

# **Interstate 95 Trafton Road Interchange**

**City of Waterville and Town of Sidney  
Kennebec County, Maine**

## **Environmental Assessment**

**Submitted Pursuant to 42 U.S.C. 4332 (2),  
23 U.S.C. 138 and 23 CFR 771**

**U.S. Department of Transportation  
Federal Highway Administration**



**Maine Department of Transportation**



**April 2014**

# FHWA-MAINEDOT

## Environmental Document

### GENERAL PROJECT INFORMATION

Municipality/County/Route No.	City of Waterville and Town of Sidney, Kennebec Co., Maine
Project Identification Number	18129.00
<u>Project Description/Termini</u>	New I-95 Interchange connection along Trafton Road

### DOCUMENT TYPE

After completing this form, I conclude that this project qualifies for the following type of NEPA action and hereby release it for public involvement.

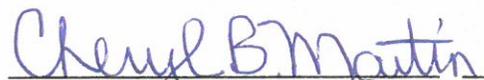
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### APPROVAL

  
\_\_\_\_\_  
MaineDOT Signature  
Commissioner or designee

3/31/14  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
FHWA Signature  
Division Administrator or designee

4/01/14  
\_\_\_\_\_  
Date

The following people may be contacted for additional information concerning this document:

Darryl Belz, P.E.  
**Maine Department of Transportation**  
Bureau of Planning  
16 State House Station  
Augusta, Maine 04333-0016  
(207) 624-3275  
[darryl.belz@maine.gov](mailto:darryl.belz@maine.gov)

Cassandra Chase  
**Federal Highway Administration**  
Edmund S. Muskie Federal Building  
40 Western Avenue, Room 614  
Augusta, Maine 04330  
(207) 512-4921  
[cassandra.chase@dot.gov](mailto:cassandra.chase@dot.gov)

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## PURPOSE AND NEED

### Existing Conditions:

The City of Waterville is a Maine Service Center located along the west bank of the Kennebec River in Kennebec County with a 2010 population of 15,722 and covering an area of approximately 14.1 square miles. It ranks 7th among municipalities in Maine for total taxable retail sales and 9th for total employment. Development is generally concentrated in the northern half of the City and east of I-95. To the south of Waterville lies the Town of Sidney with a 2010 population of 4,208, an area of 45.51 square miles and a small employment base of 320 jobs in 2010. Sidney is rural in character and serves today as a bedroom community for neighboring job centers.

Interstate 95 (I-95) traverses Waterville south to north along the western side of the City. Based on 2012 traffic counts, just north of the Sidney, Lyons Road interchange, I-95 carries Annual Average Daily Traffic (AADT) of 13,680 southbound and 13,540 northbound. Running parallel to I-95 and just west of the Kennebec River is State Route 104, the West River Road, with an AADT just north of Trafton Road of 3,120 in 2011.

The proposed full access Trafton Road I-95 Interchange location is in proximity to the Waterville-Sidney boundary. There is an interchange 3 miles to the north that intersects Kennedy Memorial Drive (KMD) at milepost 127. I-95 Exit 127 provides access to KMD (State Route 11) easterly into downtown Waterville and westerly to downtown Oakland. KMD is a multi-lane roadway carrying at its peak, just west of Washington Street, 24,140 AADT in 2011. This is the highest AADT in Kennebec County, except for the Memorial Bridge in Augusta with an AADT of 24,810 in 2011. KMD provides access to several major commercial/retail facilities, the Inland Hospital, the Lafleur Airport, the Airport Business Park, Thomas and Colby Colleges, First Park and Winslow business parks to the east using the Donald Carter Bridge crossing the Kennebec River.

Previous traffic projections prepared for MaineDOT indicated that KMD would be at capacity by 2015 during the weekday PM peak hour at the I-95 ramps and at the Cool Street/Colette Street, West River Road, and Carter Memorial Drive signalized intersections. These projections assumed certain planned developments would occur that have not materialized in full as yet. Still, as a result of these projections, traffic signals on KMD were modernized and synchronized to mitigate traffic congestion. Even with these improvements, the I-95 interchange with KMD remains a concern. Recent analysis completed for the Interchange Justification Report (IJR) indicates there is existing capacity to sustain additional growth of up to 20% before dropping to a Level of Service "E" (presently LOS C). MaineDOT has implemented all practical options to mitigate congestion on KMD - a commerce corridor of regional significance.

Four miles to the south of the proposed Trafton Road interchange at milepost 120 is the Lyons Road interchange in the Town of Sidney. Lyons Road AADT in 2011 was 1,600 just west of West River Road.

Trafton Road is a City road that travels in an east/west direction connecting two State collector highways, Middle Road and State Route 104, West River Road. At the corner of Trafton Road and West River Road is a fully occupied 227,000 sq. ft. light industrial complex. The current owners in November 2011 secured a Maine Traffic Movement Permit to expand by 450,000 sq. ft. Along the southern portion of Trafton Road, the City zoning for the land adjacent to the proposed interchange is Commercial D, a district principally for establishments which require exposure to a major highway and large areas of land on which to conduct their operations (CoW, 2013), while land closer to West River Road is zoned Industrial Park. Along the north side of Trafton Road, zoning includes more Commercial D as well as Rural Residential. Land to the south in Sidney is in a general growth district.

Public water service was provided in the 1970's to the Trafton Road light industrial facility by the Department of Housing and Urban Development signaling intent to support economic growth in southern Waterville. Public sewer service was recently installed by the Town of Oakland with assistance from USDA along nearby Webb Road to make a connection into the Waterville Sanitary District. The District in 2013 upgraded and expanded the capacity of the pumping station in the proximity of Webb and West River Roads. Also in 2013/2014, natural gas

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transmission and distribution came to the area with construction of a service connection to Thomas College. Three-phase power is available at Trafton Road. All of these services do not extend further south into the Town of Sidney nor are they available in proximity to the Lyons Road I-95 interchange.

With the support of the City of Waterville and the Town of Sidney, MaineDOT received conditional approval from FHWA on January 23, 2013 for an Interchange Justification Report (IJR) for the proposed Trafton Road Interchange. The IJR is conditioned upon receiving approval under the National Environmental Policy Act (NEPA). The IJR documents the feasibility of the proposed interchange and reviews several project alternatives including the no-action alternative. The IJR identifies a partial clover leaf interchange as the preferred design and discusses the rationale for dismissing alternatives. It also provides a preliminary summary of potential impacts resulting from the proposed interchange.

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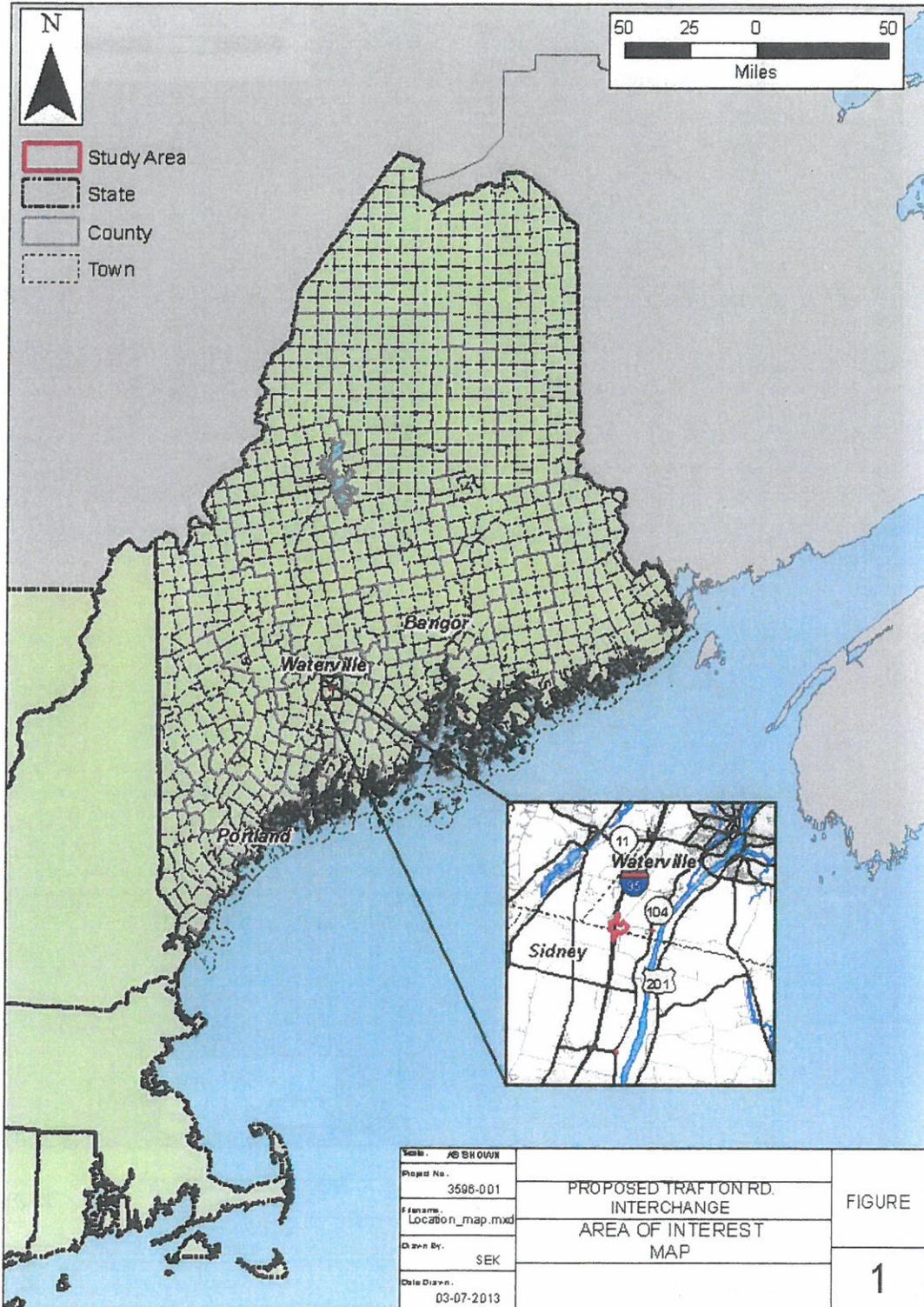
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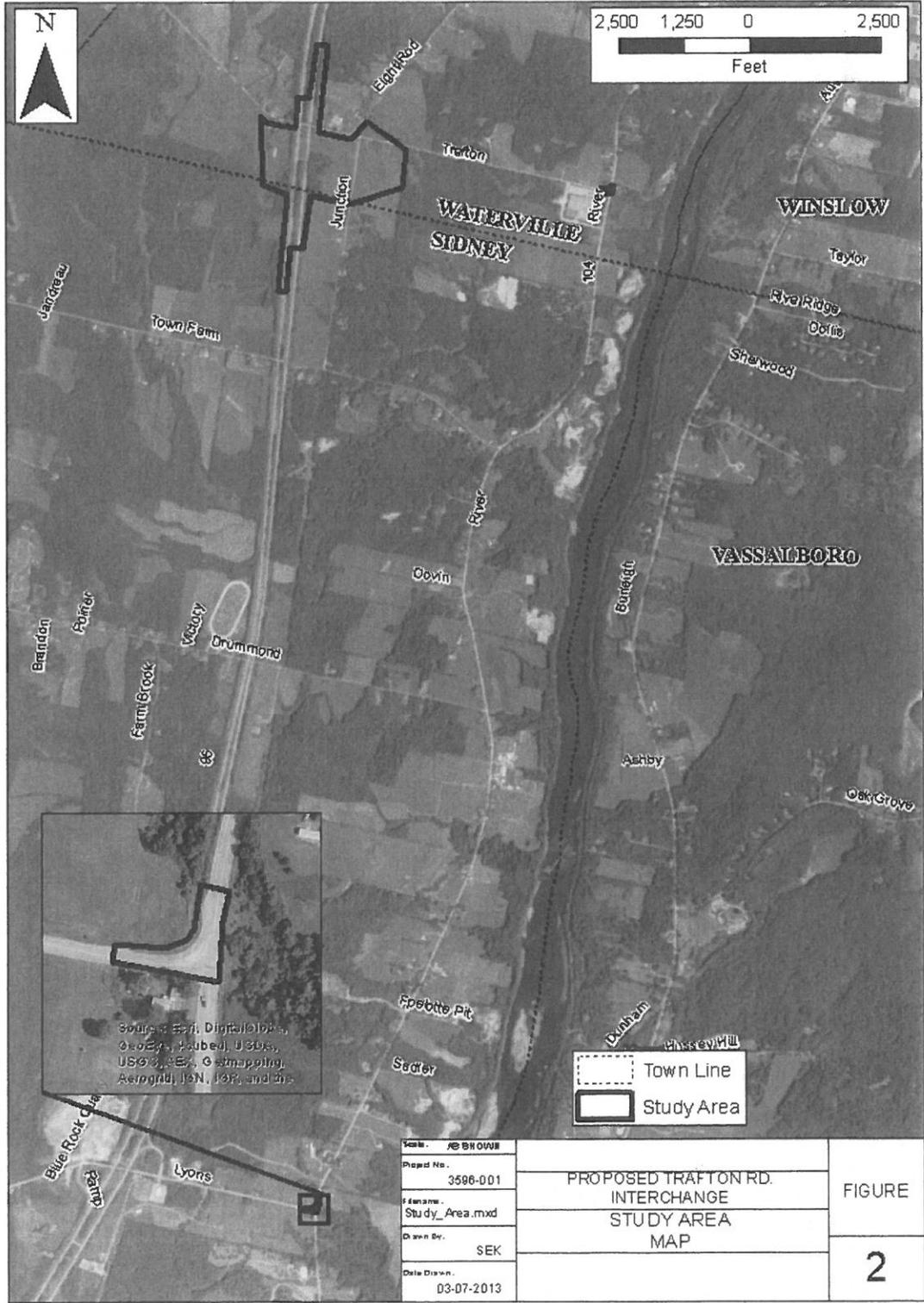
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New I-95 Interchange connection along Trafton Road

### Purpose and Need :

The I-95 Exit 127 interchange at Kennedy Memorial Drive (KMD) is the transportation focal point for the regional economy. It connects I-95 to downtown Waterville and Oakland and provides access to destinations of regional significance including a commercial/retail center, the Inland Hospital, the Lafleur Airport, the Airport Business Park, Thomas and Colby Colleges, First Park and Winslow business parks to the east using the Donald Carter Bridge crossing the Kennebec River. As a multi-lane roadway, KMD carries at its peak, just west of Washington Street, 24,140 AADT in 2011. This is the highest AADT in Kennebec County, except for the Memorial Bridge in Augusta with an AADT of 24,810 in 2011.

Recent traffic analysis and forecasting indicates there is existing capacity on KMD to sustain additional growth of up to 20% before dropping to a Level of Service "E" (presently LOS C). Some movements at the KMD interchange serving southern Waterville are forecast to reach unacceptable levels of service before 2022. MaineDOT has implemented all practical options to mitigate congestion on KMD and therefore service levels are expected to decline which will restrict existing commerce. The City of Waterville's desire to grow to the south of KMD is likely to be constrained under Maine's Traffic Movement law unless viable traffic capacity improvements are instituted.

With a 2016 baseline year, the left turn from KMD eastbound onto the northbound I-95 on ramp is at LOS "D" and the right turn from the northbound off ramp onto KMD eastbound is at LOS "D". Assuming a background growth of just 1%, the right turn from the northbound off ramp onto KMD eastbound drops to LOS "E" while the westbound KMD thru lane moves from LOS "C" to "D" by 2026 (GPCE 2014). The First Park subdivision is adjacent to the KMD interchange. With 7 out of the 22 lots in the subdivision developed, there are today approximately 900 employees. Full development is estimated to create an additional 950 jobs. To illustrate the capacity limits of the interchange, a full build out of First Park combined with a 1% annual background growth rate results in a LOS "E" eastbound on KMD for the left turn onto the northbound ramp, a LOS "D" for the westbound KMD through lane and a LOS "F" on the northbound I-95 off ramp in the right lane. This scenario does not incorporate the expansion plans for Thomas College just southeast of KMD, the plans for the Waterville Airport Business Park off of KMD or other development initiatives reliant upon KMD (GPCE 2014).

I-95 and the Donald Carter Bridge are regionally significant transportation assets that are presently underutilized given their carrying capacities. The limit to greater utilization of these assets is the choke point represented by the KMD I-95 interchange. The interchange provides less than ideal opportunities for maximizing emergency response times as well as freight movement travel times and distances.

In November 2011, MaineDOT granted a Traffic Movement Permit for a proposed addition of 450,000 sq. ft. of industrial facilities along Trafton Road. This Permit was conditioned on improvements being made to add traffic capacity to the existing roadway network. Development beyond this proposal is likely to be similarly constrained. With considerable available land, favorable zoning, public water, the presence of three phase power, nearby sewer service and the forecasted arrival of natural gas service to this area, existing transportation infrastructure deficiencies stand out as the notable impediment to development.

The **purpose** of the proposed project is to:

- Improve regional mobility
- Reduce further deterioration of Kennedy Memorial Drive (KMD) traffic flow
- Enhance transportation assets to complement and support existing land, water, sewer, electric and natural gas investments south of KMD
- Expand freight and passenger transportation connectivity

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The effectiveness of the proposed project is judged by the following **need** criteria:

- Address the traffic congestion forecasted for the I-95/KMD interchange
- Optimize freight and passenger connectivity and balance area traffic distribution
- Minimize emergency response times relative to the new regional hospital
- Maximize truck freight traffic onto the Interstate and off of secondary roads

## ALTERNATIVES

### Proposed Alternatives:

#### No-Action Alternative

The No-Action Alternative presumes that existing I-95 and its interchange configuration would remain unchanged, except for regular maintenance activities (e.g., resurfacing, traffic lane markings, spot shoulder and drainage improvements, or signage). Physical changes to increase system capacity would not occur. This alternative would not result in any additional environmental impacts or loss of wetlands associated with I-95. Under the No-Action Alternative, capacity at KMD would be expected to decline (as identified in the IJR and herein) and proposed development otherwise dependent upon KMD would be limited under Maine's Traffic Movement law. The No-Action Alternative represents the baseline condition to which all other alternatives were compared.

If the expansion of Trafton Realty facilities proceeds under this alternative, Trafton Realty, under the terms of its Traffic Movement Permit, is obligated to construct:

- a 12' wide, 100' long right turn with taper from Trafton Road onto West River Road
- a 12' wide, 100' long right turn from West River Road onto Trafton Road with taper
- a 12' wide, 100' long right turn lane from southbound West River road onto the Lyons Road with taper
- a 12' wide, 100' long left turn lane from northbound West River Road onto Trafton Road with taper
- a 12' wide, 100' long left turn lane from West River Road onto their existing industrial driveway

These results of the No-Action Alternative include impacts to a stream crossing at the Lyons Road-West River Road intersection.

The No-Action Alternative does not satisfy the Purpose and Need identified.

- The no-action alternative does not reduce traffic congestion forecast for the I-95/KMD interchange. Some movements at the KMD interchange serving southern Waterville are forecast in the IJR to reach unacceptable levels of service before 2022.
- Additionally, with a 2016 baseline year, the left turn from KMD eastbound onto the northbound I-95 on ramp is at LOS "D" and the right turn from the northbound off ramp onto KMD eastbound is at LOS "D". Assuming a background growth of just 1%, the right turn from the northbound off ramp onto KMD eastbound drops to LOS "E" while the westbound KMD thru lane moves from LOS "C" to "D" by 2026. (GPCE 2014)
- The First Park subdivision is adjacent to the KMD interchange. With 7 out of the 22 lots in the subdivision developed, there are today approximately 900 employees. Full development is estimated to create an additional 950 jobs. To illustrate the capacity limits of the interchange, a full build out of

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First Park combined with a 1% annual background growth rate results in a LOS "E" eastbound on KMD for the left turn onto the northbound ramp, a LOS "D" for the westbound KMD through lane and a LOS "F" on the northbound I-95 off ramp in the right lane. This scenario does not incorporate the expansion plans for Thomas College just southeast of KMD, the plans for the Waterville Airport Business Park off of KMD or other development initiatives reliant upon KMD. (GPCE 2014)

- The no-action alternative does not optimize freight and passenger connectivity and balance regional traffic distribution. I-95 and the Donald Carter Bridge are presently underutilized transportation assets. The limitation to greater utilization of these assets is the KMD link in between which serves as a growing choke point.
- The no-action alternative does not minimize emergency response times relative to the new regional hospital for southern Waterville, downtown Oakland and points east of the Kennebec River closest to the Donald Carter Bridge.
- The no-action alternative does not maximize truck freight traffic onto I-95 and off of secondary roads. The no-action scenario will not reduce freight travel times and distances from Winslow and points east. Tenants on industrial zoned property on Trafton Road traveling south must add 6.3 miles to use the Exit 127 interchange or 3.6 miles to use the Lyons Road interchange compared to a Trafton Road interchange. Thomas College can add 2.9 miles comparing use of the KMD interchange with the proposed interchange.
- The no-action alternative does not provide an efficient transportation facility to serve development in southern Waterville that is attracted to large tracts of available commercial and industrial zoned property in proximity to public water, sewer, three-phase power and natural gas.

#### **Diamond Interchange at Trafton Road**

This Alternative, based on Chapter 9 of the MaineDOT Highway Design Guide (MaineDOT, 2007), involved developing a diamond interchange at the existing Trafton Road overpass. A full design was not completed, and for the analysis an impact width of 60 feet was used to approximate impacts to natural resources. Anticipated impacts related to the alternative are shown in Table 1. A preliminary drawing of this alternative is included in Attachment 1.

- This alternative satisfies the Purpose and Need identified. It was, however, dismissed from further consideration for these reasons:
  - Greater impacts (acquisition) to adjacent properties (as compared to the preferred alternative).
  - Greater disruption of area residences.
  - Impact to wetland and non-wetland features (based on a review of NWI and USGS stream data, this alternative would result in 2.2 acres of wetland impact and 2 stream crossings).

#### **Re-routing of the Sidney Town Farm Road**

This alternative, based on Chapter 9 of the MaineDOT Highway Design Guide (MaineDOT, 2007), involved the removal of two bridges (Town Farm Road and Trafton Road) as well as re-routing Town Farm Road and portions of Eight Rod Road as well as the construction of a new overpass located to the south of the existing Trafton Road overpass. A full design was not completed, and for the analysis an impact width of 60 feet was used to approximate impacts to natural resources. Anticipated impacts related to the alternative are shown in Table 1. A preliminary drawing of this alternative is included in Attachment 1.

- The re-routing of Town Farm Road satisfies the Purpose and Need identified. It was, however, dismissed from further consideration for these reasons:
  - Greater impacts (acquisition) to adjacent properties and structures (as compared to the preferred alternative).
  - Greater disruption of area residences.
  - A much larger disturbance footprint.

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- The preliminary opinion of probable construction cost exceeded that of the preferred alternative (approximately \$17.1 million compared to approximately \$4.56 million under the preferred alternative). This opinion of cost does not include cost for right of way, utility relocations, environmental mitigation, etc. (GPCE, 2013)
- Greater impact to wetland and non-wetland features (based on a review of NWI and USGS stream data, this alternative would result in 4.0 acres of wetland impact and 6 stream crossings).

**Preferred Alternative**

Based on extensive collaboration at the local level and a coordinated effort between MaineDOT and FHWA, the Preferred Alternative is a partial cloverleaf design located at Trafton Road near the Waterville-Sidney boundary. Proposed grading limits include 40' from the edge of pavement for portions of the ramp parallel with I-95, 60' total grading width for single lane ramps, and 90' of total width for two-lane ramps. The proposed interchange would utilize the existing two-lane Trafton Road Bridge crossing I-95. That bridge has a 24' width and is similar to the Lyons Road Bridge with a 26' width that is in use at the Lyons Road I-95 interchange.

The Preferred Alternative (Figure 3) Includes:

- A new I-95 Interchange of a partial clover leaf design located in the southern quadrants
- Widening under Trafton Road Bridge to accommodate acceleration and deceleration lanes.
- Elimination of the City of Waterville portion of Junction Road to allow northbound ramp termini placement at same location
- Moving the southern tip of Eight Rod Road to lie opposite of the termini of northbound ramps
- Adding a 12' wide, 100' long right turn lane from Trafton Road to West River Road with taper
- Adding a 12' wide, 100' long right turn lane from West River Road to Trafton Road with taper

The new interchange is proposed to utilize typical parallel single lane entrance and exit ramps meeting the requirements in Chapter 9 of the MaineDOT Highway Design Guide (MaineDOT, 2007). There are small exceptions required in order to maintain the existing bridge which will require the shoulder width to be reduced to 3 feet under the bridge, this design exception is noted in the IJR (2012).

The Preferred Alternative also minimizes impacts to natural resources by limiting impacts to area wetlands and reducing the number of intermittent stream crossings as a result of the proposed alignment. The majority of this alternative occurs on lands previously disturbed by historical agricultural activities or cut/fill from the construction of the I-95 corridor. Impacted wetlands are degraded systems with modified functions and values (Kleinschmidt, 2013). The Preferred Alternative occurs entirely on vacant lands and therefore no relocations are required (Table 1).

**Mitigation measures to be used to “minimize harm”:**

The Preferred Alternative was selected based on several criteria, shown in Table 1. The largest wetland impact (0.7 acres) occurs in wetland 01SKN, which is a large emergent wetland within an area previously in and adjacent to agricultural uses to the west of I-95. The design limits the impacts to the eastern fringe of this wetland. Other wetland and stream impacts occur within wetlands that are actively mowed or hayed during the drier months of the summer. The intermittent stream crossings (Shown on Figure 3) occur at portions of the stream which are narrow and result in the least amount of linear feet of impact possible on the site. Other alternatives considered as part of the alternatives analysis result in more impacts to wetland and upland habitats. In addition best management practices will be used to ensure sediment and erosion control. Specific stormwater BMPs will be implemented to avoid direct run-off into nearby streams.

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**Restoration and landscaping of disturbed areas:**

The Preferred Alternative avoids and minimizes impacts to natural resources, as compared to the alternatives considered. In addition, nearby property, offers the potential for on-site mitigation for unavoidable impacts to existing wetlands on the site. Currently, the vast majority of the wetlands on the site have been altered by historic agricultural practices and related development. These wetlands represent an excellent opportunity to restore functions and values. Specifically, planting or natural re-vegetation of historically mowed wetlands associated with the intermittent stream that crosses the project site would enhance wetland functions and values (see Permits/Mitigation Section below for more detail).

Additionally, the Preferred Alternative would reduce existing impervious surfaces on Junction Road in Waterville when that section of road is discontinued. The amount of this reduction is 32,030 sq. ft. Also, a reduction in impervious surface is expected due to the realignment of Eight Rod Road of 1,230 sq. ft.

Design drawings of the Preferred Alternative are attached as Attachment 1.

**Table 1. Comparison of impacts for the alternatives analysis.**

Alternative	Length (Ft.)	Wetland Impact (Acres)	Stream Crossings		Vernal Pools (Amphibian breeding)	Structures <sup>1</sup>	Farmland Impacts (Acres)
			Intermittent	Perennial			
Partial Clover-leaf (Preferred)	9,400	1.4	3*	0	0	0	2.6
Diamond Interchange	10,727	2.2	2	0	0	2	2.2
Re-Route of Town Farm Rd.	20,970	4.0	4	2	0	0	4.8

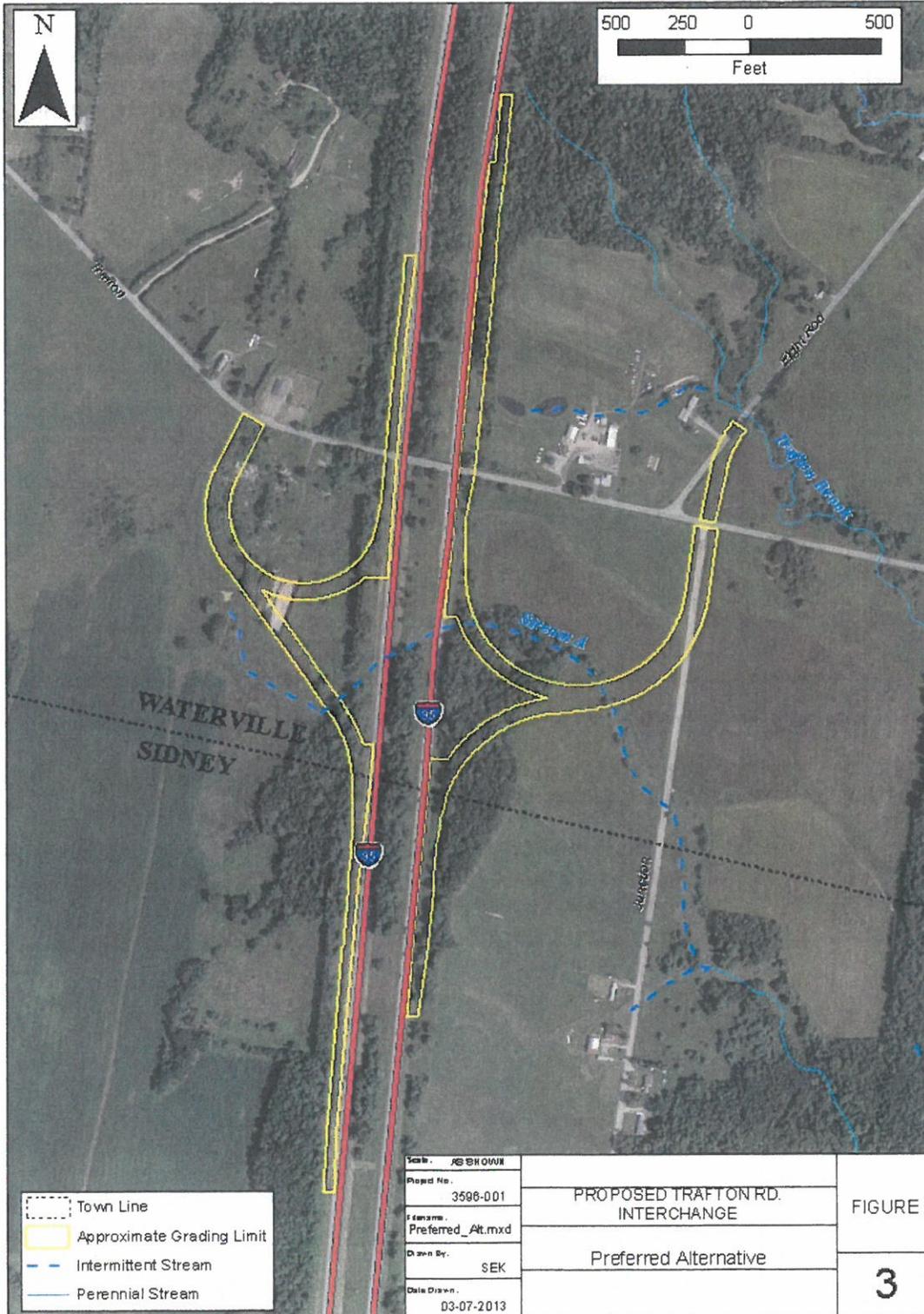
<sup>1</sup>Structures pertains to the potential need for the removal of commercial space or residences. This does not include property (i.e., land).

\* The removal of Junction Road within the City of Waterville, as part of the proposed design, will eliminate one existing crossing of the same intermittent stream impacted by the ramps.

Based on a review of the potential environmental impacts resulting from the No Action, Diamond Interchange, Re-routing of Town Farm Road, and Preferred (partial clover-leaf) alternatives, the Preferred Alternative addresses the project purpose and need as well as limits the potential for environmental impacts.

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Other preliminary concepts considered:

The following preliminary concepts were considered during the analysis, but presented issues that did not allow them to be reviewed further.

**Upgrades to KMD and the KMD I-95 Interchange**

This Alternative would entail extensive and costly takings of property including existing commercial establishments without commensurate benefits to traffic flow. KMD has received considerable attention and investment in recent years involving the implementation of a series of transportation system management (TSM) actions, most recently a signalization project. Potential further TSM actions are not feasible. This alternative is similar in most respects to the no-action alternative and was rejected for similar reasons plus anticipated costs and relocations to established enterprises compared with the preferred alternative.

**Waterville Webb Road Interchange**

This alternative, proposed in the 1990's, was dismissed as the design was inconsistent with the FHWA rural interchange spacing guidelines.

**Town Farm Road Interchange**

Sidney was deemed to be relatively removed from utility related development assets. This option impacted relatively more property owners and residences. The Town of Sidney was not a proponent of this alternative.

**Sidney-Waterville Interchange Accessing Junction Road to the East and a new Service Road to the West Connecting Town Farm Road and Trafton Road**

This alternative was rejected by MaineDOT in consultation with FHWA due to design inconsistencies with other area I-95 interchanges. It has a substantially larger footprint than the preferred alternative. It was not favored by Waterville or Sidney.

**Roundabout Design at Trafton Road**

This alternative included a roundabout design at the terminus of the partial clover leaf ramps. The alternative was considered and rejected as unnecessarily, limiting design flexibility if and when the existing Trafton I - 95 overpass bridge reaches its useful life and needs to be replaced. It did not offer any advantage over the preferred alternative.

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**Impacts checklist:**

	No	Yes
<b><u>Public Involvement</u></b> – Is there substantial public opposition to proposed action?	X	
<b><u>Right-of-Way</u></b> – Does preferred alternative include a residential or commercial displacement, or acquisition of property rights that will result in substantial abutter impacts?	X	
<b><u>Hazardous Materials</u></b> – Are there any known State or Federal Uncontrolled Oil and Hazardous Material sites within or adjacent to the action?	X	
<b><u>Cultural Resources (Section 106)</u></b> – Has the State Historic Preservation Officer (SHPO) concurred that the preferred alternative will have other than “no effect” on the properties eligible for or listed in the National Register of Historic Places?	X	
<b><u>Section 4(f) or 6(f)</u></b> – Does preferred alternative require use of any property protected by Section 4(f) of the Department of Transportation Act (except for Transportation Enhancement requisitions and preservation of historic sites), or Section 6(f) of the Land and Water Conservation Fund Act?	X	
<b><u>Wetlands</u></b> – Does action require an Army Corps of Engineers Programmatic Category III (Individual) Permit?	X	
<b><u>Sole Source Aquifers</u></b> – Is action over a sole source aquifer?	X	
<b><u>Wild and Scenic Rivers</u></b> – Is preferred alternative in, across or adjacent to a river designated as a component or proposed to be included in the National System of Wild and Scenic Rivers?	X	
<b><u>Scenic Byways</u></b> – If preferred alternative is proposed on or adjacent to any State or Federal designated Scenic Byway, has MaineDOT determined that the action would have an adverse effect on the Byway (according to the Scenic Byways Coordinator, Scenic Byways Board, and Corridor Management Committee/Plan, as appropriate)?	X	
<b><u>Noise</u></b> – Do impacts of the preferred alternative fail to conform to the Noise Abatement Criteria levels (23 CFR 772) and MaineDOT Noise Policy?	X	
<b><u>Air Quality</u></b> – Does the preferred alternative fail to meet Air Quality and/or Conformity requirements?	X	
<b><u>Endangered Species</u></b> – If preferred alternative is proposed in an area known to have Federally listed Endangered Threatened Species or Critical Habitat, will the action affect any of these resources?	X	
<b><u>Other</u></b> – Does preferred alternative adversely impact any known critical or unique natural resource, the quality of adjacent surface water resources, community cohesiveness, planned community growth, or beneficial land use patterns?	X	

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## SUPPORT DOCUMENTATION

### Public Involvement:

The following public involvement occurred during the preparation of the Trafton Road Interchange Project, Interchange Justification Report (IJR, 2012) and this Environmental Assessment. All written comments received on the project were requested of the Town of Sidney, the City of Waterville and the MaineDOT. The one written comment on file for these entities in opposition to the project is noted below. Favorable comments received are noted as well. Based on the comments received to date, there is not an indication of substantial public opposition to the project. The proposed preferred alternative takes into account concerns raised through public engagement.

January 4, 2010 Meeting of the Sidney Board of Selectmen: Initial briefing on project proposal

January 19, 2010 Public Meeting Convened by the Sidney Board of Selectmen: Public provided an overview of the proposed project given by Trafton Properties. Comments were received on community land use preferences. Meeting resulted in a March 29, 2010 letter from the Board of Selectmen in support of reviving the I-95 Trafton Road interchange project proposal.

February 2010 Board of Directors Meeting of the Mid-Maine Chamber of Commerce: Trafton Properties presented the need for improved access to Trafton Road via I-95. Meeting resulted in a March 4, 2010 letter of support to the Waterville Mayor.

March 9, 2010 Meeting with the Waterville Development Corporation: Trafton Properties presented the proposed project to the WDC and provided briefing materials. The WDC voted unanimously to support the project and sent a letter of support to the Waterville Mayor on March 23, 2010.

March 16, 2010 Meeting of the Board of Directors of the Central Maine Growth Council: Trafton Properties presented the proposed project to the CMGC and provided briefing materials. The CMGC voted to support the project and sent a letter of support to the Waterville Mayor on March 30, 2010.

April 6, 2010 Waterville City Council Meeting: City Council Resolution 45-2010 passed unanimously by the Council in support of an interchange at Trafton Road. Approved by the Mayor April 8, 2010.

September 7, 2010 City Council Meeting: City Council Resolution 118-2010 passed unanimously by the City Council to form an I-95 Interstate Access Project Advisory Committee. Approved by the Mayor September 10, 2010.

October 20, 2010 Trafton Interchange Project Advisory Committee Meeting, City Council Chambers: Discussion of project purpose and need, alternatives analysis, and next steps moving forward.

November 15, 2010 Meeting of the Town of Sidney Planning Board: Briefing provided by Trafton Properties on the project proposal, project development process, design concept alternatives and representation on the Project Advisory Committee.

November 17, 2010 Trafton Interchange Project Advisory Committee Meeting, City Council Chambers: Discussion of November 4<sup>th</sup> meeting with MaineDOT officials including then Commissioner David Cole, Kat Beaudoin, Dave Bernhardt, and Tom Gorrill of Gorrill Palmer Consulting Engineers.

December 8, 2010 Trafton Interchange Project Advisory Committee Meeting, City Council Chambers: Review of meeting with the MaineDOT and FHWA. A determination was made that the project requires completion of an Interstate Justification Report (IJR). Consensus was reached on the purpose and need for the project and the preferred alternative to recommend to the City.

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January 11, 2011 Public Meeting, Waterville City Council Chambers: Public informational meeting providing an overview of the proposed interchange project prior to City Council meeting of January 18, 2011. A public notice was provided as well as notification to property owners in the vicinity of the project in Oakland, Waterville and Sidney.

Written comment dated January 16, 2011 transmitted by email from Greg and Sandy Cormier to the City and MaineDOT The letter raised seven objections pertaining to increased traffic and related noise and lights, project proximity, undesired growth, anticipated reduced property values and anticipated widening of Trafton Road. In response, the current project concept design (southbound on-off ramp) is relocated approximately 200 feet east of the Cormier house, no widening of Trafton Road is proposed, the predominant traffic generated by the proposed interchange is expected to travel east away from the Cormier house and property values typically rise for properties located in proximity to an interchange.

January 18, 2011 City Council Meeting, Waterville Council Chambers: Public comments were received in support of the project as a means to relieve KMD traffic, reroute heavy trucks onto shorter routes to the Interstate and generally support economic development. Opponents expressed concern for the cost to upgrade Trafton Road, undesired changes to the rural character of the area, increased truck traffic, adverse impacts on property values and whether the economy would be stimulated as a result. Following public comments, the Council voted to accept the Project Advisory Committee's recommendations as to the purpose and need and proposed alternatives for MaineDOT to consider. City Council Resolution 19-2011 passed (6 for, 1 against) and was approved by the Mayor on January 19, 2011.

Letter to the Editor, Morning Sentinel, January 19, 2010 expressing skepticism as to the economic benefits of the project and concerns over the City paying to widen Trafton Road.

May 24, 2011 Trafton Properties and MaineDOT Traffic Movement Permit Scoping Meeting, Waterville City Council Chambers: Discussion and general questions related to proposed expansion of light manufacturing, distribution and warehousing space by Trafton Realty, LLC. Public provided opportunity to comment on scope of traffic movement study. Public notice and mail notice to abutters provided. Minutes recorded.

April 8, 2013 Sidney Board of Selectmen Meeting: Project update provided and request made for additional Town representative to serve on Project Advisory Committee. Input requested on approach to potential discontinuation of Junction Road.

May 6, 2013 I-95 Interchange Project Advisory Committee, Waterville City Council Chambers: Committee reconstituted and reconvened. Discussion of project background and review of project status, alternatives, purpose and need revisions and options for Junction Rd.

November 19, 2013. Waterville City Council briefing with public notice and invitation to Project Advisory Committee, Discussion addressed project financing alternatives and proposed use of the MaineDOT Development Partnership Initiative.

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### Right of Way / Land Use:

All property required to complete the preferred alternative, that is not already owned by the State of Maine as part of the existing I-95 right-of-way, is owned by the City of Waterville, Trafton Realty LLC. or Trafton Properties. The estimated permanent acreage not already owned by the State that is needed to complete the preferred alternative totals 27.6 acres. Of this amount, Trafton Realty LLC and/or Trafton Properties owns approximately 26.9 acres. The remainder is owned by the City of Waterville representing 0.65 acres of existing Eight Rod and Junction Roads. No temporary ROW is anticipated to be needed. An estimated cost to acquire this additional right-of way of 27.6 acres was prepared by MaineDOT for the Preferred Alternative is \$80,000 to \$110,000.

Current zoning for the study area (site of preferred alternative) is Contract Zoned-Commercial (D) by the City of Waterville. The Town of Sidney does not have zoning. Rural Residential zones will not be impacted as a result of the preferred alternative, but are adjacent to the north of Trafton Road. Construction of the preferred alternative will occur on commercially zoned properties (owned by Trafton Realty, LLC and Trafton Properties). This zone is designated as commercial for business that requires close proximity to the interstate (*e.g.*, truck stops, warehouses, etc.). The area where ROW is needed is bisected by I-95 and is dominated by agriculture and forest lands. No relocations are required. All ROW acquisition will follow Public Law 91-646, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

### Hazardous Materials:

A Phase 1 Environmental Site Assessment (Phase 1) was completed in the spring and summer of 2013 with a final report issued on October 23, 2013 (AEH, 2013). It was conducted to determine the presence or absence of environmental contaminants within the study area. Based on findings outlined in the Phase 1 (AEH, 2013), the environmental liability risk associated with the study area is low and it is unlikely that any hazardous materials will be encountered during any construction activities. A detailed search of State and federal databases as well as a thorough review of historic maps and property deeds found no evidence of hazardous materials on the site. A copy of this report is included as Attachment 2 (Phase 1 Environmental Investigation Report).

### Cultural Resources:

An investigation of cultural resources was completed within the study area (Figure 4) in 2013. The Maine Historic Preservation Commission (MHPC) noted that archaeological sites are unlikely to be impacted by the proposed project, based on a conditional exclusion area (Personal communication, MHPC, July 18, 2013). Correspondence related to cultural resources is included as Attachment 3. In addition, the Maine DOT reviewed this project pursuant to the Maine Programmatic Agreement (PA) and Section 106 of the National Historic Preservation Act of 1966, as amended. In a letter dated August 28, 2013, the Deputy State Historic Preservation Officer concurred with the Maine DOT finding that the proposed project would not have an effect on historic properties. In accordance with 36 CFR Part 800.4, the following identification efforts of historic properties were made:

800.4(a) (1) - The Area of Potential Effect (APE) includes properties/structures adjacent to the road and within the project limits. The project limits are defined by the footprint of the preferred alternative and the immediately adjacent area. Properties/structures adjacent to this project limit are considered to be

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within the APE. The APE is shown as a defined polygon in Figure 4.

800.4(a) (2) – Review of existing information consisted of researching the National Register and MHPC survey databases. The Maine Historic Preservation Commission Archaeological staff has also reviewed the undertaking.

800.4(a) (3) – The City of Waterville was contacted via letter and asked to comment on knowledge of, or concerns with, historic properties in the area, and any issues with the undertaking's effect on historic properties. The City was also requested to provide information regarding local historic societies or groups and has not identified any issues.

800.4(a) (4) – Letters outlining project location and scope were sent to the 4 federally recognized Tribes in Maine. The Tribes have not identified any issues.

800.4(c) – The Maine DOT did conduct historic architectural surveys within the APE, and determined that no buildings or other structures, eligible for the National Register, are located within the vicinity of the road. Maine Historic Preservation Commission Archaeological staff also reviewed this undertaking and recommended 'no archaeological properties affected conditional on an exclusion area'.

In accordance with 36 CFR Part 800.4(d), ***the Maine DOT has determined, and the Maine State Historic Preservation Commission has concurred, that no historic or prehistoric archaeological properties or historic architectural properties will be effected by the undertaking. In addition, no work will take place within the identified exclusion area.***

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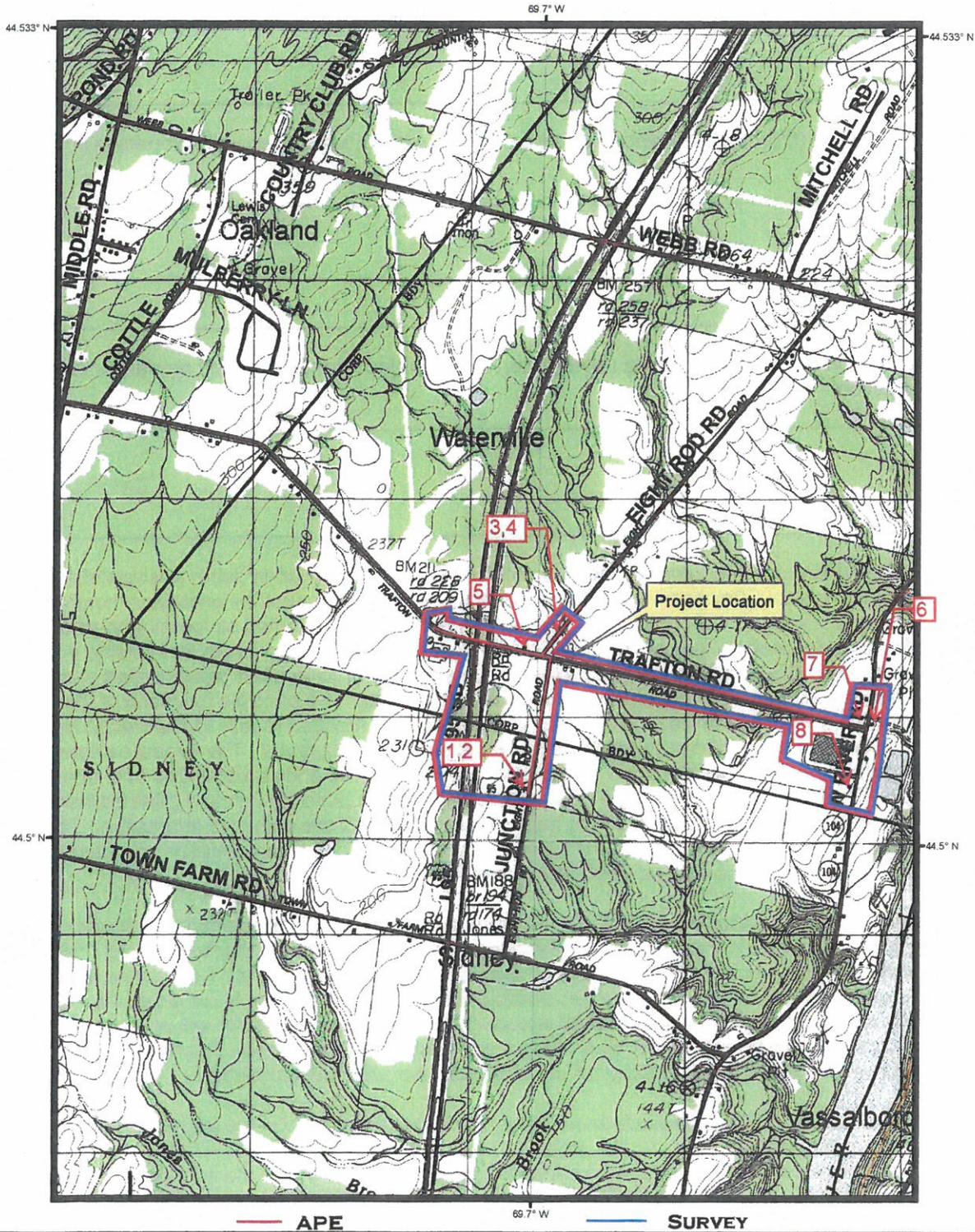


Figure 4. Area of Potential Project Effect

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**Section 4(f):**

There are no Section 4(f) properties being used as part of this project, nor are any 4(f) properties impacted by the proposed action.

**Section 6(f):**

There are no Section 6(f) properties being used as part of this project, nor are any 6(f) properties impacted by the proposed action.

**Wetlands:**

The Trafton Interchange Natural Resource Existing Conditions Report contains an in depth analysis of aquatic resources within the study area (Kleinschmidt, 2013). Wetlands are primarily palustrine emergent marsh (PEM). Most of the PEM is wet meadow where agricultural uses and mowing have prevented succession to palustrine scrub-shrub (PSS). Smaller areas of palustrine forested wetlands (PFO) occur in pockets just outside of the I-95 cleared ROWs. Very little PSS occurs in the study area. Several wetlands have been partially filled or modified by historic land use, associated with agriculture (e.g., excavated farm ponds). The principle functions of the PEM wetlands on the site are limited due to wetland size and disturbance and function mostly to filter/retain sediment and retain and transform nutrients from surrounding agricultural activities and roads. The largest wetland (01SKN) located to the west of the I-95 corridor functions primarily to retain sediments and nutrients and may offer some flood flow retention. The PFO wetlands primarily offer wildlife habitat as a principle function (Kleinschmidt, 2013). No vernal pools or amphibian breeding areas will be impacted as a result of the preferred alternative. Table 2 and 3 present impact calculations associated with the preferred alternative. Additional information on natural resources is presented in the Natural Resource Assessment (Attachment 4).

One intermittent stream occurs within the footprint of the preferred alternative. This intermittent stream is unnamed and conveys seasonal flows east to Trafton Brook. The stream becomes perennial prior to entering Trafton Brook, but is intermittent within the project area. Trafton Brook and Lowes Brook cross Trafton Road to the east of the proposed interchange. The preferred alternative has unavoidable impacts to Stream A (unnamed intermittent stream) associated with the partial cloverleaf. For all stream crossings, the culvert width will be a minimum of 1.2 (1.17) times bankfull width and will reflect the latest stream crossing Best Management Practices (BMPs) (e.g., not perched or undersized and would leave existing natural substrate) per USFWS guidelines.

No vernal pools were identified within the study area, during field work completed in the spring of 2013.

Based on an analysis of potential impacts to environmental resources resulting from the proposed project, the preferred alternative results in the least amount of disturbance to environmental resources. There is no practicable alternative to the preferred alternative with regard to cost of implementation and impacts to the environment.

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**Table 2. Wetland Impacts Resulting from the Preferred Alternative**

Wetland Type	Impact	Existing Wetland Acres	Impact (Sq. Ft.)	Impact (Acres)
PEM	Permanent Fill	18.0	48,639	1.1
PFO	Permanent Fill	2.6	12,114	0.3
<b>Total</b>		<b>20.6</b>	<b>60,753</b>	<b>1.4</b>

**Table 3. Linear Distance of Stream A Crossings under the Preferred Alternative**

Location	Proposed Crossing Type	Linear Ft.
Near the merge of the NB off and on ramps	7' diameter RCP <sup>1</sup>	96
Near the NB on ramp gore	7' diameter RCP	60
SB on ramp	7' diameter RCP	60
<b>Total</b>		<b>216</b>

<sup>1</sup>Reinforced Concrete Pipe

**Sole Source Aquifers:**

There are no Sole Source Aquifers located within the study area.

**Wild and Scenic Rivers:**

There are no Wild and Scenic Rivers within the study area.

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**Scenic Byways:**

There are no Scenic Byways within the study area.

**Noise:**

A highway traffic noise analysis was prepared to determine the potential noise impacts associated with the construction of a new full-service I-95 interchange at Trafton Road in Waterville. The highway traffic noise levels were predicted for the existing condition (2011) and the future No-action and Build Alternatives for the design year (2036). This report is included as Attachment 5.

The noise analysis was conducted in accordance with the following Federal Highway Administration (FHWA) and Maine Department of Transportation (MaineDOT) regulatory and policy guidelines:

- Title 23 Code of Federal Regulations Part 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise. (23 CFR 772);
- FHWA Highway Traffic Noise: Analysis and Abatement Guidance, December 2011, and;
- MaineDOT Highway Traffic Noise Policy, July 18, 2012.

Traffic noise levels were predicted at five receptors within the study area for the existing condition (2011) and design-year (2036) no-action and build conditions. Noise receptors were located at 255, 263, and 229 Trafton Road as well as 599 Eight Rod Road and 102 Junction Road. The receptors included a vacant commercial property and residences. The results of the traffic noise analysis demonstrate that traffic noise impacts are not expected to reach the Impact Criteria baseline at any receptors under all three modeled scenarios. Table 4 shows the results of the traffic noise analysis completed by the Maine DOT. Based on the results of the traffic noise analysis, highway traffic noise impacts are not expected to be significant and evaluation of abatement measures is not warranted (Maine DOT, 2013).

**Table 4. Results of Traffic Noise Analysis (dBA)**

Receptor ID	Impact Criteria	Existing 2011 Noise Levels	No-action 2036 Noise Levels	Build 2036 Noise Levels	Significant Impacts?
R1	71	59	61	64	No
R2	66	56	59	61	No
R3	66	59	62	64	No
R4	66	54	55	55	No
R5	66	55	56	56	No

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**Air Quality:**

The Clean Air Act established National Ambient Air Quality Standards (NAAQS) for six priority pollutants to protect public health and the environment. Areas that do not meet the NAAQS are designated as nonattainment areas and, as a result, are subject to transportation conformity. Maintenance areas are geographic regions that were previously designated as nonattainment, but are now consistently meeting the NAAQS. Transportation conformity requires non-attainment and maintenance areas to demonstrate that all future transportation projects will not hinder the area from reaching and maintaining its attainment goals.

On July 20, 2012, the entire State of Maine was designated as attainment for the 2008 8-hour ozone NAAQS, thus transportation conformity is not required for the 2008 NAAQS. Under the previous (1997) ozone NAAQS, Maine had two regions (Portland and Midcoast) designated as maintenance areas and subject to transportation conformity requirements under the Clean Air Act. As of July 20, 2013, the 1997 ozone NAAQS are revoked for transportation conformity purposes, thereby eliminating the requirement for MaineDOT to demonstrate transportation conformity for the STIP.

The project is located within Kennebec County, an area that has been identified as being in attainment for the 8-hour ozone standard and all other NAAQS; therefore, transportation conformity does not apply.

**Threatened and Endangered Species/Essential Fish Habitat:**

Routine letters of inquiry were sent to the Maine Department of Inland Fisheries and Wildlife (MDIFW), Maine Department of Marine Resources (DMR), and Maine Natural Areas Program (MNAP) to identify potentially rare or State protected species that may occur within the study area. No state listed species were identified by these agencies in responses received (Attachment 6).

Pursuant to an agreement between FHWA, MaineDOT, USFWS, USACE and NOAA-NMFS dated 1/15/2014, MaineDOT has reviewed in house database layers accepted by all the signatories as the best scientific and commercial data available and has found that the only federally listed threatened or endangered species that may be in the area is Endangered Atlantic salmon and the only federally proposed species that may be in the area is the Northern Long-Eared Bat. In addition, a mapped Deer Wintering Area occurs just north of the proposed interchange. Communication with the MDIFW (Attachment 6) concluded that the project, as proposed, would not impact this area.

**Atlantic Salmon**

During consultation with the USFWS a brief submittal was developed that outlined project details pertaining to stream crossings and construction activities. In consultation with the USFWS, the MaineDOT and FHWA maintain a commitment to use stormwater BMPs which will ensure that there is no direct linkage between stormwater runoff (e.g., sediment mobilization or elevated water temperatures) and Trafton Brook. Based on this commitment to use minimization measures and BMPs, the USFWS has agreed that the project will have No Effect on Endangered Atlantic salmon or Critical Habitat.

**Northern Long-Eared Bat**

On October 2, 2013, the USFWS announced its proposal to list the northern long-eared bat (*Myotis septentrionalis*) as an endangered species throughout its range under the Endangered Species Act (USFWS, Federal Register, October 2, 2013). All tree clearing related to this project will be completed in 2014, prior to the potential listing of the bat in October 2014. The northern long-eared bat is known to hibernate in Maine; however the site of the

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proposed interchange contains no potential hibernacula (caves or structures). The closest known hibernacula are 46 and 54 miles away. No modifications to the existing Trafton Road bridge are proposed. The project, as currently proposed, will result in No Jeopardy to the Northern Long-Eared Bat. Initiation of Section 7 consultation will be required should new information become available that reveals effects of the action that may affect the Northern Long-Eared Bat after formal listing in a manner or to an extent not previously evaluated.

**Other:**

The preferred alternative does not adversely impact any known critical or unique natural resources, the quality of adjacent surface water resources, community cohesiveness, planned community growth, or beneficial land use patterns. The project is consistent with the plans and policies of the City of Waterville and the Town of Sidney with the preferred alternative supported by formal vote of the elected officials of the City (1/18/11) and the Town (see 3/29/10 letter from Board of Selectmen). The project has been a policy objective of the City of Waterville since the 1980's and appears as such in the current Comprehensive Plan adopted in 1997. The project is also recognized in the Kennebec Valley Council of Government Corridor Management Plan, Maine DOT STIP, and the Maine DOT 2014-2016 Work Plan.

**SUPPLEMENTAL INFORMATION**

**Early Coordination:**

Early coordination with the federal and State resource agencies was conducted at the May 14, 2013 MaineDOT monthly interagency meeting. The agencies indicated that a primary concern was the identification and analysis of indirect and cumulative impacts on natural resources. Attending agencies included: MaineDOT, Federal Highway Administration, U.S. Fish and Wildlife Service, Maine DEP, and the National Marine Fisheries Service (NMFS).

**Relocations:**

No relocations are required under the preferred alternative.

**Flood Plain Encroachments/Stream Channel/Waterway/Groundwater/Water Table:**

One intermittent stream (Stream A in Figure 3) and two 1<sup>st</sup> order perennial streams occur within the study area. The intermittent stream is an un-named drainage that conveys flows during high water periods, and includes several areas of emergent marsh with no defined channel. This intermittent drainage does become perennial (outside and downstream of the study area) and is a tributary to Trafton Brook, which is the first perennial stream encountered along Trafton Road traveling east of I-95. The preferred alternative does not cross over Trafton Brook or Lowes Brook, the perennial streams within the study area. Trafton Brook includes some area of forested and scrub-shrub floodplain. MaineDOT and the FHWA are required by law to comply with Executive Order 11988, Floodplain Management. To ensure compliance, MaineDOT evaluates each project to assess and reduce long-term and short-term adverse impacts associated with the occupancy and modification of floodplains. Flood plains,

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stream channels, waterways, and the water table will not be affected by the preferred alternative. The Federal Emergency Management Agency (FEMA) floodmap for the area is included as Attachment 7.

**Water Quality:**

All work for the project, as proposed, will be completed using accepted BMPs for the control of erosion and sedimentation (MaineDOT, 2008). Water quality will not be affected as a result of the proposed interchange.

**Agriculture:**

The study area contains areas of prime farmland as well as farmland of statewide importance. Based on soil survey information, the study area includes 13.2 acres of farmland of statewide importance and 0.4 acres of prime farmland. Under the preferred alternative approximately 2.6 acres of farmland will be converted. Conversion will occur within the construction limits of the project.

On September 27, 2013 form BRCS-CPA-106 for the proposed interchange build alternatives was submitted to the Kennebec Valley Natural Resource Conservation Service (NRCS) for the consideration of farmland impacts.

The Farm Land Conversion Impact Rating Sheet is provided as Attachment 8. The preferred alternative, as proposed, will result in no substantial impacts to farmlands.

**Economic:**

Waterville ranks 7<sup>th</sup> in Maine for taxable retail sales and 9<sup>th</sup> for jobs with a very substantial portion of this activity dependent upon the free flow function of the KMD-I-95 interchange. In spite of these economic rankings, Waterville is characterized as a community in economic distress with low median household incomes. It has a high property tax rate driven by relatively low residential property valuations and a high incidence of tax exempt property. Compounding Waterville's economic dilemma is that it is relatively small geographically with only 14.1 square miles with the opportunity for further growth lying primarily to the south of KMD. The proposed action is located to the south of KMD within an area of Waterville currently zoned for commercial and light industrial uses in proximity to public water, sewer and natural gas utilities. A new interchange will provide an alternative to the KMD-I-95 interchange thereby supporting existing Waterville economic activity even as new development is accommodated to the south that builds the City's tax base and supports job creation.

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**Environmental Justice:**

The project, as proposed, would be situated on privately owned lands and will not result in disproportionately high and adverse effects to minority or low income populations.

**Other construction projects:**

There are no known roadway projects within the vicinity of the proposed interchange at this time.

**Detours/Traffic Maintenance-**

Most of the construction activities required to develop the partial clover leaf interchange along Trafton Road will occur outside of the roadway, and therefore there will be minimal impacts to traffic on Trafton Road. The only work of consequence on Trafton Road will be at the intersection of the proposed northbound on and off ramps with Trafton and Eight Rod Road. Trafton Road currently carries low traffic volumes. Alternate routes are available to the north on Webb Road and to the South on Town Farm Road. No road closures or detours are expected during the construction of the project.

**Construction Impacts:**

Based on the rural location of the proposed interchange, it is not anticipated that construction impacts will result from the project as proposed. In addition the proposed design follows Maine DOT guidelines (Maine DOT, 2007). Therefore long-term construction impacts will not result from the project.

**Permits/Mitigation:**

The final design of the project will require state and federal environmental permits which include a Tier 3 Natural Resources Protection Act Permit (NRPA) (due to wetland impacts of greater than 1 acre and the crossing of an intermittent stream) and a USACE Category 2 section 404 permit resulting from unavoidable impacts to jurisdictional wetlands.

Property adjacent to the project site offers the potential for on-site mitigation for unavoidable impacts to existing wetlands on the site. Currently, the vast majority of the wetlands in proximity to the project have been altered by historic land use and development. These wetlands represent an excellent opportunity to restore functions and values lost as a result of historic land use practices. Specifically, planting and natural succession within historically mowed wetlands east of the project site and adjacent to the intermittent stream that crosses the project site would restore and enhance wetland functions and values and allow for the development of a functional stream buffer. This will improve downstream water quality as well as increase the habitat quality by providing forage and cover, which is currently absent in most wetland areas on the site as a result of historic agricultural uses. Additionally, much of the mowed (hayed) upland meadow adjacent to the wetlands on the site are only a few inches from being functional wetland; as such, wetland establishment (creation) would be possible with very minor excavation (scraping) and a planting plan that emphasized native woody trees and shrubs to

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preclude shade intolerant invasives such as reed canarygrass. The upland meadow to the east of I-95 and immediately west of Junction Road represents a particularly good opportunity to establish wetlands since the seasonal high groundwater is within two feet of the surface and perched on dense marine clays. This low, flat area would be assured of achieving the needed hydrology. The clay would be a poor planting medium, however, so excavation would need to extend 6" below the design grade and more friable topsoil with organics used for the surface. Currently the preferred method of mitigation is on-site mitigation. In the event that on-site mitigation is not possible, the alternative is Maine's In Lieu Fee program (ILF). The final mitigation plan will be developed in cooperation with the USACE.

As an alternative to on-site mitigation, ILF offers applicants the opportunity to pay into the program rather than complete conventional mitigation projects. Based on the proposed impact of 60,753 sq. ft. to freshwater wetlands resulting from the proposed interchange, the ILF amount was calculated as \$230,861.40 using the following formula (MEDEP, 2013):

Wetland Compensation Fee = (Direct wetland impact/sq. ft. x (natural resource enhancement & restoration cost/sq. ft. + avg. assessed land valuation/sq. ft.) x (resource multiplier)

Wetland Compensation Fee = (60,753 sq. ft. x (\$3.65 + \$0.15)) x (1)

Wetland Compensation Fee = \$ 230,861.40

### Topography/Geology:

To the east, the area is dominated by glaciomarine-derived surficial materials and to the west glacial till is the dominant parent material. The underlying bedrock of the area is a combination of the Sangerville Formation and unnamed sulfidic pelite (MGS, 2002). In general, the overall topography includes gentle slopes with ravines forming to the east approaching the Kennebec River with finer surface materials. Topography in the study area generally ranges from 100-300 feet above sea level. The entire site of the proposed interchange is generally level topography. To the east, and away from the proposed interchange, the landscape slopes more steeply toward the Kennebec River.

### Secondary Impacts/Cumulative Impacts/Others:

Secondary, or Indirect, impacts are defined as reasonably foreseeable consequences to the environment that are related to the proposed action, that would occur either in the future or in the vicinity of the direct impacts (40 CF Part 1508.8, CEQ Regulations). The baseline for evaluating potential secondary impacts is the existing environment as described in the No-Action Alternative. Cumulative impacts are defined as impacts on the environment that result from incremental impact of the action when added to past, present, or future (reasonably foreseeable) development (40 CFR Part 1508.7, CEQ Regulations). The areas outlined in Figure 5 are based on watershed boundaries (for environmental impacts) as well as zoning and transportation access within the Waterville area. A start date of 1993 was selected, based on development associated with retail space along KMD and an end date of 2036 consistent with the design year.

The secondary impacts resulting from the construction of the interchange are limited, as most projects within the vicinity are planned regardless of the construction of the interchange. There is the potential for impacts to occur as a result of the interchange as most of the commercially zoned land along Trafton Road is currently undeveloped, and the interchange may either increase the amount of development or encourage a quicker rate of development in these suitably zoned areas near the interchange (see Figure 5 showing secondary impact area).

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It is important to note that upland areas are present in this area and therefore impacts resulting from development can be minimized during subsequent permitting of construction projects. Development related to existing industrial zoned properties owned by Trafton Properties LLC are considered secondary impacts, though a portion of these impacts will likely occur in the No Action alternative as well.

Cumulative impacts resulting from the proposed interchange were analyzed in the region generally between the Lyons Road and the KMD (Figure 5). Work completed as part of the Thomas College expansion, the Waterville Robert LaFleur Airport, the potential expansion and development of the Airport Business Park, and the Brownfield site are all cumulative impacts which will occur regardless of the presence of the interchange. It is important to note that while these projects may include impacts to natural resources, that impacts will be avoided and minimized during project specific permitting that will occur for each project on an individual basis.

Based on a review of data provided by the MEDEP (Personal communication, MEDEP, November 20, 2013) within the past 5-10 years approximately 20 Permit By Rule Projects and approximately 31 other projects (Natural Resource Protection Act, Stormwater, etc.) have been permitted within the cumulative impacts area (Figure 5). Permit-by-Rule regulations (Chapter 305) apply to certain activities covered under the Natural Resources Protection Act. The regulations identify activities taking place in or adjacent to wetlands and waterbodies that should not substantially affect the environment if carried out according to the standards contained in the regulations. Other projects may be permitted through more complete processes (NRPA, Site Law, etc.), but these permits also include safeguards to reduce potential impacts to the environment.

During the course of the analysis, efforts were made to reach out to Waterville, Oakland, and Sidney in order to fully understand the potential for future development within the cumulative impact area.

#### Waterville

The City of Waterville is a Maine Service Center with a 2010 population of 15,722 and covering an area of approximately 14.1 square miles. It ranks 7th among municipalities in Maine for total taxable retail sales and 9th for total employment. Since 1960, the City population has declined by 2,973 although in the most recent census the City reversed the downward trend and experienced a small growth of 117.

Within the Waterville portion of the study area, lies a diverse mix of land uses including;

1. Commercial, business and institutional uses along Kennedy Memorial Drive (KMD)
2. A compact housing subdivision adjacent to the KMD and West River Road intersection
3. The LaFleur Airport and Airport Business Park (with Foreign Trade Zone status) situated between KMD and Webb Road
4. Thomas College, a Junior High School, the Pine Tree Golf Course, various business and commercial uses, the Woodlands assisted living center and mobile home parks all along West River Road
5. The closed City landfill located off Webb Road to the south of it and just west of I-95.
6. An EPA Brownfield site under City ownership now being remediated and located to the east of the West River Road - Trafton Road intersection
7. A 227,000 sq. ft. light industrial complex located at the southwest corner of the Trafton Road - West River Road intersection
8. Agricultural lands and forest predominately along and between Webb and Trafton Roads with a scattering of larger lot single family homes.
9. I-95 traveling north-south with an interchange at KMD
10. The Donald Carter Bridge crossing the Kennebec River with a spur on the Waterville side crossing the Messalonskee Stream and connecting to West River Road.

Public water service was provided in the 1970's along West River Road to the Trafton Road light industrial facility by the Department of Housing and Urban Development signaling an intent to support economic growth in southern Waterville. Public sewer service was recently installed by the Town of Oakland with assistance from USDA along nearby Webb Road to make a connection into the Waterville Sanitary District. The District in 2013

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upgraded and expanded the capacity of the pumping station in the proximity of Webb and West River Roads. During 2013-2014, natural gas transmission and distribution came to the area with construction of a service connection to Thomas College on West River Road and the transmission line extending on Webb Road into Oakland.

Noteworthy plans for future development include Trafton Realty's intent to expand the existing light industrial facility on Trafton Road by 450,000 sq. ft. and Thomas College's master plan for a near doubling of their campus. The City recently acquired a 64 acre parcel on the southwest corner of the airport that facilitates a potential connection of Airport and Mitchell Roads with Webb Road to the south and KMD to the north. The City presently has no definitive plans for this property.

Along the southern portion of Trafton Road, the City zoning for the land adjacent to the proposed interchange is Commercial D while land closer to West River Road is zoned Industrial Park including the area where the EPA Brownfield site is located. Along the north side of Trafton Road, zoning includes more Commercial D but between Trafton and Webb Roads the Rural Residential zone dominates. The City of Waterville is currently updating its 1997 comprehensive plan but is presently not recommending changes to the zoning map.

Oakland

Within the Oakland portion of the project study area, land use is characterized to the north by commercial and business development along Kennedy Memorial Drive (KMD) while elsewhere, there is considerable open space consisting of long standing forestry and agricultural uses and the Waterville Country Club golf course. New development is mostly in the form of single-family housing and housing subdivisions particularly between Webb and Trafton Roads and along Middle Road. Oakland's census population grew from 3,075 in 1960 to 6,240 in 2010. The population grew by 2,087 between 1960 and 1980 but tapered off since then. The population grew in the last decade by 281. In consultation with the Town of Oakland, it was determined that there was no known planned or proposed development of significance within the cumulative impact study area in Oakland such as major subdivisions, commercial or industrial development or public investments like schools or new roads. First Park, now approximating 900 jobs is located on KMD adjacent to the I-95 interchange. At full build out it projects to add an additional 950 jobs.

Residential development is expected to continue throughout the study area while commercial and business development is expected to continue concentrating along Kennedy Memorial Drive. The recently installed sewer connection to the Waterville Sewer District following Country Club and Webb Roads to West River Road is not expected to spur new development in this area of Oakland due to the capacity limits of this sewer line and the reasonable expectation that this limited capacity will be reserved for higher and better uses elsewhere in the community. There is no current expectation that public water service will be expanded within the study area in Oakland. That service presently extends a short distance off of Kennedy Memorial Drive onto Country Club Road and also extends southerly along South Alpine Road onto a small portion of Libby Hill Road. The anticipated installation of natural gas transmission lines in the area opens the potential for placement of distribution lines where densities and market demand warrant the provision of service such as along Kennedy Memorial Drive.

If public water, sewer and natural gas were made available on Trafton Road in Oakland, new development other than residential could be anticipated there. However, such service offerings are not anticipated in the foreseeable future and therefore current development trends are expected to continue. Oakland does not have a zoning ordinance. There are shore land zoning, subdivision and site review ordinances. The community's 1990 comprehensive plan expired in 2012.

Sidney

Within the Sidney portion of the study area, land use is characterized by long standing forestry and farming practices. New development is dominated by the addition of single-family housing units and housing growth in general. Sidney's population has grown from 988 in 1960 to 4,208 in the 2010 census. This pattern of development is expected to continue for the foreseeable future due to the lack of infrastructure in Sidney to foster more intense land use patterns. Within Sidney's portion of the study area, there are no plans for providing public

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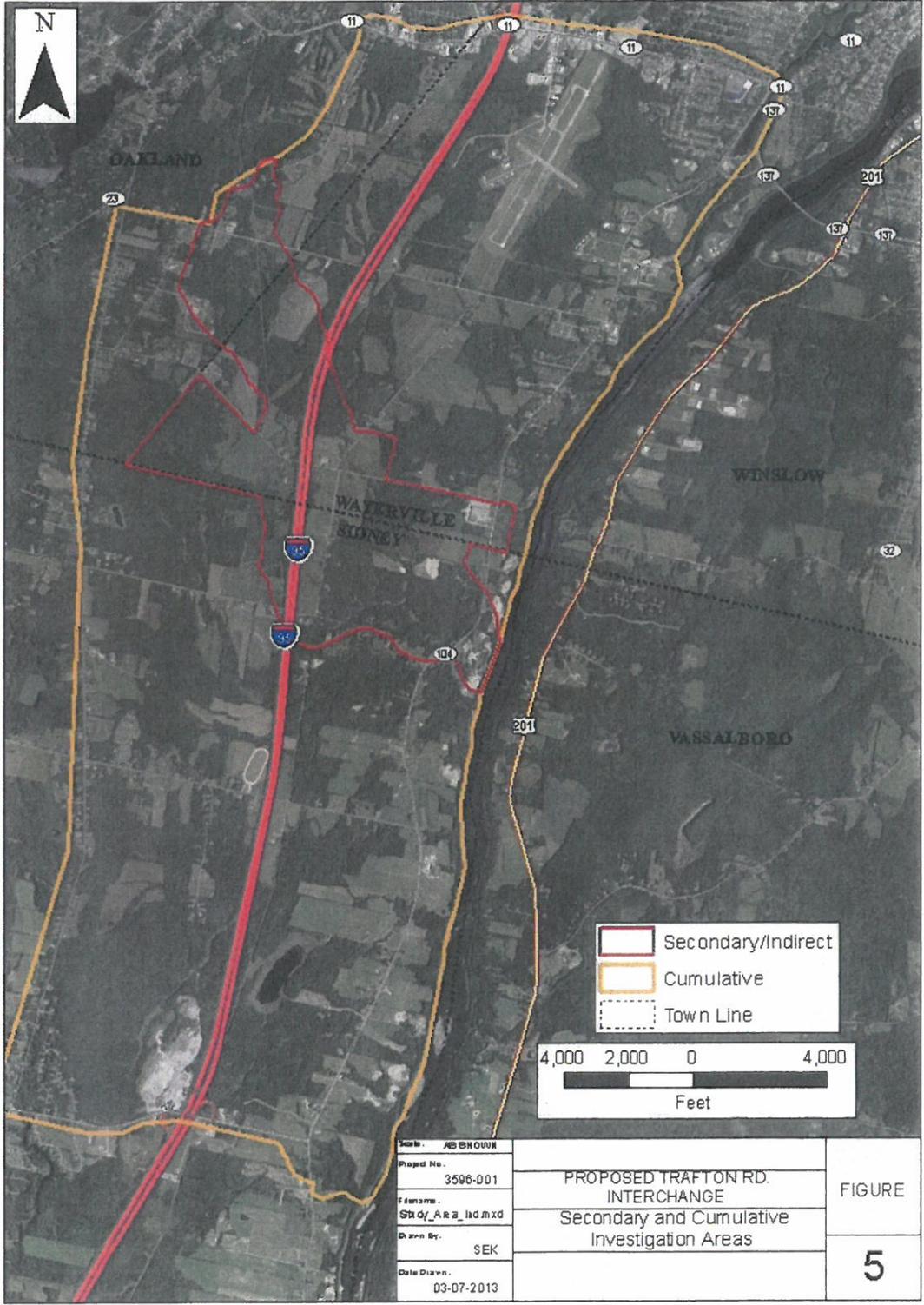
water or sewer services. Current plans for bringing natural gas to Waterville do not appear to include extensions to Sidney which lacks a major consumer or the density of development required to attract a natural gas provider. To the extent that public water, sewer and natural gas are made available in the vicinity of the proposed Trafton Road interchange new development other than residential could be anticipated southwest of the interchange in Sidney between Trafton Road and Town Farm Road. This area falls within Sidney's General Growth District. The growth stimulated by the construction of the I-95 Lyons Road Interchange in Sidney 54 years ago serves as an indicator of foreseeable development in Sidney in proximity to Trafton Road should an interchange be built without the availability of public water and sewer service.

Sidney Town officials were consulted and indicated they were not aware of any planned or proposed major residential subdivisions, commercial or industrial development or public investments like new roads or facilities within the cumulative impact study area. They did not anticipate any specific development to be induced by the proposed interchange within the secondary impacts study area.

**CONCLUSION:**

**The I-95 Trafton Road Interchange will not cause substantial secondary effects nor will the incremental impact result in substantial cumulative effects.**

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Drawn By:	SEK	
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**Coastal Zone Management Plan:**

The proposed interchange is not within Maine's Coastal Zone.

**Clean Water Act Section 401 Certification:**

Pursuant to An Order Designating the State Agencies Responsible for Water Quality Certification, the Maine Department of Environmental Protection has been designated by the Governor as the certifying agency for issuance of Section 401 water quality certification which, in this case, recognizes the issuance of the Maine Department of Environmental Protection's Natural Resource Protection Act permit as constituting State of Maine water quality certification. The permit is expected to be received in the summer of 2014.

## REFERENCES

- A.E. Hodsdon Consulting Engineers (AEH). October 23, 2013. Phase 1 Environmental Site Assessment Report. Prepared for Trafton Realty, LLC.
- City of Waterville (CoW). November 19, 2013. City of Waterville Zoning Ordinance.
- Gorrill-Palmer Consulting Engineers (GPCE). August 2012. Preliminary Opinion of Probable Cost.
- Gorrill-Palmer Consulting Engineers (GPCE). February 12, 2014 Memorandum on KMD Analysis
- Maine Department of Transportation (MaineDOT). 2007. National Standards Highway Design Guide: Volume 1.
- Maine Department of Transportation (MaineDOT). 2008. MaineDOT Best Management Practices for Erosion and Sediment Control.
- MaineDOT. November 15, 2011. MaineDOT Traffic Movement Permit (No. 02-00068A-N).
- MaineDOT. October 30, 2012. Interchange Justification Report: I-95 Trafton Road Interchange Project. Submitted to FHWA and conditionally approved January 23, 2013
- MaineDOT. May 30, 2013. Highway Traffic Noise Analysis: WIN 18129, Trafton Road Interchange Environmental Assessment. MaineDOT. 13 Pp.
- Kleinschmidt Associates. 2013. Natural Resource Inventory Report. Prepared for Trafton Realty, LLC.
- Maine Geological Survey (MGS). 1985. Maine Surficial Geology Map.
- USFWS, October 2, 2013. Federal Register / Vol. 78, No. 191 / Proposed Rules Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition to List the Northern Long- Eared Bat as Endangered Species