Another release from a LUST has impacted groundwater and is an active remediation site currently being managed under a GMP. | Active gas station with minor staining and minor cracks observed in pavement, storage of automotive parts in rear of lot | Based on the current regulatory status this site is a concern | Within Project Area |
| 238-6 | River Street | Jaffrey War Memorial | 2367 | N/A | Portion of Active Remediation Site | GMP for Reds of Jaffrey encompasses this parcel | Good condition | Based on the current regulatory status this site is a concern | Within Project Area |
| 238-292, 238-290, 238-290.1 | 10 Laundry Road (Also known as 27 Laundry Road) | Elite Laundry | 2347, 62709, 63710, 71566 | RCRA-LQG, FINDS, RCRA NonGen, UST, SEMS, UIC, EPA Brownfields | Active RCRA-LQG and Inactive RCRA- CESQG, No active USTs, Active Remediation Site | 4 Closed USTs. Generated halogenated solvents. Former laundromat which impacted soil, groundwater, and soil vapors throughout the area. Active remediation site currently being managed under a GMP. Brownfields Cleanup started in 2010 and concluded in 2016. | Good condition | Based on the current regulatory status this site is a concern | Within Project Area |
| 238-5 | 7 Main Street | Chamber of Commerce | None | N/A | N/A | Former gas station | Good condition | Based on the historical use as a gas station this site is a potential concern | Within Project Area |
| 238-4 | 1 Main Street | Bean Building | None | N/A | N/A | Former gas tank historically present behind Bean Building (once a Post Office) | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Based on the historical presence of a tank and commercial use this site is a potential concern | Within Project Area |
| 238-115-1 | Route 202 and 124 Intersection/17 Main Street | Aubuchon Hardware/ East Jaffrey Realty Trust | 15176, 2346 | UST, LUST | No active USTs, "Regulatory Status DES File Closed" | 1 closed UST. Release from a LUST was closed and AGQS achieved in 2000 | Fair condition | Based on the past regulatory status this site is a potential concern | Southerly Abutter |
| 238-257.1 | 2 North Street | Residential | None | N/A | N/A | N/A | Appears to be historical mill building, which likely indicates former commercial/industrial usage, potential AST/UST based on heat source (oil) identified in Assessor's database | Based on the past regulatory status this site is a potential concern | Within Project Area |
| 238-257-2-1 | 8 Main Street #1 | Residential | None | N/A | N/A | N/A | Appears to be historical mill building, which likely indicates former commercial/industrial usage, potential AST/UST based on heat source (oil) identified in Assessor's database | Based on the past regulatory status this site is a potential concern | Within Project Area |
| 238-257-3 | 10 Main Street | Jaffrey-Rindge Coop School | 47308, 2356 | RCRA-CESQG, UST | No active USTs, inactive RCRA-CESQG | 2 Closed USTs, no present generation of hazardous waste | Appears to be historical mill building, which likely indicates former commercial/industrial usage | Based on the past regulatory status this site is a potential concern | Northerly Abutter |
| 238-262-1 | 31 Peterborough Road | Jaffrey Citgo | 2352 | RCRA Non Gen, UST, LUST | Inactive USTs, Inactive RCRA-SQG, "Regulatory Status DES File Closed" | 6 closed USTs, no present generation of hazardous waste, releases from LUSTs was closed and AGQs achieved 2011. | Fair condition | Based on the past regulatory status this site is a potential concern | Northerly Abutter |
| 238-312.1 | 14 Peterborough Street | Rite Aid | 15190, 47320 | Hazwaste, RCRA-CESQG | Active RCRA-CESQG, "Regulatory Status DES File Closed" | Generation of pharmacy waste, no sources of AGQS identified at the property. Files not available online. Former gas station. | Good condition, storage of retail sized propane tanks, potential AST/UST based on heat source (oil) identified in Assessor's database | Based on the past regulatory status this site is a potential concern | Northerly Abutter |
| 239-222 | 4 Stratton Road | Savron Graphics Inc. | 47341 | RCRA NonGen | Inactive RCRA-CESQG | No present generation of hazardous waste | Good condition, two ASTs observed along back of building | Based on the past regulatory status this site is a potential concern | Within Project Area |
| 239-224 | 21 Blake Street | Residential/Commercial | None | N/A | N/A | N/A | Alliance Paving company located adjacent to residential structure, one AST observed in the backyard | Based on the current use this site is a potential concern | Within Project Area |
| 239-227 | Blake Street | NHDOT/Whirley Waters Inc. | 15187 | LUST | "Regulatory Status DES File Closed" | Release from a LUST was closed and AGQs achieved in 1995. Formerly managed under a GMZ. Historical repair garage. | Fair condition, moderate cracks observed, potential AST/UST based on heat source (oil) identified in Assessor's database | Based on the past regulatory status this site is a potential concern | Within Project Area |
| NA | Route 202 and 124 | Route 202 Water Line | 15189 | SPILLS | "Regulatory Status DES File Closed" | Gasoline impacted soils identified during water line installation closed and no sources identified | Good condition | Based on the past regulatory status this site is a potential concern | Within Project Area |
| - | 26 Union Street | Bean Fiberglass | 18331 | RCRA NonGen | Inactive | No present generation of hazardous waste | Exact location unknown | Based on the past regulatory status this site is a potential concern | Eastern Abutter |
| - | Turnpike Road | J Oren Belletete | 2351 | UST | No Active USTs | 3 USTs closed in place. | Exact location unknown | Based on the past regulatory status this site is a potential concern | Unknown |
| 238-13 | 8 River Street | The Park Theater | 68174 | UST, SITEEVAL | No active USTs, "Regulatory Status DES File Closed" | 1 Closed UST, Site evaluation confirmed no sources of OHM on the property. | Historic fire house, good condition, Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Based on the past regulatory status this site is a potential concern | Within Project Area |
| 238-307 | 2 Peterborough Street | General Auto Supply | 2348 | RCRA-CESQG, UST, LUST | No active USTs, Inactive RCRA- CESQG, "Regulatory Status DES File Closed" | Former gas station. 6 Closed USTs. Release from LUST was closed and AGQS achieved in 1997. | Good condition | Based on the past regulatory status this site is a potential concern | Within Project Area |
| 238-7 | 15 River Street | Former Bell Atlantic | 51393 | RCRA NonGen | Inactive | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Based on the past regulatory status this site is a potential concern | Within Project Area |
| 238-1 | Intersection of Turnpike and Stratton Road | Vacant | None | N/A | N/A | N/A | Good condition, pad-mounted transformer observed | Not a concern at this time | Within Project Area |
| 238-10 | 20 River Street | Residential | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 238-11 | 16 River Street | Northern New England Telephone Operation | None | N/A | N/A | N/A | Telecommunication house, fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |

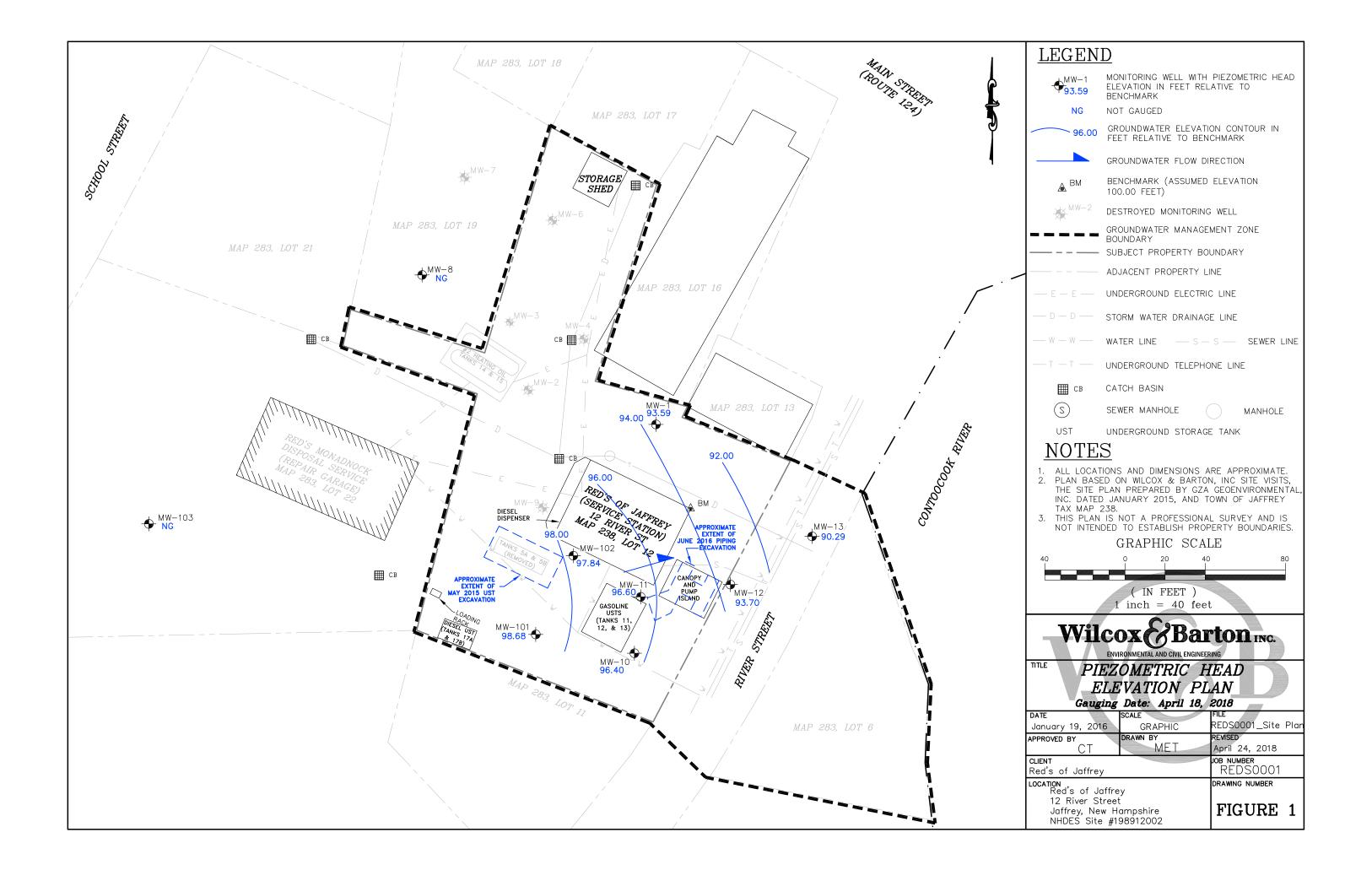
Table 1 Summary of Hazardous Materials Review U.S. Route 202 Jaffrey, New Hampshire

| Parcel No(s) | Address | Site Name | NHDES ID | Regulatory Listings | Regulatory Status | File Review Notes | Site Reconnaissance Notes | VHB Review Findings | Location in Relation to Project Area |
|--------------------|---------------------------------|----------------------------|--------------|---------------------|-------------------|-------------------|---|--|---|
| 238-15 | 17 MAIN ST | Commercial Store/Shop | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 238-16.1 | 6 RIVER | Residential | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 238-258 | 2 MAIN ST | Commercial | None | N/A | N/A | N/A | Fair condition, 2 ASTs observed at rear building | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 238-259 | No Address | Parking Lot/Welcome Center | None | N/A | N/A | N/A | Fair condition, moderate cracks observed | Not a concern at this time | Within Project Area |
| 238-3 | 6 Blake Street | Commercial | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 238-302-0-1 | 18 Peterborough Street | Residential | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 238-310 | 11 Turnpike Road | Commercial | None | N/A | N/A | N/A | Good condition | Not a concern at this time | Within Project Area |
| 238-311 | 13 Turnpike Road | Residential | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 238-8 | 28 River Street | Residential | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 238-9 | 22 River Street | Residential | None | N/A | N/A | N/A | Good condition | Not a concern at this time | Within Project Area |
| 239-103 | 12 Turnpike Road | Residential | None | N/A | N/A | N/A | Good condition | Not a concern at this time | Within Project Area |
| 239-104 | Turnpike Road | Vacant | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 239-105 | 10 Turnpike Road | Residential/Commercial | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 239-213 | Union Street | Vacant | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 239-218 | 14 Stratton Road | Residential | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 239-219 | 12 Stratton Road | Residential | None | N/A | N/A | N/A | Good condition | Not a concern at this time | Within Project Area |
| 239-220 | 10 Stratton Road | Residential | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 239-221 | Stratton Road | Vacant | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 239-223 | 9 Blake Street | Commercial | None | N/A | N/A | N/A | Good condition | Not a concern at this time | Within Project Area |
| 239-226 | Blake Street | Vacant | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 239-228 | Blake Street | Vacant | None | N/A | N/A | N/A | Fair condition, moderate cracks observed | Not a concern at this time | Within Project Area |
| 239-229 | 21 River Street | Residential | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 239-230 | 19 River Street | Residential | None | N/A | N/A | N/A | Could not make observations from street | Not a concern at this time | Within Project Area |
| 239-231 | 23 River Street | Residential/Commercial | None | N/A | N/A | N/A | Dust to Shine, LLC cleaning services, good condition | Not a concern at this time | Within Project Area |
| 239-234 239-235 | 29 River Street 31 River Street | Residential Commercial | None None | N/A N/A | N/A N/A | N/A N/A | Good condition Cournoyer Funeral Home, Good condition | Not a concern at this time Not a concern at this time | Within Project Area Within Project Area |
| 239-81 | 17 Turnpike Road | Commercial | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |
| 239-82 | 19 Turnpike Road | Commercial | None | N/A | N/A | N/A | Fair condition, potential AST/UST based on heat source (oil) identified in Assessor's database | Although heating oil is potentially stored on-site, this property is not a concern | Within Project Area |

AST = Above Ground Storage Tank
CESQG = Conditionally Exempt Small Quantity Generator
HazWaste = NHDES Hazardous Waste Project GMP = Groundwater Management Permit
LQG = Large Quantity Generator
LUST = Leaking Underground Storage Tank
NHDES = New Hampshire Department of Environmental Services
NonGen = Former hazardous material generator

Noncen = Former hazardous material ge
OHM = oil and/or hazardous materials
RCRA = Resource and Recovery Action
SITEEVAL = Site evaluation conducted
UIC = Underground Injection Control
UST = Underground Storage Tank

Likely to impact the Project Potential to impact the Project Unlikely to impact the Project



NOTIFICATION OF PROPOSED

GROUNDWATER MANAGEMENT PERMIT AND GROUNDWATER MANAGEMENT ZONE

FOR

FORMER ELITE LAUNDRY SITE LAUNDRY WAY, JAFFREY, NEW HAMPSHIRE DES SITE #199908001

As applicant, for a Groundwater Management Permit, I, David Caron, Town Manager of the TOWN OF JAFFREY, am hereby providing you notice that your property is proposed for inclusion within a Groundwater Management Zone ("GMZ") in fulfillment of the requirement of the New Hampshire Code of Administrative Rule Env-Or 607.02 (b)(2). A GMZ is an area within which groundwater use must be controlled and/or monitored due to the presence of groundwater contaminants that exceed the State's Ambient Groundwater Quality Standards ("AGQS"). Groundwater Management Permits are issued by the Department of Environmental Service (Department) for a period of 5 years and may be renewed for subsequent five-year period(s).

Upon issuance of the Permit by the Department, a notice of the permit will be recorded in the chain of title for the Former Elite Laundry Site at the Cheshire County Registry of Deeds. The four town-owned parcels which comprise the Former Elite Laundry Site include:

| Tax Map/Parcel No. | Property Address | Deed Book/Page |
|--------------------|------------------------|----------------|
| 238/Lot 290 | 6 Laundry Way | BK 2185.PG 119 |
| 238/Lot 290.1 | 10 Laundry Way | BK 2185/PG 121 |
| 238/Lot 292 | 4 Laundry Way | BK 2185/PG 117 |
| 239/Lot 293 | 38 Peterborough Street | BK 2185/PG 115 |
| | | |

Proposed Notice of the Permit and GMZ to other private properties located within the GMZ will be made via issuance of a town-wide health ordinance, which will restrict the use of groundwater for drinking. Additionally, property owners within the GMZ will be updated annually of the status of long-term groundwater monitoring within the GMZ of the Former Elite Laundry Site in accordance with the permit. This notice will remain in effect until such time as the AGQS are restored within the GMZ and the Department issues a Release of Recordation.

The attached figure shows the properties that are proposed for inclusion within the GMZ. The application for the permit is available for review at the Department of Environmental Services, 29 Hazen Drive, Concord, NH 03301. A copy of the Permit application is also available at your local Town/City Clerk's office. Generally, permits are issued by the Department within 90 days of receipt of a complete Permit application.

ATTACHMENT: Map of Groundwater Management Zone

NOTICE OF GROUNDWATER MANAGEMENT PERMIT GWP-199908001-J-001 TO BE RECODED AGAINST:

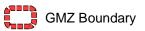
TOWN OF JAFFREY, NEW HAMPSHIRE 238/Lot 292 at 4 Laundry Way (BK 2185/PG 117) 238/Lot 290 at 6 Laundry Way (BK/PG 119) 238/Lot 290.1 at 10 Laundry Way (BK/PG 121) 239/Lot 293 at 38 Peterborough Street (BK 2185/PG 115)

NOTICE IS HEREBY GIVEN THAT: The New Hampshire Department of Environmental Services (Department) has issued Groundwater Management Permit #GWP-199908001-J-001 ("Permit") to Town of Jaffrey. Pursuant to Env-Or 607.09(a) this notice is recorded for the four parcels which comprise the Former Lite Laundry Site located within the groundwater management zone identified in the Permit at the Registry of Deeds for the county in which the property is located. Notice of the Permit to other private properties located within the GMZ was made via issuance of a town-wide health ordinance which restricts the use of groundwater for drinking.

| The Permit establishes a Groundwater groundwater use must be controlled contaminants that exceed the State's A Permit may include conditions to and reincluding restrictions on the use of groundwater and restrictions on the use of groundwater and restrictions on the use of groundwater and restrictions are the stabilized as the stabiliz | l and monitored due Ambient Groundwater (estrictions upon the use | to the presence of groundwater Quality Standards ("AGQS"). The |
|--|---|--|
| The Permit was issued on, 2 subsequent five-year period(s). This No restored within the GMZ and the Department is available for review at the 29 Hazen Drive, Concord, NH 03301, on Data and Information icon located on the | otice will remain in effe artment issues a Releas e New Hampshire Depa or can be viewed online | ct until such time as the AGQS are e of Recordation to the Permittee. artment of Environmental Services, e by clicking on the green OneStop |
| The following properties are located wi | ithin the GMZ: | |
| Property Owner/Property Address | Tax Map/Lot | Deed Reference Book/Page |
| | | |
| PERMITEE Signature David Caron, Town Manager Town of Jaffrey, NH | | Date |

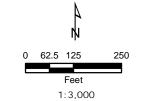


SITE PLAN LEGEND



LOCUS MAP





NOTES

Former Elite Laundry Site Jaffrey, New Hampshire

March 2016



Appendix K – Environmental Justice Population Analysis

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION RECEIVED INTER-OFFICE COMMUNICATION

JAN 25 2016

DATE:

January 21, 2016

NH DEPARTMENT OF TRANSPORTATION

FROM: Jay Ankenbrock, Chief of Labor Compliance, Executive Office

TO: Michael J. Dugas, P.E., Chief of Preliminary Design

RE: Environmental Justice Population Analysis, Project: Jaffrey 16307

The attached analysis and recommendations are provided pursuant to Title VI of the Civil Rights Act of 1964 and Executive Orders 12898 & 13166. The intent of these statutes is to ensure fair and full participation and the equal receipt of benefits under Federally-assisted programs. Your efforts to accommodate and encourage participation by traditionally underserved groups, where significant, will ensure program access and minimize the potential for disproportionate project impacts on protected groups.

The table entitled "EJ Population Analysis" shows the presence of protected groups that might be impacted by the project. Personnel responsible for project planning/design and the coordination of public meetings/hearings should use this analysis to guide their outreach efforts under Title VI and in support of developing a context sensitive solution. Based on the availability of information and where appropriate, we have included specific outreach recommendations to facilitate public comment from underrepresented groups.

Please note that US Census American FactFinder data is used to provide to an EJ Population analysis for the project. If you have questions regarding this analysis, please contact me @ 271-2467.

Encls: EJ Population Analysis

Cc: Keith Cota, Bureau of Highway Design

Marc Laurin, Bureau of Environment Julie Owen, Bureau of Right-of-Way

EJ Population Analysis for Project: Jaffrey 16307

| STUDYAREA | AVG% Elderly Population | AVG % Minority Population | AVG % Low-income Population | AVG% LEP |
|--|-------------------------------|---------------------------------|-----------------------------|-------------|
| Impacted Area – Cheshire County US Census Tract #9705 Blocks 1, 2 & 3. | 15.28% | 5.04% | 6.45% | 0.23% |
| Surrounding Area- Cheshire County, US Census Tract #9704 Block 4, Census Tract #225 Block 1 & Census Tract #9706 Block 2. | 14.11% | 4.20% | 9.41% | 0.0% |

REMARKS:

LEP Definition: Where there is a population of people who speak English as a second language less than well (as indicated by the U.S. Census data). When a particular LEP language group constitutes 5% of the impacted population, the Department is required to translate public information meeting notices and take appropriate measures to ensure language access. If this requirement exists, the Project Manager should contact the Title VI Coordinator for further assistance.

<u>Impacted Area</u>: The impacted area was defined by the project limits and the area in the immediate vicinity that most closely corresponds to the boundaries of Census Tracts and Block Groups.

Surrounding Area: All Census Tracts and Block Groups outside of, and immediately adjacent to, the impacted area.

^{*} The population percentage identified is meaningfully greater than the surrounding area and constitutes an EJ population. Characteristics of this particular study area indicate that targeted outreach efforts to solicit public participation should be taken.

Special Considerations: Special consideration should be given to any project features that affect pedestrian accessibility. This project constitutes an alteration in accordance with Title II of the Americans with Disabilities Act. As such, minimum ADAAG accessibility requirements apply, unless deemed technically infeasible.

ADAAG was adopted as the 2010 Standards for Accessible Design on July 23, 2010 by the DOJ http://www.ada.gov/reg3a.html#Anchor-Appendix-52467

For more information, I have provided a link to the Draft Public Rights-of-Way Guidelines (PROWAG

The Draft PROWAG (Revised Draft Guidelines for Accessible Public Rights-of-Way) was released in November 2005 and has not been adopted by DOJ or FHWA

In 2006, FHWA issued a statement that the Draft PROWAG is to be considered best practice for making public rights-of-way accessible

http://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/background/revised-draft-guidelines

The Draft PROWAG includes specifications for detectable warnings and gives detailed information regarding their installation on curb ramps and on blended curbs, including at street corners, at cut-through islands and medians, and in front of buildings. It also has sections on accessible pedestrian signals (APS), roundabouts, channelized turn lanes, protruding objects, channelizing devices and barriers, and tactile and print signs.

<u>Outreach Recommendations</u>: The impact and surrounding area analysis depicts a high percentage of elderly population. It is recommenced that outreach should consist of contacting the following organizations/services.

| Resident/Agency Address | Org/Housing Type | Contact Name/Number |
|---|------------------|------------------------------|
| Town of Jaffrey 10 Goodnow Street Jaffrey, NH 03452 | | 603-532-7445 |
| Jaffrey Library 38 Main Street Jaffrey, NH 03452 | | Libby Feil 603-352-7301 |
| Jaffrey Chamber of Commerce 7 Main Street Jaffrey, NH 03452 | | Becky Newton 603-352-4549 |

Appendix L – Public Hearing Documentation

NOTICE OF PUBLIC HEARING

-NOTICE OF HEARING-

JAFFREY, 16307, X-A001(234)

The Commission, in accordance with RSA 230:14 and the Surface Transportation and Uniform Relocation Assistance Act of 1987, has set a public hearing to discuss the proposed construction, in Jaffrey, NH, of a five-leg roundabout at the intersection of Peterborough Street, Main Street, Blake Street, Stratton Road and Turnpike Road, as well as the relocation of US 202 from Main Street to Blake Street and continuation on a new southwesterly alignment over the Contoocook River to intersect with the existing US 202 and River Street at a proposed three-leg roundabout.

The meeting will be held at the Jaffrey VFW Post 5613- Function Hall, 12 Hathorn Road, Jaffrey, NH on Wednesday, October 2, 2019 at 6:30 P.M.

THE VFW WILL BE OPEN AT $6:00~\mathrm{PM}$ FOR THE INSPECTION OF PLANS BY ANY INTERESTED PERSONS.

On December 19, 2018, the Governor and Executive Council appointed David Wheeler, Andrew Card and Samuel Hackler as the Commission to conduct a Public Hearing to determine whether there is the occasion for the laying out of this project and acquiring necessary right-of-ways.

We, the Commission, hereby give written Notice to said Petitioners and the owners of land over which said highway may pass, and to all others interested by posting a like copy in at least two (2) public places in the Town of Jaffrey and leaving a like copy with the Town Clerk at least fourteen (14) days before the said day of hearing.

Relocation assistance will be furnished to each owner or tenant whose improvements or property will be acquired for this project based on their eligibility.

Interested landowners, local officials and highway users are welcome and will be given the opportunity to express their comments relative to the project. The testimony will be recorded.

This project may impact historic properties. This project is tentatively scheduled for advertising for bids October 1, 2021.

Maps, plans, the environmental studies and other pertinent information developed by the Department, along with written views received as a result of the coordination with other agencies, are available at the Department of Transportation at the John O. Morton Building, 7 Hazen Drive, Concord, New Hampshire for inspection and copying. It is suggested you call Loretta Girard Doughty, Project Manager, at (603) 271-2230 in advance for an appointment.

Written statements and other exhibits may be submitted to the Chairman of the Commission, c/o Peter E. Stamnas, Director of Project Development, NH Department of Transportation, PO Box 483, Concord, NH 03302-0483 up to ten (10) days after the date of the hearing for inclusion in the official record.

Any individuals needing assistance or auxiliary communication equipment due to sensory impairment or other disability, should contact Stephen G. LaBonte, JD, Administrator of the Bureau of Right-of-Way, NHDOT, PO Box 483, Concord, NH 03302-0483 - TDD access: Relay NH 1-800-735-2964. Notification of the need for assistance must be made at the earliest convenience. This project will be administered according to the requirements of Title VI of the Civil Rights Act of 1964 and related statutes to ensure nondiscrimination.

/s/Stephen G. LaBonte
Stephen G. LaBonte, JD
Bureau of Right-of-Way
N.H. Department of Transportation

Dated at Concord, NH August 20, 2019

PUBLIC NOTICE

REPORT OF THE COMMISSIONER

JAFFREY, 16307, X-A001(234)

Reconfigure "Dogleg" Intersection of US 202, NH 124, and NH 137

Hearing Commission Members

PUBLIC HEARING

October 2, 2019 - VFW Post 5613 Function Hall - 6:30 PM

Jaffrey, 16307, X-A001(234). This project will reduce the congestion and address safety issues within the central business district of Jaffrey.

This project involves the construction of five-leg roundabout at the intersection of Peterborough Street, Main Street, Blake Street, Stratton Road and Turnpike Road, as well as the relocation of US 202 from Main Street to Blake Street and the continuation on a new southwesterly alignment over the Contoocook River to intersect with the existing US 202 and River Street at a proposed three-leg roundabout.

The Department received comments during the Public Hearing by means of testimony at the Hearing, and by means of letters and emails subsequent to the meeting. The information from the testimony's, letters and emails have been collated into at matrix format into two categories, "Support of Project" and "Non-Support of Project"; see *Attachment A*.

Following is a summary of means in which comments were received:

- 81 Letters
 - o 67 Support of the Project
 - o 14 Non-Support of Project
- 23 Emails
 - o 18 Support of the Project
 - 5 Non-Support of Project
- 36 Speaker Cards (from Hearing)
 - 17 Support of Project
 - 13 Non-Support of Project
 - o 6 Comment was generally Neutral

Based upon comments received by the Department, approximately 77% of comments are in Support of the Project and 23% are in Non-Support of Project (excluding Neutral comments).

The Department also received signed Petitions with three of the letters, they are summarized as follows:

- Support of Project
 - o Petition with 4-signatures
 - o Petition with 51-signatures
- Non-Support of Project
 - o Petition with 154-signatures

Based upon number of signatures received on the Petitions by the Department, approximately 26% are in Support of Project and 74% are in Non-Support of Project. The Department did not vet the names/addresses of those who signed the petitions; therefore, it is not clear how those that signed could be affected by the Project.

The "Support of Project" matrix categorizes the comments received in the following categories:

- General Comment about Project
- #1 Improvement: General Comment in Support of Project
- #2 Improvement: Traffic Flow / Reduce Congestion
- #3 Improvement: Downtown Pedestrian Use and Safety
- #4 Improvement: Revitalize Downtown Business
- #5 Improvement: Reduce Noise Pollution

The "Non-Support of Project" matrix categorizes the comments received in the following categories:

- General Comment about Project
- #6 Concern: General Comment in Non-Support of Project
- #7 Concern: Pedestrian Safety at Roundabout
- #8 Concern: Impact to Property
- #9 Concern: Reduced Parking
- #10 Concern: Impact on Business / Bypass Town
- #11 Concern: Demolition of Affordable Housing Bldg
- #12 Concern: Cost of Project

The Department recognizes it is a significant change to the downtown area and there is not unanimous support. However, the Department worked through an extensive Public Participation process (3-Public Informational/Workshop meetings) in conjunction with the Town and the Advisory Committee (9-Advisory Committee meetings) to the Project to build a consensus, culminating with the Public Hearing to present the Proposed Action. The Project and addressing the "dogleg" is a high regional priority and has been for a number of years. The Proposed Action layout has support from the following Town of Jaffrey officials:

- Board of Selectmen
- Planning Board Chair
- Jaffrey Town Manager
- Office of Planning & Economic Development
- Jaffrey Economic Development Council
- Executive Director of Team Jaffrey
- Conservation Commission

- Jaffrey Chief of Police
- Jaffrey War Memorial Committee
- Rivermill Homeowner's Association; as well as,
- Southwest Regional Planning Commission, and
- Chief of NH Bureau of Trails, Parks & Recreation Division, DNCR

The Department received many comments on the Proposed Action through the Public Hearing process in "Support of Project", which were collated into the matrix and categorized as #1 through #5 (as noted above and detailed in *Attachment A*). The Proposed Action is also consistent with the Town Master Plan. Many of those supporting the Project note it being potentially transformative to restoring a vibrant downtown, a catalyst for downtown renewal, improve and facilitate pedestrian accessibility, an aesthetic enhancement, eliminate chronic traffic problems and noise pollution, among many others detailed in *Attachment A*.

The Department also received comments on the Proposed Action through the Public Hearing process in "Non-Support of Project", which were collated into a matrix and categorized as #6 through #12 (as noted above and detailed in *Attachment A*). The following decisions are the Department's resolution of concerns as a result of testimony presented at the October 2, 2019 Public Hearing and written testimony subsequently submitted:

Project Concern: General Comments (Matrix #6)

There were a number of comments with regard to traffic signal timing and opinions that the recent traffic signal timing modifications implemented by the New Hampshire Department of Transportation (NHDOT) addressed the US 202 "dogleg" congestion problem. There were also comments and requests that if the project does move forward that the NHDOT continues public outreach, community/stakeholder participation in the Final Design phase, phase construction to minimize impacts to businesses and abutters, detailed MOT plans and requirements, implements stringent requirements for dust control, noise control, truck washing, etc., bi-weekly owner/contractor/town/community process meetings during construction, provisions for schedule recovery, and deployment of an on-site Clerk of Works to manage the project.

Response: An alternative was developed and evaluated that upgraded the traffic signal hardware and programing software at the two existing dog-leg configured intersections, which provided Flashing Yellow Arrow phasing for the Main Street westbound left-turn onto River Street and for the Main Street eastbound left-turn onto Peterborough Street. The results of the operational analyses reveal that the traffic signal modifications would modestly improve the efficiency of the existing condition but would not address the long-term purpose and need of the project. For this reason, the traffic signal enhancement alternative was not selected as the Proposed Action. Nevertheless, the NHDOT did implement the traffic signal enhancements as an interim measure to provide modest relief to the traffic congestion problem in the short-term.

As for the long-term Proposed Action, given the project's proximity to Main Street and the need to minimize impacts to businesses during construction, the NHDOT is committed to continuing a robust public outreach and community involvement process that will extend through the final design and construction phases of the project. The NHDOT will work with a community advisory committee to share and discuss information such as design features, construction phasing and schedule, as well as plans to maintain traffic/pedestrian mobility and access to businesses during construction. In addition to project status updates that would be provided to the advisory committee and Select Board, information will be disseminated through project newsletters as well as the NHDOT and the Town of Jaffrey's websites. The NHDOT will ensure that the contractor will adhere to strict requirements on dust control, noise control, etc. Additionally, the NHDOT will be requiring on-site construction inspection.

There were also a few attendees at the Public Hearing that requested information on examples of other New Hampshire roundabouts.

Response: The project team will pull together the requested information and make it available on the Project website.

Project Concern: Pedestrian Safety at Roundabout (Matrix #7)

Concern was voiced with pedestrian safety of school children, as well as blind and special needs individuals, at the proposed roundabouts.

Response: Roundabouts are traffic calming measures that serve to lessen the dominance of vehicular traffic by reducing travel speeds and presenting a "look and feel" to the downtown that raises motorists' expectations of pedestrian activity. Roundabouts are designed to improve safety for all users, including pedestrians. Crosswalks are set back from the circle, have shorter crossing distances, and involve only one direction of traffic at a time making crossings simpler and safer for both pedestrians and drivers.

It's important to note that after extensive evaluation and public input of various roundabout and traffic signal control options, in addition to support for the roundabout by many members of the community, the Select Board formally recommended the roundabout as the town's preferred alternative.

Nevertheless, given the proximity of schools, the NHDOT is committed to working closely with the town to consider potential enhancements to the proposed design. For example, as part of the final design phase the NHDOT will consider and evaluate the potential installation of Rectangular Rapid Flashing Beacons (RRFB) at the roundabout crosswalks. RRFBs are user-activated amber Light Emitting Diodes (LEDs) that supplement warning signs at crosswalks.

Project Concern: Impact to Property (Matrix #8)

Concern was voiced with the negative impact to existing businesses and the impact and/or acquisition of their own or other's properties.

Response: From the outset of the project, the NHDOT has been committed, and will continue through the final design, to work closely with the community to ensure a context sensitive solution. In fact, the following Project Purpose, which was developed by the community's Advisory Committee early-on, guided the selection of the Proposed Action.

The purpose of the project is to address the traffic congestion and safety related deficiencies associated with the current configuration of the US 202 dogleg intersections of Main Street with Peterborough Street and Main Street while enhancing pedestrian mobility and supporting the quality of life and economic vitality of Jaffrey's downtown.

RKG Associates, who were on the study team to evaluate the economic impacts of the project, concluded that the proposed roadway project, which would serve to reduce traffic congestion in the downtown, could, if coupled with enhanced streetscape and pedestrian amenities, facilitate increased business for existing merchants in addition to attracting new businesses and residential development.

As to the impact and/or acquisition of individual properties, despite efforts to minimize property impacts, the project does involve the full acquisition of two properties - the Lab 'N' Lager restaurant/pub and a six-unit apartment building at 15 River Street. The NHDOT has an established right-of way (ROW) process in place that is intended to appraise and negotiate fair compensation with the owners of these properties.

Note that under an earlier alignment alternative, Mr. Langoren's property (21 River Street) and Ms. Jean's property (19 River Street) would have required full acquisitions. To minimize property impacts, the alignment was modified to the Proposed Action, which now requires only a partial acquisition of 21 River Street and no acquisition of 19 River Street. Likewise, the Department will work with those property owners through the final design and ROW process to negotiate fair compensation for these partial acquisitions.

Project Concern: Reduced Parking (Matrix #9)

Concern was voiced with the loss of parking in downtown as well as in the vicinity of individual businesses.

Response: The Department has worked closely with town officials and the Advisory Committee to not only minimize the project's impact on parking, but to, where possible, increase the number of parking spaces. That effort resulted in an increase of two on-street parking spaces on Main Street, six additional on-street spaces on River Street and one additional on-street space on Blake Street totaling nine additional on-street parking spaces in the downtown. To accommodate the new connector roadway, the state owned 35-space off-street parking lot on Blake Street is being eliminated and replaced with a smaller 15-space lot. Constructing the new roadway on state owned property (the existing parking lot) was done to avoid the need to acquire additional private property. Fortunately, the town has plans to reconfigure and formalize the parking area adjacent to Blake Street at the ballfield. This is estimated to provide as many as 100 off-street

parking spaces between Blake Street and Union Street. The combination of the increased on-street parking supply and the reconfigured Blake Street off-street parking lot and the ballfield off-street parking lot will offset loss of parking and enhance parking opportunities in the downtown.

Project Concern: Impact on Business / Bypass Town (Matrix #10)

Concern was voiced with impact to downtown business both long-term and during construction as well as the loss of the Lab 'N' Lager restaurant/pub, and the loss of local property taxes.

Response: As stated previously under Project Concern: Impact to Property (Matrix #8), RKG Associates, who were retained by the Department to evaluate the economic impacts of the project, concluded that the proposed roadway project, which would serve to reduce traffic congestion in the downtown, could, if coupled with enhanced streetscape and pedestrian amenities, facilitate increased business for existing merchants in addition to attracting new businesses and residential development.

In fact, the Jaffrey Economic Development Council, which has expressed strong support for the project, has established a capital reserve fund that will be used to fund Town desired enhancements, to help compliment the Project, such as sidewalk furniture, business wayfinding signage, and possibly a new Welcome Center.

As to potential construction impacts to Main Street business, the NHDOT is committed to working closely with the town and downtown businesses in the development and implementation of construction phasing, scheduling, as well as plans to maintain traffic/pedestrian mobility and access to businesses during construction. In addition to project status updates that would be provided to an advisory committee and the Select Board, information will be disseminated through project newsletters as well as the NHDOT and the Town of Jaffrey's websites.

Project Concern: Demolition of Affordable Housing (Matrix #11)

Concern was voiced that the acquisition of the apartment building at 15 River Street reduces the amount of affordable housing and the residents will experience difficulty in relocating within the downtown.

Response: The Department acknowledges that the proposed acquisition of the multi-unit apartment building on River Street may have a slight negative/undesirable effect on the overall availability of affordable rental housing in the downtown area of Jaffrey. Unfortunately, to implement the project design as proposed, that impact is unavoidable. However, the residents of the apartment building, who will be displaced as a result of the project impact to the property, will be afforded all relocation protections available to them under Federal and State statute including, rent subsidies to relocate to a replacement dwelling and reimbursement of eligible moving costs, along with relocation advisory services provided by the Department.

Project Concern: Cost of Project (Matrix #12)

Concern was voiced as to whether the town would be responsible for any cost overruns and question whether the total cost including utility relocations is too much to address a traffic congestion problem.

Response: The project is fully funded and the town would not be responsible for any project cost overruns. There may be some incidental costs due to utility relocations. Impacts to existing municipal utilities will be addressed through the Department's Utility Accommodation Manual and the Department will work with the Town to minimize costs in Final Design. The NHDOT is, however, committed to coordinate with the town on any concurrent town sponsored projects within the project area. Obviously, the funding of any town sponsored project would be the responsibility of the town.

Lastly, there were several general comments from responders who were neutral on support of the project but raised questions or concerns about construction staging, signage and incident management at roundabouts, and additional Town Maintenance requirements.

Response: Generally, it is the responsibility of the contractor to identify and secure construction areas to support the construction according to their means and methods. As part of the construction specifications the contractor will be required to develop a detailed traffic control plan and maintain traffic through the construction zone. In addition, as part of the Final Design a detailed signing package will be developed to guide travelers through the new traffic configurations according to signing standards. In developing the project signing the Department will work with the Town to incorporate and coordinate appropriate business district and wayfinding signing. Roundabouts are designed to slow speeds and experience has shown that collisions that do occur are typically fender benders, minor in nature, and requiring no special incident management procedures.

Finally, the roadways and roundabouts will continue to be maintained by state forces. It is expected that the state will enter into a maintenance agreement for the Town to be responsible for maintaining sidewalks, much as they are today, and any landscaping or street hardware (benches, special lighting, etc.) that are included as part of the project in coordination with the Town.

Date:__ 7/15/2020

Victoria Sheehan Commissioner

NH Department of Transportation

| | Forma | at Comment Re | ceived | Date on Letter/Email | Date Rec'd at DOT | Support Yes/No | | #1 | # 2 | #3 | # 4 | # 5 |
|--|---------------------|----------------------|--------|-------------------------|----------------------------|-------------------|---|---|---|--|--|--|
| Name / Address / Email | Public Testimony | Letter / Petition | Email | | | | General Comment about Project | Improvement: General Comment in Support of Project | Improvement: Traffic Flow / Reduce Congestion | Improvement: Downtown Pedestrian Use and Safety | Improvement: Revitalize Downtown Business | Improvement: Reduce Noise/Air Pollution |
| John and Stephanie Minteer 194 Mountain Road Jaffrey, NH 03452 Received via email as well on: 10/9/2019 jfm1209@me.com | | х | х | 10/8/2019 | 10/15/2019 | Yes | | I am writing a follow-up letter to Jaffrey's Route 202- Downtown Project because we strongly support the bypass of Jaffrey's Main Street. We feel this is an opportunity that Jaffrey cannot afford to miss. | | Improved Downtown Pedestrian Use and Safety. | Revitalize Downtown: - improved entrances into Town - Signage to attract visitors to business district, incl. Park Theater - Improved Parking on Main Street - More space for green space with shrubs and perennials - Incorporation of Contoocook River as vital part of downtown - Beauty of a walk around town and use of the Veteran's Park. | |
| Carrie C. Webster carriecwebster@gmail.com | | Х | | 10/11/2019 | 10/17/2019 | Yes | | | Strongly supports roundabout traffic pattern to eliminate "dogleg" traffic pattern. | | Supports all renovations to the downtown Jaffrey area with the elimination of the "dog-leg" traffic pattern. | |
| Peter and Jinnie Russell 4 Gilson Road Jaffrey, NH 03452 | | х | | 8/26/2019 | Rec'd at Public Hearing | Yes | | Support for the new rotaries and bypass for Route 202. | Believe it will reduce congestion. | Make it safer for pedestrians. | Be a long-term benefit to downtown businesses. | |
| Jack and Stephanie Minteer 194 Mountain Road Jaffrey, NH 03452 jfm1209@mac.com (603) 532-7486 | | х | | 9/10/2019 | Rec'd at Public Hearing | Yes | | | Improves traffic flow, reduce congestion. Roundabouts also eliminate the traffic lights and will save driving time and reduce fuel consumption | Improved Downtown pedestrian use and safety. | Revitalize downtown; ease of parking, beautify Main Street, add to downtown parks, more user friendly environment | |
| Jack Belletete (via Judy Zola email) Selectman jbelletete@belletetes.com | | | Х | 10/2/2019 | - | Yes | | Full support for moving forward with the project. | | | Major improvement for the future of downtown Jaffrey. Example of Route 202 bypass downtown Peterborough for 20 or more years and downtown is thriving; hoping for the same for Jaffrey. | |
| Bruce and Sally Larsen 30 Harkness Road Jaffrey Center, NH 03452 bruce.larsen@myfairpoint.net | | х | | 10/2/2019 | - | Yes | | Highly in favor of the project. No plan can be perfect, and there are no perfect solutions to our serious and frequently unsafe traffic routing through downtown. Believe the proposed solution is the best one considering: - safety, finances, convenience, as well as being comfortable, safe, and pleasurable for pedestrians. | Improved traffic routing. | Improved pedestrian safety and use. | | |
| Petition - A Statement of Support for the Route 202 Dogleg Improvements for Jaffrey, NH Collected by: Carolyn Garretson and Harry L. Young | | Х | | - | | Yes | | A Statement of Support for the Route 202 Dogleg Improvements for Jaffrey, NH. (4-signatures) | | | | |
| Dominique Caissie 20 River Street Jaffrey, NH 03452 | | х | | - | 10/9/2019 | Yes | | Route support for the improvements on Rt. 202 and the intersections to community, with the property being affected by the change. Only requests to try to save tree. | | | | |
| Tim Murphy Executive Director Southwest Region Planning Commission 37 Ashuelot Street Keene, NH 03431 Sent via email as well: tmurphy@swrpc.org | | х | х | 10/11/2019 | 10/15/2019 | | The Project is recognized as a top regional priority and in the opinion of the SWRPC, the Town of Jaffrey has maintained a robust open and transparent public process from defining the problem to the proposed solution today. | Would be hard-pressed to identify a community more prepared and invested in a Ten Year Plan project. | Improves traffic flow/reduce congestion. | Improved downtown pedestrian use and safety. | Improve vibrancy of downtown. | |

| | Forma | at Comment Re | ceived | Date on Letter/Email | Date Rec'd at DOT | Support Yes/No | | #1 | # 2 | #3 | # 4 | # 5 |
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| Name / Address / Email | Public Testimony | Letter / Petition | Email | | | | General Comment about Project | Improvement: General Comment in Support of Project | Improvement: Traffic Flow / Reduce Congestion | Improvement: Downtown Pedestrian Use and Safety | Improvement: Revitalize Downtown Business | Improvement: Reduce Noise/Air Pollution |
| Robert B. Stephenson 347 Main Street Jaffrey, NH 03452 rob@rs41.org | | х | | - | 10/3/2019 | Yes | | Supports the project now being considered. The two roundabouts present great opportunities for incorporating landscaping and public art that car bring identification to downtown Jaffrey. So I say let's get behind this project and see it through. | Main benefit of proceeding will be improved traffic flow through the downtown, smoother, faster circulation. | Pedestrian environment will be enhanced. | Downtown greatly improved aesthetically; sympathetic design should be considered for new bridge to preserve qualities of downtown. | |
| Petition - A Statement of Support for the Route 202 Dogleg Improvements for Jaffrey, NH (received with Robert Stephenson's letter) Collected by: Carolyn Garretson and Harry L. Young | | х | | - | 10/3/2019 | Yes | | A Statement of Support for the Route 202 Dogleg Improvements for Jaffrey, NH. (51-signatures) | | | | |
| Lynette Frederick PO Box 195 24 Carey Road Jaffrey, NH 03452 | | х | | 10/7/2019 | 10/9/2019 | Yes | | We need a state road system in our town to work better than our current dogleg system. | Jaffrey needs to improve the traffic situation from the 5-way intersection to the 4-way intersection. The town has identified the dogleg as a problem in the 80's and has been working to fix it since. | | | |
| John McCarthy Jaffrey-Rindge School Board 133 Squantum Road Jaffrey, NH 03452 | | х | | - | 10/9/2019 | Yes | | | | Project will provide positive effect on pedestrian traffic in downtown. Project will be good for school children, who currently navigate two difficult intersections. With proper pedestrian safety lighting at roundabouts, believes safety and mobility will be greatly improved. | This project will benefit the kind of businesses that rely on foot traffic | |
| Tim Gordon Chair, Jaffrey Planning Board Town Office Building 10 Goodnow St. Jaffrey, NH 03452 | | х | | 10/4/2019 | 10/9/2019 | Yes | The Final project as proposed is the result of years of consultation and feedback with stakeholders in the community. We stand now at a point where the efforts of those residents, volunteers and professionals can come to fruition. The community has shown its support and engagement, and the residents of Jaffrey and its Planning Board have indicated their support. | This project is important to the community as it is central to several of the key principles which were developed and adopted in the update to the town's Master Plan of 2018. | The project implements first on the list of objectives in the Master Plan, to "Implement the Main Street/Route 202 "through pass." This objective has been a consistent priority in the Town's Master Plan since 2007. | | The project, once completed, will support the community's efforts to revitalize the downtown area and will indeed "Promote improvement and business development in the downtown," as envisioned in the Master Plan. | |
| James Webster 188 Peabody Hill Road Jaffrey, NH 03452 | | х | | 10/8/2019 | 10/9/2019 | Yes | | Feels this is a wonderful opportunity for Jaffrey, one that is unlikely to come again if this project does not move forward now. | improve traffic congestion, as the current large truck traffic through downtown undermines the appeal of the town's center, making it less likely to see the kind of development that will encourage people to spend time and money. | | | Current truck traffic is loud, sme and sometimes dangerous. |
| Elizabeth Moch Webster 188 Peabody Hill Road Jaffrey, NH 03452 | | х | | 10/8/2019 | 10/9/2019 | Yes | | | This project is important to the community because trucks using Rt. 202 cannot safely navigate the turn. | | | |
| Lawrence J. Jadlocki 159 Proctor Road Jaffrey, NH 03452 | | х | | 10/7/2019 | 10/9/2019 | Yes | Although the apartment building will be lost, he appreciates the fact that the state will work to help relocate the affected residents. He would also hope that the state will also use some of its knowledge and resources to help the town find ways of addressing the need for affordable housing for all ages. | | The proposal presented on October 2nd addresses the problem of traffic congestion caused at the intersection. The changes to timing of the lights has diminished the problem to a certain point, but it is not a permanent solution. | | As a realtor, feels the majority of the existing businesses are not a strong draw to increasing the vitality of the community. Believes the change in traffic flow and some marketing and planning by the town, Team Jaffrey and the chamber will help draw businesses that will attract the general public and increase the vitality of the town. | |

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| Name / Address / Email | Public Testimony | Letter / Petition | Email | | | | General Comment about Project | Improvement: General Comment in Support of Project | Improvement: Traffic Flow / Reduce Congestion | Improvement: Downtown Pedestrian Use and Safety | Improvement: Revitalize Downtown Business | Improvement: Reduce Noise/Air Pollution |
| Eunice K. Jadlocki 159 Proctor Road Jaffrey, NH 03452 | | x | | 10/7/2019 | 10/9/2019 | Yes | She has attended each of the public sessions and reviewed the information that is available on the website regarding studies and proposals for improvements. She has found the entire process one that at all times kept them informed, sought their input and answered their questions. She was very impressed with the team that handled the project. | there is a need to make improvements that address the flow of traffic and the safety of pedestrians. The submission of a petition of support with the 51-names on it attest to the majority being in favor of this project, and adds her own voice of support. | • | were opposed to them; when asked about the existing intersection, they then said that they avoid the intersection all together because they don't like it and don't feel safe maneuvering | complain about the roundabout proposal and the impact on their business, but she has observed the congestion and it was clear to her that they must also be | |
| William B. Raymond 8 Main Street, #6 Jaffrey, NH 03452 | | х | | 10/7/2019 | 10/9/2019 | Yes | | | The roundabout plan will get the trucks of that stretch of roadway and that alone will make downtown a more pleasant place to be. | | The roundabout plan will make the downtown a more pleasant place to walk and a more appealing place to site a business. | The roundabout plan may also lesson noise downtown. As it is today, the big trucks employ engine breaking and acceleration multiple times to get through the dogleg. This "opera" goes on from early morning, all day and into the early evening. |
| Martha M. Raymond 8 Main Street, #6 Jaffrey, NH 03452 | | х | | 10/7/2019 | 10/9/2019 | Yes | | This project is important to the community for a number of reasons. I have been a resident of downtown Jaffrey for the past 11 years and feel that this project would benefit the downtown community. | | The project would enable the town to be a safer place for pedestrians, especially children. | Without the traffic streaming though, Jaffrey could enhance and beautify the downtown area which could lead to the possibility of more retail shops and a more cohesive, community oriented downtown. | |
| Bruce R. Edwards 8 Main Street, #5 Jaffrey, NH 03452 | | х | | 10/7/2019 | 10/9/2019 | Yes | | Attended the Public Hearing and is in favor of the project. This project is important to the community. | | | | |
| JoAnn and Martin Greenberg 8 Main Street Jaffrey, NH 03452 | | Х | | 10/5/2019 | 10/9/2019 | Yes | | Letter of support for the Route 202 Traffic Improvement Project in downtown Jaffrey. | | | | |
| Hannah R. Rierson 71 Bryant Road Jaffrey, NH 03452 | | × | | - | 10/7/2019 | Yes | | circles. | As a long time resident, has seen the increase of traffic, especially large trucks and the congestion they cause in the center of town. The traffic currently disrupts the nature of the small New England town. | The truck traffic is dangerous for pedestrians. | | The trucks are noisy and the traffic never declines. |
| Timothy Furlong 8 Main Street, #11 Jaffrey, NH 03452 | | х | | 10/4/2019 | 10/7/2019 | Yes | | Letter of support for the Route 202 Traffic Improvement Project in downtown Jaffrey. This project is important to the community. | | | | |
| Dawn L. Oswalt 43 Prospect Street Jaffrey, NH 03452 | | х | | 10/3/2019 | 10/7/2019 | Yes | Asks that it would be great if the project could be completed by 2023 for Jaffrey's 250th celebration in downtown. | | Believes this change in traffic pattern will be GOOD for Downtown Jaffrey. | Hopeful that flashing lights will be taken into consideration at the crosswalks and a four way stop a the Four Way intersection. | | |

| | Format Comment Received | | | Date on Letter/Email | Date Rec'd at DOT | Support Yes/No | | #1 | # 2 | # 3 | # 4 | # 5 |
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| Name / Address / Email | Public Testimony | Letter / Petition | Email | | | | General Comment about Project | Improvement: General Comment in Support of Project | Improvement: Traffic Flow / Reduce Congestion | Improvement: Downtown Pedestrian Use and Safety | Improvement: Revitalize Downtown Business | Improvement: Reduce Noise/Air Pollution |
| Stephanie Porter Executive Director TEAM Jaffrey 28 Main Street, Rear Jaffrey, NH 03452 (603) 532-7168 teamjaffrey@myfairpoint.net | | x | | 10/4/2019 | 10/7/2019 | Yes | | Letter as testimony in support of the Route 202 Traffic Improvement Project in downtown Jaffrey. | | | Most of our Board Members are in support of this project as we believe it will help revitalize, enhance and improve the downtown, which is our mission statement. It would be very disappointing if things remain status quo, our Main Street businesses are struggling, despite what was stated at the Hearing. | |
| William J. Weibel 8 School Street Jaffrey, NH 03452 | | x | | 10/4/2019 | 10/7/2019 | Yes | | Letter as testimony in support of the Route 202 Traffic Improvement Project in downtown Jaffrey. This project is important to the community of Jaffrey, as a downtown resident, would love to have these changes brought to the community. | | | | |
| Jo Anne Carr Director Town of Jaffrey Office of Planning & Economic Development Goodnow Street Jaffrey, NH 03452 (603) 532-7880, x110 jacarr@townofjaffrey.com | | X | | 10/3/2019 | 10/7/2019 | Yes | The reconfiguration of the traffic pattern with two roundabouts and bridge in close proximity to the town center is the result of two and a half years of work with the town boards, the Advisory Committee and support from staff. While the project has been moving along in the preliminary design phase with the DOT, the EDC, through the downtown TIF District has established a capital reserve fund to complement any ancillary projects which will arise out of this significant change to downtown. Additional lighting fixtures, sidewalk furniture, wayfinding signage and possibl a new Welcome Center situated near the 5-way roundabout are anticipated. | dogleg. | This project can safely and efficiently accommodate both regional and local traffic. | This project will also enhance pedestrian movement and serve as a gateway to both the downtown and region. | This project is a high priority for the downtown revitalization and economic prosperity. The Jaffrey Downtown Master Plan seeks to promote redevelopment in the downtown area, fostering an active and vibrant economy on Main St. These assumptions depend on resolution of the dogleg constraint. | |
| Rick Lambert, President Jaffrey War Memorial Committee P.O. Box 565 Jaffrey, NH 03452 | | X | | | 10/3/2019 | Yes | The Jaffrey War Memorial Committee has met and communicated with the NHDOT and the Town of Jaffrey regarding the major traffic changes proposed for downtown Jaffrey including a new river crossing, realignment of travel ways and the introduction of two roundabouts. It has been proposed that a portion of the present park be carved off to make the present proposal and that in return some land be made available to be added to the existing park. However, the Committee has some specific concerns related to relocation of affected monuments and park elements, and land added to the present park and developed at no cost to the Committee. | downtown Jaffrey, its infrastructure, its commercial life, its townscape, and its traffic flow and pedestrian safety. Improvement indeed is called for and the Committee, as a significant presence in the downtown, is willing and eager to assist in the best way it can in this effort. | | | The Committee is receptive to working with the NHDOT and the Town of Jaffrey as it agrees that an improvement of the park and downtown Jaffrey will result and be a benefit to all. The Committee is open to discussion of the points of concern and is confident that a satisfactory arrangement can be reached that benefits NHDOT, the Town of Jaffrey, and the Jaffrey War Memorial Park. | |
| Deborah Roberts Whip-Poor-Will Farm (R.F.D. 1) Box 247 Fitzwilliam Road Jaffrey, NH 03452 | | х | | 10/5/2019 | | Yes | | Attended the Public Hearing and please accept this note in place of personal testimony in favor of the project. This project is very important to the community!!! We need it!! | | | | |
| Carl P.J. Dokla, Ph.D. | | х | | 10/5/2019 | 10/8/2019 | Yes | Wished to provide feedback on the project: - First, the full acquisitions for the project are minimal and not costly Second, the proposed roundabouts provide a rather elegant solution to the perennial traffic problem that has plagued Jaffrey motorists for decades Third, the negative economic consequences to the local businesses appear to be negligible to nor existent. | Hope that in the final deliberations that the project is fully approved and implemented. The needs of the many clearly in this case outweigh the needs of the few. | | | Believes that the improvements will have a very positive and beneficial economic effect in the long term. | |

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| Dana Tuscher 8 Main Street #13 Jaffrey, NH 03063 danatuscher@gmail.com | | х | | 10/7/2019 | 10/8/2019 | Yes | | Letter as testimony in support of the Route 202 Traffic Improvement Project in downtown Jaffrey. This project is important to the community of Jaffrey and the residents of Rivermill Condo Association. | | | | |
| William Graf 661 Gilmore Pond Road Jaffrey, NH 03452-6101 | | × | | 10/7/2019 | 10/8/2019 | Yes | | in downtown Jaffrey. | | Another concern is the inhospitable nature of the downtown to pedestrian traffic. There are lengthy waits between opportunities to cross the intersections, and the distances are not convenient for those more elderly and the many students who use the crosswalks on a daily basis; you have a potentially dangerous situation. | theater, feel the situation is | |
| Carolyn D. Garretson, Chair Jaffrey Conservation Commission Including 6-members: Pamela Armstrong, Kathy Batchelder, William Graf, Charles Koch, Francis McBride, and Elizabeth Webster | | x | | 10/5/2019 | 10/8/2019 | Yes | | Accept letter as testimony in support of the project in downtown Jaffrey. On behalf of the Jaffrey Conservation Commission, it is important to communicate that the Jaffrey Conservation Commission unanimously supports the 202 Dogleg Project and feels it will significantly benefit safety, reduce traffic congestion and encourage a pedestrian friendly downtown. | Project will reduce traffic congestion. | Encourage a pedestrian friendly downtown and significantly benefit safety. | | |
| Francis McBride 43 Nutting Road Jaffrey, NH 03452 | | x | | 10/7/2019 | 10/8/2019 | Yes | | I fully support the project. | I have lived in Jaffrey for nine years. When I first heard about the roundabout solution to the problem I was a little skeptical. Although I first found roundabouts a little confusing, I soon learned the basics and see how they improve traffic flow. These two in Jaffrey shouldn't be confusing since they will only be one lane. | | I did have concerns about trucks, kids, Stratton Rd., and the skirting of downtown, but I now see this as a beautiful plan. I don't understand the local merchants' resistance. If anything, the new plan facilitates access to downtown rather then impedes it. | |
| Russell Butler 34 Frost Pond Road Jaffrey, NH 03452 | | х | | 10/5/2019 | 10/8/2019 | Yes | | Accept letter as testimony in support of the project in downtown Jaffrey. This project is important to the community of Jaffrey. | | | | |
| Elizabeth Tong 34 Frost Pond Road Jaffrey, NH 03452 | | х | | 10/5/2019 | 10/8/2020 | Yes | | Accept letter as testimony in support of the project in downtown Jaffrey. This project is important to the community of Jaffrey. | | | | _ |

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| John H. Van ness, M.Div., Ph.D. 11 Jaquith Road Jaffrey, NH 03452 | | x | | 10/5/2019 | 10/8/2019 | | My wife's mother grew up in Jaffrey - on Main Street, and her father, Edward Adams Coburn designed the first water works in Jaffrey. From the first time I met her family in the 1950's, I heard how the State was planning to "fix" the dogleg. How long does it take? | in downtown Jaffrey. | Have you ever missed an important appointment while waiting through one or two red light cycles, as one or two 18+ wheelers try to thread themselves through the turns and lights? I have. Do you think customers for the new rebuilding of the Park Theater will endure the traffic snarl through the dog-leg to get to the theater? I don't. If you want Jaffrey to grow in the 21st Century, please approve the new traffic circle to enable traffic to move smoothly through Jaffrey. My grandchildren and I will thank you. | | | |
| Allen & Susan Leach 8 Main St. #14 Jaffrey, NH 03452 | | х | | 10/4/2019 | 10/8/2019 | Yes | | Accept letter as testimony in support of the project in downtown Jaffrey. This project is important to the community of Jaffrey. | | | | |
| Donald A. MacIsaac 19 Stony Brook Rd. Jaffrey, NH 03452 | | X | | 10/5/2019 | 10/8/2019 | Yes | | additional written testimony concerning the project, which is vital to the future viability of Jaffrey. Concerns are for the pedestrian safety and future viability of Jaffrey. Be aware that the Town of Jaffrey has applied to the State Division of Economic Development to designate the Jaffrey Downtown an Economic | DOT evaluation concludes that changing the timing of the signals is temporary at best. Jaffrey would like to provide every available advantage to prospective investors. Improvements to safety and traffic flow will improve walkability and accessibility and encourage future investment. | continuing evidence of the necessity to improve safety at the 5-way intersection. The current proposal provides pedestrian | viability. Jaffrey's downtown is a major asset; the project affects not only the viability of downtown businesses, but also property values of the entire town. Jaffrey has Mt. Monadnock, a | |
| John O. Field 38 Monadnock View Drive Jaffrey, NH 03452 | | х | | 10/4/2019 | 10/8/2019 | Yes | | Accept letter as testimony in support of the project in downtown Jaffrey. Strongly support the Route 202 Traffic Improvement Project for two reasons: 1. (See #2 and #3) 2. (See #4) If Jaffrey is willing to think big on this, the results could be transformative. | Improved traffic flow. | Improved pedestrian safety. | Catalyst for downtown renewal: - Especially as a needed stimulus to business activity by facilitating access and parking while diverting traffic; - Also for reasons of aesthetic enhancement appealing to citizens and visitors alike, with consequent benefits to businesses as well. | |
| Edward and Julanne Surprenant 53 Milliken Road Jaffrey, NH 03452 | | х | | 10/4/2019 | 10/8/2019 | Yes | | Accept this letter as testimony in support of the Route 202 Traffic Improvement Project in downtown Jaffrey. This project is important to the community businesses, traffic congestion and all considered. | | | | |

| | Forma | at Comment Re | eceived | Date on Letter/Email | Date Rec'd at DOT | Support Yes/No | | #1 | # 2 | #3 | # 4 | # 5 |
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| Name / Address / Email | Public Testimony | Letter / Petition | Email | | | | General Comment about Project | Improvement: General Comment in Support of Project | Improvement: Traffic Flow / Reduce Congestion | Improvement: Downtown Pedestrian Use and Safety | Improvement: Revitalize Downtown Business | Improvement: Reduce Noise/Air Pollution |
| Chief William Oswalt Jaffrey Police Department 26 Main Street Jaffrey, NH 03452 | | X | | 10/8/2019 | 10/10/2019 | Yes | | Writing to express my support for the state's proposal for modification to NH Rte 202 in the downtown area of Jaffrey. It is my sincere hope that, in your assessment, you will recognize that this project will not only benefit the State of New Hampshire with the increased efficiency of the new traffic pattern but also the long term benefit to the people of Jaffrey. Change is certainly difficult and frightening but resisting change can also lead to stagnation and economic decline. Thank you for the opportunity to offer this input. I look forward to the continuation of this process and a positive outcome for all involved. | have been closely involved with traffic management issues that have occurred on Main Street. I have personally stood on the corner of the 5 way intersection and addressed those instances when cars were backed up between the traffic lights due to | | The current traffic configuration of the traffic flow through our downtown area is at the least uninviting and at its worst intimidating for anyone that wants to travel through or to patronize those businesses that seem to struggle to survive on Main St. over the years. Change is difficult and frightening. I completely understand when those business owners express objections to this project primarily out of rear that, first the construction process and then the impact that the new configuration will have on their businesses. My response and hope for these business owners is in my faith and confidence that the NHDOT will honor their commitment to keep the welfare of these people in mind as plans are made to move forward with this project. | |
| Mary Ley 28 School St. Jaffrey, NH 03452 | | Х | | 10/8/2019 | 10/10/2019 | Yes | I was surprised to hear some of the emotional complaints about the project that seem so short sighted. Sure the construction will be inconvenien for awhile, but in the long run this project will be so beneficial for our community. Sometimes I think Jaffrey has an "inferiority complex". I have witnessed this type of negativity in the past, when there was a proposal for a new high school, but was voted down due to all the naysayers complaining that our kids didn't need a fancy new school. There was funding for most of the cost, but we turned it down! The funding for this project is guaranteed and we need to say YES!! We want to improve Jaffrey for the future. | | I have lived in Jaffrey on School St. since 1992. The traffic backups due to the dog leg have been an issue for years. I work in Keene and have been amazed how the roundabouts there have eliminated traffic backups. | I am a frequent walker and try to avoid the 202 intersections on my walks as much as possible. | ioiward with this project. | |
| Anne S.N. Webb 43 Thorndike Pond Road Jaffrey, NH 03452 | | х | | 10/5/2019 | 10/10/2019 | Yes | My greatest concern about the project is for those who are being displaced from their homes and for those whose businesses will not survive the construction. We have heard that the owners of buildings that are being taken down will be compensated for their property, but those who remor run small businesses will be in very big trouble. I would like to hear more about how those people can be accommodated. The second problem I see is the lack of parking. We will soon have a large theater; without parking, there is no business. Perhaps the Town becomes responsible for the parking rather than the State. In any event, I think we need to hear more about that. | downtown Jaffrey. I believe that these concerns can be addressed, tand I hope that you will move forward quickly. Jaffrey really needs this project. | I have lived in Jaffrey off and on for my whole life, and remember our downtown as a lovely, accessible center. It was a pleasant, easy place for shoppers, with plenty of parking along Main St. For many years now we have been relegated to being a path for tractor trailer trucks on their way to and from other places. Parking was reduced to make it easier for them to get through, and much of the charm that was downtown Jaffrey was gone. | | I think the Roundabout Project, as presented, is our best chance of restoring a vibrant downtown center to a vibrant town. | |
| The Reverend Richard C.L. Webb 43 Thorndike Pond Road Jaffrey, NH 03452 | | x | | 10/5/2019 | 10/10/2019 | Yes | Some merchants and residents of the downtown area show spoke in opposition oat the hearing seem to be under the impression that the entire project area will be torn up for two full years, which they justifiably regard as disastrous. Surely that is incorrect, and needs to be corrected. I suspect that this will be a piecemeal project which will inconvenience people for much less time, and much less seriously, than is thought. Specific information from the experts, and references to other towns which have been similarly placed, would be very helpful. | I write in vigorous support of the Roundabout Project for Jaffrey, as presented. For some, roundabouts may take some getting used to, but there are now many others in the area which people have learned to navigate with ease. In every case, they have improved traffic flow and safety. I look forward to the completion of this long-awaited project. I urge the Commissioners to find in favor of the Project, which such modifications as may seem best. | I have been a resident of Jaffrey since 2003, though a frequent visitor to my wife's family there since 1969, when the difficulties of traffic congestion in downtown Jaffrey were already evident. I am not surprised that even then there were plans afoot to relieve the situation, which has grown steadily worse. | | The current plan seems to me to represent not just an amelioration of traffic difficulties but also an opportunity for a transformation of the downtown area into a place where pedestrians and motorists alike can feel welcomed into a precious space with a history and a natural beauty that has for a long time been obscured. | |

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| Carolyn D. Garretson Member 202 dogleg Committee | | х | | 10/5/2019 | 10/9/2019 | Yes | the committee. In talking with many residents since the hearing, I am finding that numerous residents felt that since they gave their input previously, those comments would be included in the official record and considered in the final decision. I believe it would be a fair and equitable procedure to include these opinions of Jaffrey residents. I am including herewith copies of testimonies (via email that I have kept. | committee and testified in person. So many residents are aware that the commercial base of Jaffrey has significantly declined, the population base continues stable, with very limited options for the downtown area. The 202 project will give Jaffrey an incredible opportunity to improve | | | | |
| Stephanie Minteer (Email via Carolyn D. Garretson's letter) stephanie7686@gmail.com | | | х | 10/4/2019 | 10/10/2019 | Yes | | We understand that you (Carolyn) are gathering signatures from those supporting the concept of a roundabout to remove the unwanted traffic from Main St. Steph and I (Jack) are both in favor of the proposed plan and would like to sign your petition. I did send a letter to Marty Kennedy for documentation already. Thank you for all you are doing to help Jaffrey get beyond the obvious feeling of may to stay with the status quo. | | | | |
| John O. Field Former Chair of Conservation Commission (Email via Carolyn D. Garretson's letter) john.field@myfairpoint.net | | | х | 11/11/2018 | 10/10/2019 | Yes | | I strongly support the 202 Project for two reasons: 1. Improved traffic flow and pedestrian safety (See #2 and #3). 2. Catalyst for downtown renewal (See #4). If Jaffrey is willing to think big on this, the results could be transformative. | Improved traffic flow. | Improved pedestrian safety. | Catalyst for downtown renewal: - Especially as a needed stimulus to business activity by facilitating access and parking while diverting traffic; - Also for reasons of aesthetic enhancement appealing to citizens and visitors alike, with consequent benefit | |
| Kenneth Campbell (Email via Carolyn D. Garretson's letter) kendcampbell@gmail.com | | | Х | 11/11/2018 | 10/10/2019 | Yes | | I have attended most of the meetings and the test driving with buses and trucks at Conval. I heartily endorse the current 2-roundabout solution to Jaffrey's Rte. 202 traffic problem. | | | | |
| Susan Schenck 63 Monadnock View Drive Jaffrey, NH 03452 (Email via Carolyn D. Garretson's letter) | | | х | - | 10/10/2019 | Yes | | The Route 202 project is necessary to improve the traffic flow, and have safe intersections in the center of Jaffrey. I feel it is important to proceed with this project in a prompt fashion to prevent further deterioration of the traffic problem. | Improve traffic flow. | It will also allow for safer pedestrian crossings. | | |
| Elizabeth Webster 188 Peabody Hill Rd. Jaffrey, NH 03452 (Email via Carolyn D. Garretson's letter) | | | х | - | 10/10/2019 | Yes | | | I would like to see the traffic improvements made so that Jaffrey can develop a downtown, rather than a space where one sits while waiting for the light to change. | | | |

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| John Van Ness 11 Jaquith Rd. Jaffrey, NH 03452 (Email via Carolyn D. Garretson's letter) | | | х | - | 10/10/2019 | Yes | | I am writing in strong support for the project to reroute Rt. 202 through Jaffrey. | Jaffrey in 1953 with my wife, who | The pedestrians also struggling to cross the street, all have made downtown Jaffrey extremely unpleasant. | If we are ever to attract shops and shoppers to downtown Jaffrey, I believe the daunting traffic must be re-routed. | Then we moved here to live full- time in 1985. The long waits (sometimes two cycles of green lights to get through), the fumes from the constantly increasing number of 18 wheelers and school buses. |
| Allen & Susan Leach 8 Main St. #14 Jaffrey, NH 03452 (Email via Carolyn D. Garretson's letter) | | | х | 11/13/2018 | 10/10/2019 | Yes | | Jaffrey has needed a downtown by-pass for decades. Although this project does not give us a true by-pass, it will significantly reduce the downtown trough traffic. Downtown viability will naturally be enhanced with less through traffic. Susan and I are in favor of this project and believe its completion will help bring our wonderful little town up to its potential. | | | | |
| Heather Ames 12 Blackberry Lane Jaffrey, NH 03452 (Email via Carolyn D. Garretson's letter) Heatherwames@aol.com | | | х | 11/11/2018 | 10/10/2019 | Yes | | I support the Route 202 project as I believe it is a first step in revitalizing the downtown of Jaffrey and bringing business here that are so needed. | | | First step in revitalizing the downtown of Jaffrey. | |
| Bill Raymond President Rivermill Homeowner's Association (Email via Carolyn D. Garretson's letter) | | | х | | 10/10/2019 | Yes | | I absolutely support the two roundabout solution as presented. In addition, I have emailed all the residents of the Rivermill condominiums at 8 Mill St. to inform, advise and request their support. I hope that they will respond by emailing you or attending the meeting. | are right in the middle of this traffic nightmare and we see this two roundabout plan as a very viable solution to Jaffrey's | | | |
| Bill Weibel 8 School St. Jaffrey, NH 03452 (Email via Carolyn D. Garretson's letter) | | | х | - | 10/10/2019 | Yes | | I do support this project since it will revitalize our downtown area and, hopefully, make it more appealing for new business and friendlier to pedestrian traffic. | | Will make it friendlier to pedestrian traffic. | Will revitalize our downtown area and, hopefully, make it more appealing for new business and friendlier to pedestrian traffic. | |
| Harry Young 125 Jacquinth Road Jaffrey, NH 03452 (Email via Carolyn D. Garretson's letter) | | | х | - | 10/10/2019 | Yes | | I think that the 202 project is absolutely excellent and long overdue. | | | | |
| Florence Rawls 8 Main St. Jaffrey, NH 03452 (Email via Carolyn D. Garretson's letter) floprawls@gmail.com | | | х | 11/12/2018 | 10/10/2019 | Yes | | I wholeheartedly give a thumbs up to the proposed double rotary rearrangement of the traffic pattern. | I live at 8 Main St. and am a regular witness to the traffic on 202 that crawls over the bridge making its way through the two 90% turns that happen in quick succession. 18 wheelers are barely able to negotiate the turns without jumping the curb posing a real danger to pedestrians including the many school children. | | It is a bottle neck and the extraordinarily wide street presents a daunting barrier to foot traffic thus isolating the businesses on both sides of that stretch effectively killing any hope for retail business growth. | |
| Francis McBride 43 Nutting Road Jaffrey, NH 03452 (Email via Carolyn D. Garretson's letter) fr42mcb@yahoo.com | | | х | 11/12/2018 | 10/10/2019 | Yes | | I have lived in Jaffrey for over eight years. I am constantly annoyed at this obstructive dogleg when traveling through Jaffrey on Rte. 202. I don't understand how the natives have tolerated this situation for years and years when it appears to be fixable. The double roundabout solution appears to be the best answer. I want the DOT to implement this proposed plan. | | | | |

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| Pamela Armstrong and Fran McBride 43 Nutting Road Jaffrey, NH 03452 (Email via Carolyn D. Garretson's letter) | | | х | - | 10/10/2019 | Yes | | We want you to know that we strongly support the changes proposed - starting with some adjustments to the present light system and ending with the best roundabout that is feasible - hopefully with a diversion down Blake Street and crossing back to River St. just beyond the park. | | | We really need this to revitalize downtown Jaffrey. | |
| Jo Anne Carr Director Town of Jaffrey Office of Planning & Economic Development Goodnow Street Jaffrey, NH 03452 (603) 532-7880, x110 jacarr@townofjaffrey.com | | х | | 10/7/2019 | 10/10/2019 | Yes | I have been asked to relay comments that have been submitted through the Town and VHB project page. These have all been submitted via email, correspondents assumed these were to be part of the record. (These emails will be referenced back to my letter-Jo Anne Carr's letter.) | | | | | |
| Anthony (Tony) Scholl 357 Thorndike Pond Road Jaffrey, NH 03452 (603) 352-6046 (Email via Jo Anne Carr's letter) tschollster@gmail.com | | | х | 8/23/2019 | 10/10/2019 | Yes | | I am definitely in favor of the solution of two roundabouts to help solve our dog-leg problem in downtown Jaffrey. This has been a long time in coming and I think that all of the discussions and presentations have finally helped to design an excellent solution. I am sorry that I will not be there in person to express my approval of the two-roundabout solution. | | | | |
| Patty Scholl 357 Thorndike Pond Road Jaffrey, NH 03452 (603) 532-6046 (Email via Jo Anne Carr's letter) pschollster@gmail.com | | | х | 8/21/2019 | 10/10/2019 | Yes | | I am definitely in favor of the solution of two roundabouts to help solve our dog-leg problem in downtown Jaffrey. This has been a long time in coming and I think that all of the discussions and presentations have finally helped to design an excellent solution. I am sorry that I will not be there in person to express my approval of the two-roundabout solution. | | | | |
| Suze Campbell 435 Mountain Road Jaffrey, NH 03452 (Email via Jo Anne Carr's letter) suzecampbell@mac.com | | | х | 11/15/2018 | 10/10/2019 | Yes | | I can't make the meeting but want to record my support for the 2-roundabout proposal. Thank you for your work on this project. | | | I think it will help revitalize Jaffrey. | |
| Gunilla Johanson 28 Thorndyke Pond Road Jaffrey, NH 03452 (Email via Jo Anne Carr's letter) | | | х | 11/15/2018 | 10/10/2019 | yes | | I am Gunilla Johanson and I support the By Pass. | | | | |
| gunilla.i.johanson@gmail.com Charlie Palmer 258 Gilmore Pond Road Jaffrey, NH 03452 (Email via Jo Anne Carr's letter) outlook_F32DAC339F0B046B@outlook.com | | | х | 11/15/2018 | 10/10/2019 | Yes | | I want you to know that I am a strong supporter for the project. This discussion has been going on for at least the past 20 years and a plan needs to be implemented ASAP. | We need a bypass to eliminate the chronic traffic problems in the dogleg. | | | |
| Stephen Weiner 42 First Tavern Road Jaffrey, NH 03452 (Email via Jo Ann Carr's letter) SMEW18@msn.com | | | х | 11/15/2018 | 10/10/2019 | Yes | | Pat and I firmly support the project We are not that well versed on this project, but if it benefits the township and eases traffic we are all for it. | | | | |

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| Herbert and Colette Gramm 270 Gilmore Pond Rd. Jaffrey, NH 03452 (Email via Jo Anne Carr's letter) colfrangra@live.com | | | Х | 11/15/2018 | 10/10/2019 | Yes | | We are strongly in favor of the proposed rerouting of Route 202 and the rotary in the downtown area. Let's not lose state and federal financial support for this project by the opposition of a few vocal but misguided opponents. | The dogleg design of this major road with huge 18 wheelers and logging trucks to negotiate the tight turns is dangerous and subject to traffic jams. | The trucks and traffic jams also detracts from the small town pedestrian ambiance. | | The trucks and traffic jams also detracts also increase pollution. |
| Carol Gehlbach (Email via Jo Anne Carr's letter) gehlbachs@yahoo.com | | | х | 6/28/2018 | 10/10/2019 | Yes | | Although I have been unable to attend any meetings on this issue in recent history, it has not been for lack of interest and concern. I would like to state my support for a plan which avoids the dogleg intersection in Jaffrey and shoots the traffic straight through from the Peterborough direction down the east side of the river, even though it will involve expensive land acquisition, a bridge and taxes. Thank you for the time and attention you have put into this important project. | | | The importance of the bypassing of the main part of town will be seen as we will have the opportunity to develop a more user friendly and attractive downtown area. | |
| Carl Querfurth 8 Turner Road Jaffrey, NH 03452 Emailed Letter: carlq@bluesbone.com | | | х | 10/7/2019 | 10/7/2019 | Yes | I do feel that the parking as proposed in the plan may not be ideal. It would be more beneficial to the businesses on Main Street to have more parking in front of their stores. I hope you can find some way to accommodate this idea. | Accept this letter as testimony in support of the Route 202 Traffic Improvement Project in downtown Jaffrey. This project is important to the community. Thank you for your time and attention to this important project. | The proposed plan will ease the traffic. | The proposed plan will make the downtown a much more pedestrian friendly place. | | |
| Carol W. Gehlbach 225 Gilson Rd. Jaffrey, NH 03452 gehlbachs@yahoo.com | | | х | 10/11/2019 | 10/11/2019 | Yes | | I would like to go on record as a supporter for the planned Jaffrey roundabouts. Thank you for all the work that has gone into this project. | With the increasing length of trucks which go through Jaffrey on Rte. 202, it is imperative to ease the congestion which arises when they get "stuck" in between the current light arrangement. | | I know the planners have done a thorough job of considering numerous alternatives in a quest for finding a suitable plan. Although not everyone will be pleased, I feel the proposal does address the major issues and will greatly benefit Jaffrey and give it a chance to renew the downtown and prosper in the future. | |
| Chris Gamache, Chief NH Bureau of Trails Parks & Recreation Division, DNCR 172 Pembroke Road Concord, NH 03301 (603) 271-3254 Chris.gamache@dncr.nh.gov | | | x | 9/18/2019 | 9/18/2019 | Yes | Our concerns would be limited to safety of trail users crossing Stratton Road and NH Route 124 from the State-owned Monadnock Branch Rail Trail to the Town-owned section of the rail trail. The proposed plan calls for sidewalks (purple areas) to be installed at the north end of the rail trail, at the junction of Stratton Road and Rte 124 and then on the north side of Rte 124. The connection to these sidewalk sections is proposed to be crosswalks; the southern portion being a crossing to an island before the rotary and then back to the junction of Rte 124 and Stratton Road. This proposal would accommodate the majority of the permitted summer recreational trail users on this trail, however this would be problematic for winter snowmobile use. We would like to propose that the sidewalks be tipped down to the street surface, in a direct line between the Monadnock Branch Rail Trail and the proposed sidewalk across Rte 124. This would allow for a straight crossing of Stratton Road and Rte 124 for snowmobiles and the trail groomer. Granite curbing is problematic for snowmobiles to get over and the machines do not turn well on pavement, as such we would request that the ability to continue the straight crossing of these roads, as is done today, be accommodated for the winter season. | proposed plans for this project in Jaffrey. | | | | |

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| Dorothy McCagg 8 Turner Road Jaffrey, NH 03452 Emailed Letter: carltory@me.com | | | х | 10/7/2019 | 10/7/2019 | Yes | I also understand the concern about housing. Given that the project is still 1-2 years out, I wonder if the town and state could work this out so that the displacement would be minimized. Perhaps houses being used for Air B&B and other such things could be rented for the displaced people. If it costs more, either tax rebate for the home owners, or a subsidy to the renters form the state could be made. Out of the box thinking is something that is needed here in order to allow for progress. Also known as change. Which is coming either way. Best to be prepared. I also wonder if there has been any thought to putting EV charging stations in the new lot. That would encourage people with EVs to stay a bit longer, check out the town. With time, hopefully more businesses could open up - coffee shops, grocery, restaurants, etc. | downtown Jaffrey. This project is important for myriad of reasons. Though many people are concerned with the short term consequences, it seems the long term consequences should be considered as well. | By the time the work is done, there will be no normal and the resulting flow of traffic will be a welcome relief. | Regarding the safety concern, that pedestrians are used to the traffic stopping and might be taken unaware by continuous movement. I would suggest that this might be a benefit of the chaos of the rebuild of the roads. Construction will break all sorts of habits, and make way for new ones. | | |
| Dorothy Coates 21 Cutter Hill Road Jaffrey, NH 03452 dcoatespoole@gmail.com | | | х | 10/12/2019 | 10/12/2019 | Yes | | right here in Jaffrey. | We love being here but find the 18 wheelers on 202 dangerous, frightening, etc. | | | |
| Elizabeth (Betsy) and David Trimble 401 Main Street Jaffrey, NH 03452 bdtrimble17@yahoo.com | | | х | 10/14/2019 | 10/14/2019 | Yes | | This email is being sent in support of the Round Abouts in Jaffrey. | | | We feel that our "Downtown" clearly needs to be walkable. It is obvious that the Round Abouts wil make I possible for more small business to be brought to the downtown; that the parks and lawns will be more appreciated; small restaurants will benefit from a downtown where members of the community and guests stroll instead of "park if you can and run in "; The Park Theatre is going to make a huge difference in our towna walkable downtown will be important. | environment. It would seem that the round abouts would bring less exhausts / fumes into the downtown. |
| Gwendolyn Gundlach 11 Jennifer Lane Jaffrey, NH 03452 ggundlach52@gmail.com | | | x | 10/11/2019 | 10/11/2019 | Yes | | I am writing in full support of the Proposed Jaffrey Roundabout Project. I truly hope that the roundabout project will be approved so that the future of the wonderful town of Jaffrey, a gem in the Monadnock region, can begin. | | | The new design will tremendously enhance our downtown, not only improving the traffic pattern and flow, but also for pedestrians, businesses, and future improvements to our town. Despite the sacrifice that some business owners and homeowners may face with these changes, the benefits far outweigh the few buildings that may have to be "relocated" to make room for the roundabouts. Furthermore, the loss of housing and business space will enable the town planning board to assess further needs of not only downtown, but also affordable housing needs and business needs for the town as a whole. | |

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| Herbert and Colette Gramm 270 Gilmore Pond Rd. Jaffrey, NH 03452 herbert_gramm@yahoo.com | | | х | 10/11/2019 | 10/11/2019 | Yes | | To miss the opportunity of this long planned improvement because of the vocal opponents of a minority would be another example of lack of progress benefiting society at large because of the | As summer resident of Jaffrey since 1968 I've been aware of the deteriorating traffic situation in downtown Jaffrey. At present traffic merely passes THROUGH downtown where drivers don't find an inviting atmosphere. | The will thought out and frequently discussed improvements will when completed will make a pedestrian friendly town. With a visitor kiosk at Rt. 202 north and south and signage for parking tourists are invited to stop for a meal, shopping and a relaxing walk on the riverside rail trail instead of being stuck in a line of cars and trucks trying to navigate the "dogleg". | concern of some of the residents about the impact of construction, | |
| Kenneth and Susan Campbell 435 Mountain Road PO Box 416 Jaffrey, NH 03452 ken.campbell@mac.com | | | х | 10/11/2019 | 10/11/2019 | Yes | | We urge you to approve the NHDOT two- roundabouts plan for the US 202-NH 124-NH 137 five-way dogleg intersection in Jaffrey. We believe the planners have done a good job that will have long-term beneficial effects on the town of Jaffrey. We have been to several of the public meetings and Ken attendee the rodeo at the ConVal High School; we have been impressed with the job done by NHDOT and Marty Kennedy of VHB. | | We trust that they can make improvements to the plan that will alleviate pedestrian and some other issues raised by opponents and nearby businesses, and that the planners can come up with a construction-phasing plan that should minimize the economic and traffic impact of construction. | | |
| Margaret and Gene Pokorny 24 Parsons Lane Jaffrey, NH 03452 mpok@384@gmail.com | | | х | 10/11/2019 | 10/11/2019 | Yes | | While I was not able to attend the public hearing, I have followed the coverage of the meetings and the pros and cons expressed very closely. My husband and I, 30 year residents of Jaffrey are in complete support of the two roundabouts solution that was presented. | | | | |
| Mary Amirsakis Precious mary.amirsakis.precious@gmail.com | | | х | 10/12/2019 | 10/12/2019 | Yes | | I vote yes for the project. | | | | |
| Nancy R. Beiter 769 Gilmore Pond Road Jaffrey, NH 03452 (306) 532-7225 beitern@gmail.com | | | х | 10/11/2019 | 10/11/2019 | Yes | | | onto 202 from 124 had to rearrange ourselves to accommodate an 18-wheeler who | | businesses I believed that, when the project is complete, those | |
| Richard Stein ricks999@myfairpoint.net | | | х | 10/11/2019 | 10/11/2019 | Yes | | | On grounds of improved traffic flow and reduced congestion. | And on grounds of aesthetics, safety and pedestrian quality of life here, this is a plan which will work! | | |

| | Forma | t Comment Red | ceived | Date on Letter/Email | Date Rec'd at DOT | Support Yes/No | | #1 | # 2 | #3 | # 4 | # 5 |
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| Name / Address / Email | Public Testimony | Letter / Petition | Email | | | | General Comment about Project | Improvement: General Comment in Support of Project | Improvement: Traffic Flow / Reduce Congestion | Improvement: Downtown Pedestrian Use and Safety | Improvement: Revitalize Downtown Business | Improvement: Reduce Noise/Air Pollution |
| Robert B. Stephenson PO Box 435 Jaffrey, NH 03452 (603) 532-6066 Supplementary Statement via email: rob@rs41.org | | | X | 10/8/2019 | 10/8/2019 | Yes | These comments supplement ones given at the hearing and previously submitted. Many of the negative comments related to roundabouts seem to me to have been said out of ignorance, possibly by those who have had little experience with them. They are the rule for intersections throughout the world and not the exception. I have full confidence that DOT with its experience in designing and maintaining roundabouts throughout the state knows what it's doing and that vehicles of all types and sizes will be able to navigate those proposed for Jaffrey safely and without difficulty. One comment focused on lack of mention of construction staging areas in downtown. This is premature but I can think of several without much difficulty: St. Patrick school parking lot, the Municipal Parking lot; the Ballpark parking area; W.W. Cross; the Welcome Center parking (owned by my condo association). | I would like to add some commentary based on my attendance at the Hearing on Oct. 3, 2019. Despite having heard the testimony of others at the hearing, I stand by what I said in my original statement. Many of the statements in opposition seemed to me to be from those who would be impacted by the project because of land taking or perceived harm to business. It's expected that those who might be adversely affected by the project - or believe they will be - should be in opposition, mildly or forcefully. I believe the Commission should take this into account and give it only minimal consideration. Granted that the two-year construction period will make downtown Jaffrey a difficult place at times to navigate and to carry-on a business. However, such disruption needs to be balanced against leaving the situation as it now is: years of traffic going through the center of downtown, continued congestion and noise, likely increasing over time, indefinitely and with no end. | the project will have on traffic flow and congestion. | I do not believe a case has or can be made that pedestrian crossings at the roundabouts will be more dangerous to pedestrians than the present situation. There is no need for any warning lights; actual crossing lights (stopping traffic) would defeat the whole logic of continual traffic flow that is the basis for roundabouts. Signalized roundabouts are only found in situations where the traffic volume is far higher. I know of none in New Hampshire. | project will ultimately be of benefit to Jaffrey's downtown both economically and aesthetically. There were several comments at the hearing to the effect that there is a parking problem in downtown Jaffrey. Only if you insist in parking in front of your destination is there a parking problem. I have never in 40 or so years not gotten a parking space in downtown within, say, 50 feet of where I wished to go. Invariably when I go to shop in Market Basket in Rindge I have to park 100 feet or more from the front door. | Also, the positive effect the project will have on noise. |
| Stephanie Dionne Eric Dionne Alec Dionne Briana & Andrew Rivard Gabrielle Dionne Olivia Dionne esdionne96@gmail.com | | | X | 10/9/2019 | 10/9/2019 | Yes | | We as a family have had many discussions on the lights and the round about. We are all for the project and smooth traveling on our busy commutes! My oldest is 21 and my youngest 16 of 4 kids. Please make this happen and sooner the better! | | | I know a lot of people think the downtown businesses will loose customers and I just don't see that happening. The traffic now continues to move on their route and not stop at any of them. These businesses have their regulars and no new customers just passing through town! Seriously who stops at the Realtor to shop or the barbershops or the CPA's to get some accounting done on a whim? There is nothing in this town to draw outside shoppers. | |
| Rep Dick Ames 12 Blackberry Lane Jaffrey, NH 03452 | x | | | | 10/2/2019 | Yes | | I'm very impressed with the good work that's been done by the planners and by the presentation. It's thorough and helpful to all of us, I think, whether pro or con. That's really a · remarkably good job, so thank you. I am supporting this project. | downtown, help with traffic flow, | | | |

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| Jon Frederick 24 Carey Road Jaffrey, NH 03452 | x | | | | 10/2/2019 | Yes | | Town Manager thanked NHDOT, VHB and the Advisory Committee for all the work they put in over the last 2-1/2 years. A lot of civil discussion has taken place and, you know, with the purpose that was developed, the purpose of the project was to address the traffic congestion and safety-related deficiencies associated with the current configuration that we see inour downtown, while enhancing pedestrian mobility an supporting the quality of life and economic viatality of Jaffrey's downtown. This is the proposed plan comng out of that, and I think that that meets the purpose. Has a couple of things that were brought up that would liek to see happen; flashing beacons on the crosswalks for pedestrians, discussions during final design regarding the 4-way intersection at River & 137, 124 whether it be 3-way or 4-way stop, or lighted, and the parking at the Community Field, options. So I am in favor of the project, and I thank you for being here. | | | | |
| Rob Stephenson POB 435 Jaffrey, NH 03452 (603) 532-6066 | х | | | | 10/2/2019 | Yes | On May 3rd, 1990, I appeared at a similar hearing at Pratt Auditorium that concerned Jaffrey's last major downtown project, which resulted in traffic lights, new parking configuration, the placing of utilities underground and the creation of a municipal parking lot. Despite my being the owner of that lot, which still exists on Blake Street and despite it being taken from me by eminent domain, I spoke in general support of the project. | And I appear tonight nearly 30 years later to support the project now being considered. | The main benefit of proceeding will be improved traffic flow through the downtown. It's undeniable that the proposed traffic pattern with the two roundabouts and the river crossing will make for smoother and faster circulation. | I also believe that the downtown would be greatly improved aesthetically and that the pedestrian environment will be enhanced. | | |
| Franklin Sterling Selectboard 79 Highland Ave. Jaffrey, NH 03452 | х | | | | 10/2/2019 | Yes | | This isn't just a project about relieving the traffic congestion downtown. This is an opportunity for the Town of Jaffrey to recapture a major segment of our downtown. The segment between Perborough St and River St has become a dead zone. The four-lane highway has competely destroyed what used to be a very vibrant commercial center. We need this to bring people to our downtown, pedestrians and businesses. | going to increase. It's not going to go away. And Jaffrey right now is | | | |
| Ken Campbell 435 Mountain Road PO Box 416 Jaffrey, NH 03452 (603) 532-8686 ken.campbell@mac.com | x | | | | 10/2/2019 | Yes, strongly | Question: Has there been an economic impact statement of what this \$8.6 million project will mean to the local economy? Answered: No. | I strongly support the project. | | The project will also improve safety for drivers, school kids and pedestrians, I believe. I'm looking forward to walking the loop that we are creating and seeing new perspectives on this town, and I strongly support the project. | | |
| Monique Coll Ken & Monique Transport 75 Typler Hill Rd Jaffrey, NH 03452 (603) 532-6925 KTM_Monique@yahoo.com | х | | | | 10/2/2019 | Neutral | Question: Are you going to have an apron on the roundabout for the trailers. Answer: Yes Question: can you put lines not curbing on the exits of the circle so wheels wont be damaged going over them? Answer: The roundabout is being designed to accommodate large trucks without the need for their tires to cross over the outside curb. | | | | | |

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| Sheila Ellis 75 Turnpike Rd Jaffrey, NH 03542 (603) 532-6937 preskittiee@aol.com | х | | | | 10/2/2019 | Yes | | I know we have good businesses and good people, and I do have a concern about our downtown. I would like to see it revitalized. I'm not saying I'm against the roundabout, because I I am in favor of it. I'm just asking that people base your decision on facts and not your emotions or your fears. | | | | |
| Carolyn D. Garretson 202 Committee 125 Jaquith Road Jaffrey, NH 03452 (603) 532-9998 | х | | | | 10/2/2019 | Yes | | I have a statement of support, which is just a petition, and I have 51 members, and I will try to get some more in the next ten days, but these are the people that I've spoken with that are in support of this project. And I hope those of you who are opposed to it will take a different look at it and really, really see that over these many, many years and I'm going back to the charrette and what was suggested from the charrette. I really think this will be very, very beneficial for Jaffrey. | | I have been privileged to work my fanny off for two-and-a-half years on this 202 committee. We have taken it very, very seriously. I also participated in the charrette. And we — the first thing that we did was to — to make up a mission statement, and our mission was really to improve Jaffrey and to improve safety and to make it a more pedestrian-friendly town, make it a town that small businesses could move into and survive in. | | |
| Herbert Graham 270 Gilmore Pond Road Jaffrey, NH 03452 (603) 532-9319 | X | | | | 10/2/2019 | Yes | | | | I also am concerned about the crosswalks. Now, I've traveled a lot in England and in New Zealand and Australia, and they have rotaries, roundabouts, all over the place, and the crossing is very safe because on these crosswalks, it isn't just the zebra stripe, but people can push a button and there is a flashing light that alerts the cars to someone about to cross. And because-these crossings are so short, it doesn't stop the traffic much, because as soon as the person is on the other side, the traffic can start again. It isn't a light that's going to be for, you know, 15 seconds or 20 seconds. It's very short. So it will not impede the traffic. | | |
| Suzanne Green 38 Woodbury Hill Rd Jaffrey, NH 03452 | X | | | | 10/2/2019 | Yes | | | | sentiments with regards to the students that would be using those crosswalks. | One thing we talked about awhile ago was supporting the economic viability of those businesses that are downtown. The reduction in the number of lanes in that part of the road, that there was a request of some of the folks that had businesses downtown for a return for slant parking to increase the number of parking spaces to enhance their ability to have more people be able to pull in and have access to those businesses, and the only thing I would request is that early request be fully realized in this plan or is considered in this plan to help support those businesses that are going to see less traffic going in front, to encourage more people to be able to have the opportunity to stop and park. | |

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| Sam Greene 785 Gilmore Pond Road Jaffrey, NH 03452 (603) 533-5152 greenappraisal@gmail.com | х | | | | 10/2/2019 | | Questions: the size of the roundabout? In comparison to say Keens roundabout. Answer: Marty Kennedy will get that information. Question: will there be additional parking spaces? Answer: Yes there will be. | | But I did want to ask about traffic calming. Is there going to be a policemen or and, you know, the bumps before you get to a sidewalk, or would there be a light that would slow traffic as they're approaching the roundabout? Answer: The layout all combined will calm traffic. | One big issue is the lack of parking and the lack of walkability in downtown Jaffrey. | | |
| Steve Jackson 54 Thorndike Pond Rd Jaffrey, NH 03452 (603) 562-9010 sjax@mac.com | x | | | | 10/2/2019 | Neutral | CEO of the Park Theatre I would assume a robust sign program, informational sign in addition to crosswalk and yield signs, woul dbe part of the plan of the DOT, but I also know that there are very stringent rules of what DOT allows on their roadways. and so I ask at what point it probably is premature in terms of a sign plan at this poing, but I would ask that there be a robust sign program so that we don't have people the ease of going around the two roundabouts on 202, it's like I'll just keep shoooting through without taking a stop downtown, because that's really what we want to make sure, that they know that there is a business shopping downtown, there is a theatre downtown, and that Jaffrey is not bypassed. | | | | | |
| Rick Lambert, President Jaffrey War Memorial Committee P.O. Box 565 Jaffrey, NH 03452 (603) 532-7946 | X | | | | 10/2/2019 | Yes | There is a portion of the park land hat is proposed for the project contains utilities, granite bollards, walkways, landscaping and other landscape elements. These will be relocated elsewhere in a consistent manner in a way agreed to by the committee, according to mutually agreed agreable plan and at no cost to the committee. Land taken for the proejct by NHDOT abutting, but not necessarily within the bounds of the park, shall be added to the present park and developed at no cost to the committee, in accordance with teh plan developed and approved by the NHDOT and the town, and the committee. The committee is open to discussion on these points and is confident that a satisfactory arrangement can be reached that benefits NHDOT, the Town of Jaffrey, and the Jaffrey War Memorial Park. | downtown Jaffrey, its infrastructure, its commercial life, its townscape, its traffic flow and pedestrian | | | | |
| Rep Douglas Ley 28 School Street Jaffrey, NH 03452 (603) 532-8556 dartley58@gmail.com | x | | | | 10/2/2019 | Yes | | I think this moment is sort of a moment where Jaffrey's at a crossroads. I think this project will move us in a very positive direction. I'm happy to see that the direct impact on properties is limited. I think that's a good thing. | | | And I think really having the roundabouts in this way and doing the traffic configuration this way will change the way Jaffrey looks to a lot of people, and I think it will help enhance making Jaffrey more of a destination. We have a theater being built downtown, which is going to be hopefully a new economic draw into the downtown. I think that will help stimulate other businesses along Main Street. | |

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| Laurel McKenzie 103 Fitch Road Jaffrey, NH 03452 | x | | | | 10/2/2019 | Neutral | Jaffrey resident and currently serve on Jaffrey's Planning Board and the Jaffrey-Rindge Cooperative School Board, but representing her own opinion. Question: What will Jaffrey's role be in maintaining this new configuration, impact to town finances with respect to snow removal, landscaping maintenance, and any other maintenance or cost issues should this project go forward? Has that been researched and quantified? Answer: It hasn't been quantified. The state routes will still remain the Department of Transportation's responsibility. We do not plow or maintain sidewalks or landscaping. So any enhancements or additional sidewalks will be the town responsibility. Question: Is the parking lot that is shown on the proposed planstill a state parking lot? Answer: It's on state land, yes. | Should this project go ahead, I would strongly recommend that there be a four-way stop at the junction of Main Street and River and North Street. Everyone knows how to negotiate a four-way stop and they clear quickly. | | | | |
| Renee Sangermano 14 Nutting Rd Jaffrey, NH 03452 (603) 593-5499 sangermano.renee@gmail.com | х | | | | 10/2/2019 | Yes | Recreational director for Jaffrey speaking as a resident. | So I am hoping that you all support this project and move forward, and I'm looking forward to the new sidewalks downtown and the more parking. | | But when we are talking about pedestrians and getting from a 12-foot space versus 125 feet, that is a huge difference. And when you have children passing through these streets, it's very important for us to know that they only have to get 12 feet and looking for one direction for a vehicle, where right now the impact that they could receive is from multiple angles. | | |
| Rachel & Andrew Schwartz 39 Woodbury Hill Rd. Jaffrey, NH 03452 | х | | | | 10/2/2019 | - | Received speaker card at Public Hearing, but chose not to speak. | | | | | |
| Marc Tiegen 18 Bradley Ct. Jaffrey, NH 03452 (603) 532-8765 info@tiegenrealty.com | х | | | | 10/2/2019 | - | Received speaker card at Public Hearing, but no comments in Transcript. | | | | | |
| Harry L. Young 125 Jacquith Rd Jaffrey, NH 03452 (603) 532-9998 | х | | | | 10/2/2019 | Yes | | Look at the people here. Look at the tables. They're lined up with experts, of civil engineers, the works. I had no idea that Jaffrey would attract this kind of attention and this kind of expertise, and yet here they are. I am not going to tell them what to do. They know. They know really, really well. I have no concerns about what they have done here. Folks, it's been a long time. 1932 is a long time ago. We need to do something about Jaffrey downtown, and we need to do it soon. Let's vote yes and move on with this project. | Jaffrey has a long history of problems downtown. The first that I know of was in 1932. | | | |
| Clay Hollister | Х | | | | 10/2/2019 | Neutral | Question: What portion of the cost of the project is Town paying? Question was answered, did not speak. | | | | | |

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| Stephanie Kavouras 15 Ellison St. Jaffrey, NH 03452 | х | | | | 10/2/2019 | Received speaker card at Public Hearing, but did not speak. | | | | | |

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|---|-----------|-----------|-------|--------------|---------------|---------|---|--|---|--|---|---|--|---|
| | Format (| Comment I | | Letter/Email | DOT | Yes/No | | #6 | # 7 Concern: Pedestrian Safety | # 8 | #9 | # 10 Concern: Impact on | # 11 Concern: Demolition of | # 12 |
| Name / Address / Email | Testimony | Petition | Email | | | | General Comment about Project | Concern: General Comment in Non-Support of Project Concerned about: | at Roundabout | Concern: Impact to Property Concerned about decision | Concern: Reduced Parking | Business / Bypass Town | Affordable Housing Bldg | Concern: Cost of Project |
| Bjorn Langoren (abutter) 21 River Street Jaffrey, NH 03452 bjorn@langoren.com (617) 599-3529 | | х | | - | 10/17/2019 | No | | - property with the roundabout located where current oval driveway exists - decision process for acquisition - value of potential appraisal options - feels paralyzed by project. | | process for home ownership and impact to property. Order of personal preference: 1. Cancel the project 2. Sell entire property 3. Sell portion of property Requesting appraisals for preferences 2. and 3. | | | | |
| John M. Peard Jr. (abutter) Owner/Operator Red's of Jaffrey 12 River Street Jaffrey, NH 03452 | | х | | 10/14/2019 | 10/17/2019 | No | Believes there is room for improvement in Jaffrey traffic with less invasive, less expensive measures. | Opponent of the downtown Jaffrey roundabout & bypass project from the beginning due to the affect on business started in 1955 by grandparents. | Pedestrian safety concern, especially school children, and blind or special needs individuals | Bypassing business will result in negative impact on long-term operation; lack of traffic and loss of easy accessibility. - Concerned about impact to properties on River St. | Reduced on-street parking for businesses. | The motoring public will be focused on driving through town, not visiting town. Removal of viable business, Lab n' Lager, which has brought much needed younger to downtown. There are six multi generation downtown businesses that feel they may suffer an adverse effect with the bypass. | Demolition of a multi-family apartment house; lose affordable housing. | Concerned about the cost of the project and what happens if the cost increases. |
| Jack D. Kitchen Associate General Counsel Consolidated Communications 350 S. Loop 336 W. Conroe, TX 77304 Sent via email as well: Jack Kitchen@consolidated.com (936) 788-9911 | | х | х | 10/9/2019 | 10/21/2019 | No | | Formal notice of objection to the currently proposed design for the Route 202 Project in Jaffrey, NH. Requests a redesign that addresses the concerns listed under #10. | | | | Three main concerns for utility company: 1. Prolonged disruption to service 2. Timeline for completion of project is not feasible 3. Effects on Consolidated's operations | | |
| Tracy Meehan 93 Fitch Road Jaffrey, NH 03452 (603) 532-6735 | | х | | 10/9/2019 | 10/11/2019 | No | | The downtown will not be improved by this project. Opinion is that this project is not needed for the town; believe that if the majority of citizens of Jaffrey were allowed to vote on this project it would not proceed. | Safety will always be a concern, but feels a rotary between two schools will result in more traffic congestion as multiple crosswalks will need to be used to access parts of the downtown. Should consider more cost effective measures to the crosswalk structure. | owners with highway going through private yard. | Net loss in parking spaces, and loss of parking spaces near businesses. | This project will destroy what businesses have built, such as Lab n' Lager (being demolished), and Pizza Barn and Candy's will suffer during construction. | that offers an affordable place to | Doesn't feel like there is a traffic issue or know of any recent truck accidents a the intersection that warrants spending \$8M on this project |
| Susan Lovell 99 Stratton Road Jaffrey, NH 03452 | | х | | 10/9/2019 | 10/11/2019 | No | | There are more important things than traffic flow; our lives are in your hands. | Beg to reconsider the safety of the crosswalks approaching the roundabout; concerned about unescorted school children, as well as teens and adults, and drivers becoming confused when approaching or leaving the rotary. | | | | | |
| David Kemp Charlonne Street Jaffrey, NH 03452 | | × | | - | 10/11/2019 | No | needed upgrades to the substandard southern end of Route 202 (River St.) including, but not limited | The thru pass routing 202 down Blake St. and onto the old rail bed, crossing the river in the area of the Contoocook lake dam would be a far better long term solution to the problem and would correct many of the heretofore ignored and unaddressed problems caused or dismissed by the current roundabout proposal. | | Unmentioned land taking for additional sidewalks shown on River Street. Route 202 S. sidewalks on both sides of the road proposed by Cournoyer's funeral home; most likely affect stone walls on west. | Loss of parking for businesses and will affect parking for new Theater being built. Addition of additional sidewalks and sidewalk widening (affects parking opportunities and snow storage). | The addition of a second Roundabout to placate a wealthy vocal member of the committee. | | |
| Laurel MCKenzie 103 Fitch Road Jaffrey, NH 03452 Jaffrey resident and currently serve on Jaffrey's Planning Board and the Jaffrey- Rindge Cooperative School Board, but representing her own opinion. | | х | | 10/9/2019 | 10/11/2019 | No | If it moves forward, requests the following: 1. Thoughtful outreach to citizens adverse to project 2. Community/stakeholder participation in the design process 3. Careful phasing of construction to minimize impacts to businesses and abutters 4. Detailed MOT plans and requirements 5. Stringent requirements for dust control, noise control, ruck washing, etc. 6. Bi-weekly owner-contractor-town-community progress meetings during construction 7. Provisions for schedule recovery 8. Deployment of an on-site Clerk of Works to manage the project. | The proposed Route 202 traffic configuration has been developed to address traffic congestions, increase pedestrian safety, and revitalize the downtown business area: - This solution will not revitalize Jaffrey's downtown in and of itself. - The changes made to the traffic light timing have greatly improved traffic back-up at both intersections, eliminating it during most times of the day. - The goal to improve pedestrian safety when crossing the current intersections could be met with "scramble" crossings providing adequate time for pedestrians to cross any corner that is their ultimate destination. Traffic light timing has greatly improved traffic back-up. | Believes improved pedestrian safety could be met with "scramble" crossings at intersection vs. roundabouts. | | | Solution does not revitalize Jaffrey's downtown in and of itself | | |

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| Name / Address / Email | Public Testimony | Letter / | Email | Letter/Email | DOT | Yes/No | General Comment about Project | Concern: General Comment in Non-Support of Project | Concern: Pedestrian Safety at Roundabout | Concern: Impact to Property | | Concern: Impact on Business / Bypass Town | Concern: Demolition of Affordable Housing Bldg | Concern: Cost of Project |
| Kevin Chamberlain 18 Darcie Drive Jaffrey, NH 03452 Resident of Jaffrey; Former Asst. Fire Chief, former Town of Jaffrey Budget Committee, currently appointed Interim Selectman. | | × | | 10/8/2019 | 10/9/2019 | No | | Final traffic management of the four-way intersection needs serious consideration for traffic and pedestrian safety issues. Concerned about economics of project and potential for costs to be incurred by Town of Jaffrey; question statement that the project will have NO cost impact to the town. Confused by the need to "Revitalize" Main Street, as currently all Commercial and Residential space in the project area is 100% occupied. Traffic management could be addressed with further enhancements to traffic signals and in the future, with the use of autonomous vehicles. | crossings; and number of school age children that will need to | Properties adjacent to the project area will be impacted, usable land will be compromised. In addition, impact on the tax value, and serious impact on the resale value of the properties. | The overall impact is fewer parking spaces available in the Downtown area; with no handicap parking spaces identified. | Current "concept plan" removes taxable property from the project area which will impact the tax revenues to the Town of Jaffrey forever. Future business expansion limited. Most active business, Lab n' Lager will be forced to close; and concerned about traffic and construction impacts to local businesses. | The tenants of the Apartment Building proposed to be razed will be hard pressed to locate a new residence within the downtown area of Jaffrey. | Utility relocation cost associated with the project have never been discussed; concerned about significant issues raised by Telecommunications, Electric and Consolidated Communications. Between the following entities Federal, State, Municipal, Utilities and the private sector; this project will have a financial impact greater than \$10M. This is a significant price to pay to deal with traffic congestion. |
| Kelly L. Jean (abutter) 19 River Street Jaffrey, NH 03452 (603) 540-3570 | | х | | - | 10/17/2019 | No | Many of us would love an improved downtown, bu we would also like it to focus on the pedestrians, not paving around downtown. Please consider a walking bridge into Bjorn's butterfly garden instead of a traffic bridge. | Never got a chance to provide input, nor did anyone reach out for input. The only ones who will benefit is the retired folks in condos who seem to be the ones pushing the project. They are the ones making the decision for all us hard working, younger generations who just want to participate. | | Bypassing downtown will not only ruin businesses but will put traffic in my neighbor and my driveways. Don't see how we could get out of our driveways safely, block the noise it'll bring to our front steps, and how it would even increase our property values. | | | | |
| Petition - To save Downtown Jaffrey. A Statement of Non-Support for the Route 202 Dogleg Improvements for Jaffrey, NH (received with Kelly Jeans letter) Collected by: Kelly L. Jean | | х | | - | 10/17/2019 | No | Support upgrading the current existing downtown leaving it as close to original as possible, and ask for a different configuration with every Jaffrey citizen, merchant, and visitor in mind. | Petition of Non-Support of the project (154-signatures). | Proposed project will put children at risk while walking to school. | Proposed project will displace many families and reconfigure property and business owner's current property. | | The proposed project will bypass the vital established businesses downtown, resulting in loss of revenue for the town. | | |
| James C. and Jeannelle F. Moore 28 Libby Court, P.O. Box 526 Jaffrey, NH 03452 | | х | | 10/6/2019 | 10/8/2019 | No | Ourselves and many other community members feel that no significant survey has been done or considered regarding the project. We feel a town-wide voting scenario would happen. So far there have been a few mid-week announced sessions attended by a hundred or less community members. We truly feel a ballot voting at an annual voting venue would yield a truer and more valid feeling of this project from the townspeople. | | | | | | | |
| Cathy and Joel Proulx 508 North St. Jaffrey, NH 03452 (603) 532-6002 | | × | | 10/6/2019 | 10/8/2019 | No | | Thoughts about the Project are listed here and in subsequent columns: 1. It doesn't benefit Jaffrey; it benefits the people driving through Jaffrey. 2. It will forever change the character of our town. No going back. 3. Don't mind the red lightallows time to enjoy the view of my town. see the river from one direction and the steeples and flag pole and mountain from another. 4. (See #10) 5. (See #11) 6. Small rotaries don't work, Shaw's in Peterborough is a perfect example of a poor choice small roundabout. Can't undo that now that i is in place! 7. (See #7) 8. Perhaps a stop sign for all vehicles making the right-hand turn from Peterborough onto Main St. would work. The problem there is cars block the intersection because they turn when they shouldn't. 9. Consider vehicles from Peterborough turning right into either one of the two lanes. If they want to go to kinding either lane will do and they need to zipper merge before Red's. 10. It seems that many people who want the roundabout moved into Jaffrey, maybe even by 20 years. More of the life long residents were against it. 11. (See #7) 12. Thought the drone video of the truck was not typical. Trucks can handle that turn. It seemed to be bias, as was the video of the kids running in to the road. Did this happen? Obliviously it did, but it is not typical. 13. Have never seen a fender bender or accident in the 5-way. EVER! What is the count of accidents this past year? In the past five years? | trailer truck coming from Peterborough and going east onto 124 towards Millipore can make I the circle and enter onto Turnpike Road especially since the road becomes narrow as it meets up to the roundabout. Narrow so it is safe for crossing, but too narrow for the truck. I. We may need to put some crossing guards in the five way for the school kids. | | | The businesses on Main St. will suffer and possibly close. Believes Aubuchon Hardware left during the construction on Main St. back in the early 1990's. | 5. It was mentioned the people losing their homes in apartments will be compensated when finding a new place. Will Lab and Lager be compensated when they no longer have their business revenue on a yearly basis? | |

| | Format | Commont | Bassiyad | Date on | Date Rec'd at | Support | | #0 | 4.7 | #0 | #0 | # 40 | | # 40 |
|--|-----------|----------|----------|--------------|---------------|---------|--|---|---|---|--|---|------------------------------|--|
| Name / Address / Email | Public | Letter / | Email | Letter/Email | | Yes/No | General Comment about Project | # 6 Concern: General Comment in Non-Support of Project | # 7 Concern: Pedestrian Safety | # 8 Concern: Impact to Property | # 9 Concern: Reduced Parking | # 10 Concern: Impact on Business / | # 11 Concern: Demolition of | # 12 Concern: Cost of Project |
| David Carpenter Principal Orion Product Development PO Box 503 13 Stratton Road, Unit A) Jaffrey, NH 03452 (508) 479-3283 (Email via Jo Ann Carr's letter) dcarpenter@oronpd.com | Testimony | | X | 12/1/2018 | 10/10/2019 | No | General Comment about Project | I have owned a home an operated a home-based engineering consultancy at 13 Stratton Road in Jaffrey since 2005. My home is one building removed from Stratton Road's intersection with Routes 202 and 124. I have been following the topic of downtown traffic flow improvements since more or less the time I purchased the property. I have recently become concerned that the Jaffrey Select Board seems to have convinced the NHDOT that the five-way roundabout at the subject intersection is the preferred approach to pursue. I am not opposed to improvements to traffic flow and pedestrian access to downtown. I appreciate Jaffrey's dense core and take advantage of my proximity to many local businesses by almost never driving. However, I consider this a safety concern of the highest priority and am asking you to reassess the situation in light of this. I would deem converting Stratton Road to a dead-end to be a considerable improvement over the existing conditions; however, I purchased the property well aware of the existence of the five-way traffic light (of course) and am not included to demand improvement, only to strongly resist a substantial degradation in the safety and utility of my home, so would also accept Stratton Road remaining a through street with a signal at the intersection to stop traffic periodically. Given how rapidly the situation seems to be evolving after years of stagnation, your consideration and rapid response are requested and will be much appreciated. Writing to voice concerns about this Rotary Project in Jaffrey. I have over 30 years in the trucking industry and I have never had any problems turning in any direction in the square. I have lived in Jaffrey since 2006 and in that time, I have seen a lot of traffic jams, but not in Jaffrey. I believe that the change in traffic lights is working fine. Sometimes there are a few cars here and there, because of the right hand turn-traffic coming from 202 on the Main Street. | at Roundabout | However, I am vehemently opposed to a five-way roundabout at the subject intersection. I have no driveway to speak of, my garage gives directly onto Stratton Road. During the school year, there are several hours at the beginning and end of each school day when the only reason I can possibly exit or enter my garage is because there is a traffic light. With no traffic light, I will be literally trapped in my garage during those times. There are multiple dwelling at this end of Stratton Road that will suffer the same fate if this project proceeds in the direction of a five-way roundabout; including where I live, is a 4-unit townhouse style condominium complex, next door is a 6-unit apartment complex, the East Side Apartments, and across the street are five multi-family dwellings. I am estimating that on the order of 20 households would be negatively impacted. Private Property rights: People by property as an investment, home or business. It is part of the American Dream to own property. I do not see the justification to take any building via eminent domain for this project. | Concern: Keduced Parking | Bypass Town | Affordable Housing Bldg | I have a huge concern with the \$8.6 million dollar cost of the project because our taxes could increase and possibly the cost of the maintenance of the Rotary. There is also a problem with accidents and clean up within the Rotary, which could cause |
| David and Gail Wilkie 12 Stratton Road Jaffrey, NH 03452 | | x | | | 10/10/2019 | No | | What I see is that the right turn sometimes interferes with the rest of the traffic, who have the green light. The 202 traffic continues to turn right on red, so the other traffic with the green light ends up in the middle of the road, which blocks all of the other traffic when their light turns green. I think that the "no turn on red" light should be used more often and the walk-light for the pedestrians should be longer, to ensure that they cross in a safe manner. I feel this project is being forced upon us and we have very little to say about it. WE DON'T WANT THIS PROJECT! | | I am a Vietnam Era veteran and I am very passionate about the Vets getting the respect that they deserve. I was very insulted to hear that the project would take part of the Memorial. | | | | Notary, which could cause problems with traffic. I live close to the square, I get a birds eye view of the traffic, there is no problem with emergency vehicles getting through the square to respond to a call. New Hampshire has always had a reputation for being frugal, but this project is a huge waste of money. |
| Donald Stewart 43 Hunt Road Jaffrey, NH 03452 | | х | | 10/9/2020 | 10/10/2019 | No | project representative, stating the towns generally die off when bypasses are put in too far from the centers of towns and I remember thinking "sure" like Milford? It's booming. Peterborough? Booming. Rindge? Where would they be without the taxes collected from their bypass businesses? | River St.: Six parking spots created to replace parking lost. A very good addition to the parking in Jaffrey but eliminates a turning lane. The project ends on 202 S. as School St. From that point on 202/River St. is sub standard all the way to the narrow bridge (D2) crossing Mountain Stream. There are utility poles very nearly whittled in half by contact with State Highway plows. The bridge on 202 S. has no way for pedestrians to cross the bridge. It is VERY narrow. Please view this for yourself. There will be the exact same number of vehicles moving through Jaffrey on Rt. 202, 124, 137. As stated many times in meetings by citizens, it never takes more than 2 or 3 minutes to navigate Main St. even when it is peak rush hour in the afternoon. | no pedestrian studies done by the DOT. I have done this on my own twice. One day, starting at 2:00 p.m., weather was not good and focused primarily schools letting out. Only 54 kids came from the direction of the Conant High School. The second time I watched 81 kids come to cross Blake St. also a few bicycles. Kids tend to look down at cell phones, not paying attention, some with ear buds in place. There are also Grade school kids walking Main St. going to Stratton Rd., etc. The solution of "safety islands" in the crosswalks won't work, picture a number of seventh grade boys on a safety island pushing and shovingsomeone will get hit. The danger to pedestrians will increase with no lights to stop | corner of Blake St. is slated to be demolished to make room for this project. What about the former railroad station, now a retail /apartment space directly behind the Lab & Lager? IT IS NOT EVEN ON THE MAP! The building on River St. to be removed is also NOT ON THE MAP! It was discussed that the apartment building near Veterans Park would be purchased and removed for room for the roundabout. This building is also NOT shown on the map? Private driveway access to the proposed roundabouts as shown on the mapis there any other | on River St. complained that he would no longer get as much business at his garage because the initial proposal came out onto River St. further south than his garage. Next meeting the DOT folks are proposing TWO roundabouts in Jaffreyone very near his garage. Local members of this study group had to point out that parking counted as public in two areas was indeed not public but in fact privately | The only business to open in Jaffrey in a dozen years, the Lab & Lager, and be successful will b gone. | | |

| | Format | Comment | Received | Date on | Date Rec'd at | | | #6 | #7 | #8 | #9 | # 10 | #11 | # 12 |
|---|---------------------|----------------------|----------|--------------|---------------|--------|---|---|--|---|--------------------------|---|---|--|
| Name / Address / Email | Public Testimony | Letter / Petition | Fmail | Letter/Email | DOT | Yes/No | General Comment about Project | Concern: General Comment in Non-Support of Project | Concern: Pedestrian Safety at Roundabout | | Concern: Reduced Parking | Concern: Impact on Business / Bypass Town | Concern: Demolition of Affordable Housing Bldg | Concern: Cost of Project |
| Jessica Livingston jessica93livingston@gmail.com | | | × | 10/4/2019 | 10/4/2019 | No | pedestrian safety, I think it would be better to turn | While I no longer live in Jaffrey, I do work close to the center of town. It currently looks like you plan to keep traffic flowing in both directions, through the roundabouts and through the current traffic pattern. I don't think that's the way to go. | | | | | | |
| Margie Clark-Kevan 125 Sherwood Lane Jaffrey, NH 03452 margieack@gmail.com | | | × | 10/9/2019 | 10/9/2019 | No | | Can some creative alternatives be presented? Perhaps a pedestrian bridge/skywalk? If not, then perhaps something that blocks foot traffic from cutting across the shortest distance - a wall? A green space? - and leads walkers to the crosswalk that is located further down. | I have concerns for future walkers trying to cross the round-about, especially going from Main Street to Stratton Road. I feel that some walkers will choose the shortest distance between two points if the current design stays as it is. I'm also concerned that the drivers will do as Reuben Duncan stated - look at oncoming traffic to merge and keep moving rather than be focused on kids who are crossing the road. Drivers have been trained to slowly move into traffic circles rather than stopping for pedestrians. These two factors make for a dangerous situation-especially during travel to and from nearby schools. I also feel that some way for walkers and bikers to stop traffic is necessary too. | | | | | |
| Mark Palermo ironmarq@att.net | | | x | 10/5/2019 | 10/5/2019 | No | | My concerns with the proposed roundabout changes for Jaffrey is the rise in auto insurance rates associated with roundabouts. States like NJ spend much money on projects that eliminate roundabouts because when there are accidents, everyone has some fault. It is unclear who has a right of way in a roundabout. Has the proposed plan for roundabouts in Jaffrey addressed this issue of increased auto insurance rates? | | | | | | |
| Nick Panagiotes (603) 562-9336 npanagiotes@gmail.com | | | х | 10/4/2019 | 10/4/2019 | No | | I own the Jaffrey Pizza Barn. I know something has to be done about the dogleg in town. Trying to leave from Blake Street is a test of patience. But after this summer with the water main project in town and the blacktop project of route 202 my business was hit very hard. My lunch business was a joke. People did not want to come to me because of detours and traffic backups. No signs to alert people how to get to me and the police details not helping people to get to me are were major problems. Allowing the water main construction crew to take over the municipal parking lot was a major blunder also. It was gridlock. | | | | | | |
| Angela Beecham 13B Stratton Rd, Jaffrey, NH 03452 (603) 593-5215 | x | | | | 10/2/2019 | No | | I own a condo on Stratton Road. I think that my main concern is that I don't think that these roundabouts are anything that we need. I live right next to Hill Insurance in a condo there, and I have seen a drastic improvement since they've adjusted the lights. I think that that has solved a whole lot of the traffic problem. | | Concerned they are going to take away her driveway to put in sidewalks, they will spend some time with her at the end of the meeting. | | | | I think that that the adjusted lights have solved a whole lot of the traffic problem, and I think that with a little bit of money, we could probably make that even better, and not \$8 million. |

| | Format 0 | Comment F | Received | Date on Letter/Email | Date Rec'd at DOT | Support Yes/No | | #6 | #7 | #8 | # 9 | # 10 | # 11 | # 12 |
|--|---------------------|----------------------|----------|-------------------------|-------------------|-------------------|--|--|---|-----------------------------|---|--|---|--------------------------|
| Name / Address / Email | Public Testimony | Letter / Petition | Email | Letter/Email | DOI | Tes/No | General Comment about Project | Concern: General Comment in Non-Support of Project | Concern: Pedestrian Safety at Roundabout | Concern: Impact to Property | Concern: Reduced Parking | Concern: Impact on Business / Bypass Town | Concern: Demolition of Affordable Housing Bldg | Concern: Cost of Project |
| Candy Curtis 1 Main Street Jaffrey, NH 03452 (603) 532-6666 | x | | | | 10/2/2019 | No | | | | | | She owns Candy's Hair Salon. So I have a total of three parking spots in front of my business. So I have three and I'll be going to one, is what you're saying. So you're trying to improve downtown businesses, but you're taking my parking, and I'll have tow years of construction. This does not help me at all. I am so against this. Not a good thing for me. | | |
| Birgit Johanson Main Street Business owner 51 Johanson Dr Jaffrey, NH 03452 (603) 831-4267 | x | | | | 10/2/2019 | Neutral | been done over since, what, a hundred years ago, needs to be done over. And if you concentrate your traffic flow design around the bridge and keep the other one maybe for walking and bikes, you're going to have a walkable, beautiful downtown that's alive and can accommodate the parking and | I live out further up north on 137, but we've had a family business since the '40s. It's a barbershop that's been there well over a hundred years. And I've had a lot of family in the area that have run a lot of businesses, and very few of them are on Maine St now, but I am. And my kids will be, which I take a lot of pride in because a lot of people leave this town, and my kids have no intention of leaving. So I grew up around the Emerald Necklace in Boston, and the architect of that made very, very good use of parkways and rotaries and bridges, and it centered around people. And this design is not centered around people. Everything in the middle is going to be kind of a dead zone, very hard to get to, very isolated, no parking. And I think you've got to redefine the problem again. The problem isn't trucks, okay? The problem is Jaffrey's gone dead since they took away the angle parking. | | | | | | |
| Kork Little 21 Main Street Jaffrey, NH 03452 (603)532-7991 | x | | | | 10/2/2019 | No | | I own property on 21 Main St. I have been my commute for 233 years has been Main St. in Jaffrey. I started there when I was in high school. I've seen the transition of the diagonal parking, the loss of parking spots. Everybody talks about bringing businesses downtown. We don't have any vacancies downtown. All the buildings are full downtown for businesses, so I don't know what y'all are talking about, about bringing more business downtown, because we are full. I'm not for this. I don't know of any business owners on Main St. that want this project to come through. Red's too. Nobody from the state and nobody from this town has come and asked me as a business owner whether I want this, what my opinion is, what can we do to help you and revitalize the downtown area. I'm not for this, and if you guys do it, it's a stupid frickin' project. | | | We don't have parking. We're going to have a park there with how many seats? Where are they going to park? You're taking parking spots away from us. You're not adding anything for us. You're going to run into additional issues with snow removal because you are adding more sidewalks. You are also adding more salt to the river. | | | |
| Jane Millar 100 Gay Street Manchester, NH (603) 645-7905 | × | | | | 10/2/2019 | No | I'm hoping that DOT can give me some clarification. There was a meeting back in September when we were talkling about the manholes being moved, conduits, the Jaffrey CO., and a redesign was supposed to be given. But during the presentation tonight there were a couple of dates given for utilities to be relocated. Question: Can someone help me which way we're going? Because that CO will take more than two years to refeed and all these people are out of service. Answer: In the presentation the construction period was mentioned, but the utility relocations aren't we have been working with Consolidated Communications, and we're aware of the facilities. And during the design, the final design, the details will continue to be coordinated with you. So we're not intending to say how long it will take because there's no definition yet of exactly what will be impacted. So that's really part of Final Design. | | | | | | | |
| Jim Thoin | х | | | | 10/2/2019 | No | have lived in this town their entire lives. My grandparents lived in this town most of their life. Son owns an auto body shop in Rhode Island, on a rotary. They built three new rotaries in this town to solve the traffic problems. In the first year they | In my opinion, you will never have a vibrant, quiet, peaceful New England town if you have the traffic continuing through town. We haven't eliminated the traffic. We're just moving it to a different area. It's just not going to going to be a peaceful, quiet town like it could be. Let's get this traffic out of the town so then you people can come in and have a nice stroll, have a nice dinner, go to the Park Theatre and not listen to trailer trucks running through their town. | | | | | | |

Commission: Public Hearing Testimony from October 2, 2019 and Letters/Emails received Date on Date Rec'd a Support Format Comment Received #7 #6 #8 #9 # 10 # 11 # 12 DOT Yes/No Concern: Impact on Concern: Pedestrian Safety Concern: Demolition of Name / Address / Email Concern: General Comment in Non-Support of Project General Comment about Project Concern: Impact to Proper Concern: Reduced Parking Business / Concern: Cost of Project at Roundabout Affordable Housing Bldg Bypass Town night have a cluster downtown where, you know, you have to go rough. But that's it. There's nothing else. So to put this Steve Ascani roundabout in to solve a two-hour problem? Really? It doesn't make 13 River Street Jaffrey, NH 03452 Х 10/2/2019 Nο any sense to me. I am totally against this. concerns with the students and lestrians which was addresse and stands with Kelly & Biorn's atement about affect to property Andrew Chesney And also with the residents on th 58 Heath Rod Jaffrey, NH 03452 10/2/2019 building that's going to be torn down on River St, as well as the owners of Lab 'n Lager who's (603) 562-6417 going to have to do something ith their business. rame of reference, I don't have to travel to work We can save \$8 million and put it hrough this downtown intersection, being retired. somewhere else. Because that's don't own property in there or rent property or hav all we have to do, adjust the traffi an office. I rarely have to cross the walks. I don't drive a big truck through there, so I really don't Bruce Hill 20 Cutter Hill ave much of a dog in this fight. Jaffrev, NH 03452 X 10/2/2019 Neutral If it's just based on safety and beautification, I thin (508) 280-9546 t looks great, and I just put a lot of trust into the owhill1947@gmail.com professionals and the experts. But there's a lot of consideration for people who do have -- are affected by this. So it just needs a lot of onsideration in the future. Although the committee is saying that they have operty Owner, with a small house whose backyard is private. So he roundabouts themselves. The last meeting I had with them f it's jay-breaking that's the spoken to use. I demanded the only meeting I got. ny question is, am I going to get anything out of this other than nean I'm sure it's a beautiful nev kind of pushed me to ask for problem, police it. It doesn't cos a full acquisition of my house at 1 \$8.6 million to police jay-breaking and the town manager laughed in my face when I eople in my, quote, unquote, it's not really my backyard right now, roject, but you're saying that this was trying to tell him about how I'm trying my best but it's land that I'm able to use. So my question is, if it goes through, is to fix traffic. To me, it looks like River Street. I didn't mention that if that's what happening what am I going to get from this? last time I was up because I really o live in Jaffrev at a voung age. vou're trying to make downtown Kelly Jean don't want that. I want to live her nore aesthetically pleasing for 19 River Street just hope that you realize what you're doing to us. My request is that I'm not forgotten about. I'm already going to have maybe the retirees that want it want to join these committees Jaffrey, NH 03452 10/2/2019 And we haven't heard a single number, what's a roundabout in my driveway now. My neighbor's going to now have quieter down there during the day that some of the people that are going to happen, any of our houses. So please, (603) 540-3570 don't lie to everyone and say you've spoken to us kjean09@gmail.com ecause it hasn't happened Chairman Wheeler: We'll make sure that happer Staging, where will all the cars/trucks park while The other thing that comes down to is that the trucks that you heard here, for example, just nov staging is put up. The other part is, sooner or late lowed, and I could hear it from even the people in the trucking he eally you're not getting any more you showed trucks that were in the video 42 feet basically. If I'm in those circles, you're going to have an accident. parking spaces and -- of any What's the Plan B to move the vehicles and clear i vrong, I'm off a couple feet. But again, the federal standards from olume, and right now you don't out in a rapid fashion? that perspective go somewhere up to 65 feet. That is double log trucks, double FedEx vehicles, double Walmart vehicles. You've go ave enough as it is right now. S s there any plan at all in any of thi 27 Fitch Road to have a realistic diameter, and I really think if you're going to do of more parking spaces Jaffrey, NH 03452 this, do the math. I'm talking from an engineering perspective because that's what I am. But you got to do the math, and if it can omewhere? I mean it doesn't 10/2/2019 Neutral sound -- nine, you know, ten, a (603) 593-5487 work, fine. But you're going to have to look at what the maximum is andful. And we do have a lot of double logger trucks going up the street, making those turns, and I think you might have a problem there, but that's -- that's from my math perspective than anything else. 'm still by seeing what you did at ConVal. I'm just The whole change, it bothers me. That roundabout really bothers m concerned about the going to make this comment. Maybe you can me. And the bridge going over the river. So my concern is there to properties that will be taken and answer the question. How many times did they so at storm time, where will you put all that snow. the loss of homes, a home for have to not hit the cones when they went around people to live in, especially in the this thing at ConVal? Because you don't always apartment building, but the loss o see that not happening when you come across ar roperty around some of the othe Donna Ouellette roundabout in your travels. existing buildings. Stratton Road Jaffrey, NH 03452 10/2/2019 Question: How many practice runs did these don't want to see one inch of tha perfect drivers have in the long vehicles? A joke Veteran's Park disturbed or taken sounding, but I wonder. away, and it if it is, I do not want (603) 532-7769 nswer: I guess I don't know what to tell you other one dime to be charged to that han the truckers themselves who drive those rucks came out, and we asked them to drive rough them, and they did. It wasn't us driving ose trucks. It was the actual truck drivers.

| | Format | Comment I | Received | Date on Letter/Email | Date Rec'd at | Support Yes/No | | #6 | #7 | #8 | #9 | # 10 | # 11 | # 12 |
|--|---------------------|----------------------|----------|-------------------------|---------------|-------------------|-------------------------------|--|---|-----------------------------|--|--|---|---|
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| Cliff Pelissier Apollo Steel 35 Maria Drive Jaffrey, NH 03542 (603) 532-1156 cliff@apollosteelllc.com | х | | | | 10/2/2019 | No | | | | | | | | You know, the last time that we — that the town — that the state promised money for the town, they bailed out. I think it was like \$5 million. So I could see this happening again. The town is left holding the bag. I think it's just a waste of money. |
| Kerri Pellalucca 10 Forcier Way Jaffrey, NH 03452 | х | | | | 10/2/2019 | No | | videos and you visit every now and then. You don't see what we see. | crosswalks, and I'm going to throw a little twist in here. I have a daughter that's legally blind. She can see. Right now, it is very | | | | | |
| Nick Hill 27 Tumpike Rd Jaffrey, NH 03452 (603) 320-5651 nhill824@yahoo.com | х | | | | 10/2/2019 | No | | and I'm curious which ones you've put them in right in the middle of their downtown, if there are any. Answer: A list will be put together where rotaries are in downtowns. Something happened before last November's meeting that changed the light structure in town. Work smart, nor hard, okay? We can adjust those lights again. Since that meeting, it's been adjusted again. I know for a fact. Because I'm sitting at my desk looking out there every single day. There is not the backup that there used to be. And if there is a problem, then we have an easy solution. | those kids hit the lights and it gives them a short amount of time to cross these crosswalks. Again, I see these kids do it every single | | here. Well, over the last few years, I feel like our downtown has a good business structure. But with this | these business owners. And doing this roundabout and this bypass is going to make downtown a ghost town. It's going | | We don't have to spend \$8 million on this rotary bypass. |