

MEMORANDUM

TO: David Hart, Project Development Supervisor

FROM: Michael McCullouch, Regional Hydraulics Engineer MKM

- **SUBJECT:** Hydraulic Evaluation PIN 778009, NY Route 12E over Black River, BIN 1080440 Replacing BIN 3338900 Town of Hounsfield / Town and Village of Brownville, Jefferson County
- **DATE:** April 12, 2021

We have completed a hydraulic evaluation for the Route 12E bridge over the Black River and have determined the project will have no significant effect on hydraulics. A hydraulic analysis is not required due to the height of the bridge above the river and the bridge being founded on rock. The Main Office Hydraulic Engineering Unit has concurred. For documentation purposes a short discussion on project scope, water levels, scour, and hydraulic vulnerability follows.



Rendering of Proposed BIN 1080440

Project Scope – Bridge replacement of BIN 3338900 involves construction of two new bridges:

<u>BIN 1080440</u> - A new 200' single span multi-girder bridge located approximately 3500' downstream of the existing bridge will be constructed on a new alignment. The proposed bridge has been assigned the BIN 1080440.

<u>New Utility Bridge</u> - The second bridge will be a new utility bridge constructed at the site of the existing structure (BIN 3338900) using existing foundations to carry the existing watermain. This utility bridge will have a 3' wide pathway to allow for maintenance activities but will be closed to the public, and ownership will be transferred to the Town of Hounsfield.

Water Levels – The Black River is subject to routine flooding; however, the location of both bridges is characterized by riverbanks that are vertical rock walls with no floodplain. A review of the FEMA Flood Insurance Rate Map (FIRM) shows that both bridges are in Zone A which is described as, "Areas of 100-year flood, base flood elevations and flood hazard factors not determined." Therefore, FEMA has not determined flood elevations for these locations.

<u>BIN 1080440</u> - The proposed new Rte. 12E bridge (BIN 1080440) will have an approx. low chord elevation of 316.8'. Existing low chord elevation at the existing bridge (BIN 3338900) is approximately 299.4'. Therefore, the proposed new Rte. 12E bridge is expected to have increased freeboard as the low chord elevation is approx. 17.4' higher than existing low chord and located approx. 3500' downstream of existing bridge, within an area of similar channel geometry. The existing low chord has had adequate freeboard during record flood events as discussed further in the following paragraph. Survey data shows the water surface elevation at time of survey to be approximately 261.5' which is representative of normal flows. This places the proposed low chord over 50' above normal flows.

<u>New Utility Bridge</u> - Existing low chord elevation at BIN 3338900 is approximately 299.4', therefore, the proposed utility bridge, constructed at the same location, with the same low chord elevation of 299.4', will maintain the same freeboard. While existing freeboard has not been determined by completion of a hydraulic model, the Black River has experienced record flows exceeding a 500-year flood event. The nearest USGS Stream Gauge is located at the Vanduzee Street location, USGS Station 04260500, approximately 3.5 miles upstream of the existing bridge. Period of record for this stream gauge is July 1920 to present, with an all time recorded high of 16.02', approximated to be 55,500 cfs on January 10th, 1998 (a.k.a. the Ice Storm of '98). Photographs taken from the Brownville Bridge on January 9th, 1998 were found and can be used for comparison purposes with a more recent picture at lower flows. On January 9th, 1998, at 12:00 pm, flows were approximately 40,000 cfs at the Vanduzee Street gauge and are likely representative of the flows seen in the 1998 pictures. A graph of flows from Jan 8th to 12th 1998 is included as created on the USGS website.



Jan 8th to 12th, 1998 Discharge graph for USGS gauge station 04260500

When comparing the Black River flows at the existing Brownville bridge to the location of the Vanduzee Street stream gauge, it can be seen that the drainage areas and flows are similar, and for that reason, allows the flow rates discussed above at the Vanduzee Street gauge to be considered close approximations for the flow rates seen at the Brownville bridge. Below is a table created using information from each of the StreamStats reports created for the two sites.

USGS StreamStats Drainage Areas and Flow Rates							
Study Location	Drainage Basin Area (square miles)	50-year Storm Flows (CFS)	100-year Storm Flows (CFS)	500-year Storm Flows (CFS)			
BIN 3338900 Brownville Bridge	1900	38,500	42,600	51,400			
USGS 04260500 Vanduzee Street Stream Gauge	1860	37,400	41,400	49,900			



Looking Upstream – From BIN 3338900 Jan. 9th, 1998



Looking Downstream – From BIN 3338900 Jan. 9th, 1998



Recent Photo Looking Upstream During Lower Water Levels

Note the water surface in relation to the building located on the left bank, looking downstream in the 1998 photograph, and compare with the same building located on the right side of the recent photo looking upstream at the bridge. The water level during flood flows in the 1998 photo is below the top of the building foundation indicating that the existing bridge had adequate freeboard on January 9,1998 with flows estimated in the photo

to be between the 50-year and 100-year flood events. We are not aware of any freeboard issues when the Black River peaked a day later on January 10, 1998.

Scour – Scour will not be an issue at the new bridge location because the foundations will not be exposed to any flow from the Black River. The proposed structure BIN 1080440 will be founded on rock at the top of a 50' deep gorge located well above flood levels.

The existing foundations at BIN 3338900 are also built on rock and have not experienced any scour issues. This project is not proposing any changes to the foundations that will affect scour. The proposed utility bridge will use the existing foundations, with only minor changes planned to accommodate the new structure.

Hydraulic Vulnerability – BIN 3338900 has a "Low" Hydraulic Vulnerability Classification and is not on the Flood Watch or Post Flood Inspection List. The bridge has an FHWA Item 113 Scour Critical Code of "5" which is described as, "Bridge foundations determined to be stable for assessed or calculated scour condition. Scour is determined to be within the limits of footing or piles by assessment (i.e., bridge foundations are on rock formations that have been determined to resist scour within the service life of the bridge), by calculations or by installation of properly designed countermeasures." The hydraulic vulnerability of new BIN 1080440 will also be low and will have an FHWA Item 113 Scour Critical Code of "9" which is described as, "Bridge Foundations are on dry land well above flood levels." Hydraulic Vulnerability for the new utility bridge will not be evaluated but is expected to be the same as the existing bridge.

cc: Scott Docteur, Regional Planning & Program Manager Ernie Reape, Regional Design Engineer Tom King, Regional Structures Engineer Jeff Grill, Regional Structures Management Engineer Kent Collier, Project Manager

APPENDIX E – Non-Standard Features Justification

Justification Number

NEW YORK STATE OF OPPORTUNITY. J

Exhibit 2-15 Nonstandard Feature Justification

2								Rev	. 03/16/20 EB 20-018
PIN: 7780.09	Route No. and	Name: NY Rout	e 12E						
Project Type: Bridge Replacement					al Network	c/Qualifying	g Highway	Access I	Highway
Functional Class: Urban Minor Arteria	I			Design Classification:	Arterial		Context Class:	Rural	
AADT: 12,530 (ETC +20)	% Trucks: 4	0		O NHS 🔍 I	Non-NHS	Terrain:	Rolling		
1. Description of Nonstandard Featu	re								
Type of Feature: Shoulder Width									
Location: 190+00 to 205+40									
Latitude and Longitude (Linear Feature) FROM Lat: 44.0014437 Long: -75.9960809 TO Lat: 44.0015564 Long: -75.9983086									
Latitude and Longitude (Point Feature)	Lat:	Long:							
Standard Value: 6 feet				Design Speed:	60 mph				
Existing Value: 4 feet minimum				Recommended	Speed - Exi	sting:	55 mph (posted)		
Proposed Value: 4 feet				Recommended	Speed - Pro	oposed:	60 mph		
2. Accident Analysis									
Current Accident Rate ¹ : 1.79	🖲 acc/mvm 🛛 a	cc/mev		Statewide Acci	ident Rate:	3.73	• acc/m	ıvm 🔘 a	icc/mev
From 1/1/2019 t	o 12/31/2021			Is the Nonstand	dard Featur	e a contribu	iting factor?	🕽 Yes	No
Anticipated accident rates, severity, and	costs:								
		vide futes.							
3. Cost Estimates									
Cost to fully meet standards: \$0.0N	1			Cost(s) for incre	emental imp	provements	:: \$0.5M		
4. Mitigation	ah an an Isra Isra ath fa								
e.g., increasea superelevation and speed	change lane length fo	r a non-standara rai	mp raaius						
None									
5. Compatibility with Adjacent Segme	ents and Future Plan	5							
This segment of roadway is compatible with the adjacent segments as the proposed shoulder width matches existing width; and it meets the future plans of the area.									
6. Other Factors									
Constructing the roadway to accommodate 6 foot shoulders would result in additional impacts to adjacent environmentally sensitive areas as well as additional needs for permanent right-of-way acquisitions.									
7. Proposed Treatment (i.e., recommendation)									
The segment of roadway will be co segment to 6 foot shoulders would	onstructed with 4 fc	ot shoulders. Thi: with remainder o	s segme of NY Ro	nt is a short stre ute 12E beyond	etch (appro	oximately : mits.	1/4 mile) and re	constructi	ng this short

¹ Use accidents per million vehicle miles (acc/mvm) for linear highway segments; use accidents per million entering vehicles (acc/meh) for intersections.

Justification Number

NEW YORK STATE OF OPPORTUNITY. Departm Transport	ent of rtation	Exhibit 2-15 Nonstandard Feature Justification			
PIN: 7780.09	Route No. and Name: NY Route 12E (Pro	oposed)			
Project Type: Bridge Replacement		🗆 National Network/Qu	ualifying Highway 🗌 Access Highway		
Functional Class: Urban Minor Arterial		Design Classification: Arterial	Context Class:		
AADT: 7,405 (ETC +20)	% Trucks: 4.0	◯ NHS	errain: Rolling		
1. Description of Nonstandard Feature		· · · · ·			
Type of Feature: Superelevation					
Location: BS 3+51.76 to BS 6+50.46 & BS	8+27.84 to BS 10+01.10				
Latitude and Longitude (Linear Feature) FR	DM Lat: 43.9981633 Long:	-75.9948065 TO Lat:	44.000022 Long: -75.9945664		
Latitude and Longitude (Point Feature) Lat:	Long:				
Standard Value: 7% at emax=8%		Design Speed: 45 mph			
Existing Value: Normal Crown		Recommended Speed - Existing	g: 35 mph		
Proposed Value: 3.5%		Recommended Speed - Propos	ed: 45 mph		
2. Accident Analysis					
Current Accident Rate ¹ : 2.62	acc/mvm C acc/mev	Statewide Accident Rate:	3.73 • acc/mvm C acc/mev		
From 1/1/2019 to	12/31/2021	Is the Nonstandard Feature a c	ontributing factor? C Yes 🔍 No		
Anticipated accident rates, severity, and cos	ts:	1			
Accident rates are anticipated to rem exists for the new roadway/bridge.	ain below statewide rates. Accident data	listed above (including existi	ng values) are for the existing bridge, no data		
3. Cost Estimates		1			
Cost to fully meet standards: \$0.0 M		Cost(s) for incremental improv	ements: \$0.2 M		
4. Mitigation					
e.g., increased superelevation and speed change lane length for a non-standard ramp radius Curve warning signs will be installed where appropriate.					
5. Compatibility with Adjacent Segments	and Future Plans				
This segment of roadway is compatible with the adjacent segments and meets the future plans of the area.					
6. Other Factors e.g., social, economic. and environmental					
Constructing this roadway to 8% super needs for right-of-way acquisitions. A	erelevation would result in additional impa lso, while 8% is the standard value, 5% ca	acts to adjacent environmen n be utilized for a curve radiu	tally sensitive areas as well as additional us of 800 feet.		
7. Proposed Treatment (i.e., recommenda	tion)				
Also, the curve is approaching the inte	ersection; the superelevation meets the st	andard at reduced speed of	30 mph (reduced by 15 mph) is 5%.		

¹ Use accidents per million vehicle miles (acc/mvm) for linear highway segments; use accidents per million entering vehicles (acc/meh) for intersections.

Justification Number

NEW YORK STATE OF OPPORTUNITY. Department of Transportation Exhibit 2-15 Nonstandard Feature Justification Rev. 03/16/20 EB 20-018				
PIN: 7780.09 Route No. and Name: NY Route 12E (Pro	oposed)			
Project Type: Bridge Replacement	National Network/Qualifying Highway C Access Highway			
Functional Class: Urban Minor Arterial	Design Context Classification: Arterial Class: Rural			
AADT: 7,405 (ETC +20) % Trucks: 4.0	C NHS Non-NHS Terrain: Rolling			
1. Description of Nonstandard Feature				
Type of Feature: Superelevation				
Location: BS 13+67.81 to BS 14+88.46				
Latitude and Longitude (Linear Feature) FROM Lat: 44.0009878 Long:	-75.9945939 TO Lat: 44.0013182 Long: -75.9946192			
Latitude and Longitude (Point Feature) Lat: Long:				
Standard Value: 7% at emax=8%	Design Speed: 45 mph			
Existing Value: Normal Crown	Recommended Speed - Existing: 35 mph			
Proposed Value: 2.5%	Recommended Speed - Proposed: 45 mph			
2. Accident Analysis				
Current Accident Rate ¹ : 2.62 • acc/mvm C acc/mev	Statewide Accident Rate: 3.73 e acc/mvm C acc/mev			
From 1/1/2019 to 12/31/2021	Is the Nonstandard Feature a contributing factor? C Yes No			
Accident rates are anticipated to remain below statewide rates. Accident data	listed above (including existing values) are for the existing bridge, no data			
exists for the new roadway/bridge.				
3. Cost Estimates				
Cost to fully meet standards: \$0.0 M	Cost(s) for incremental improvements: \$0.2 M			
4. Mitigation				
e.g., increased superelevation and speed change lane length for a non-standard ramp radius				
Curve warning signs will be installed where appropriate.				
5. Compatibility with Adjacent Segments and Future Plans				
This segment of roadway is compatible with the adjacent segments and meets	the future plans of the area.			
6. Other Factors				
e.g., social, economic, and environmental				
needs for right-of-way acquisitions. Also, while 8% is the standard value, 5% ca	n be utilized for a curve radius of 800 feet.			
7. Proposed Treatment (i.e., recommendation)				
Also, the curve is approaching the intersection; the superelevation meets the st	andard at reduced speed of 30 mph (reduced by 15 mph) is 3%.			

¹ Use accidents per million vehicle miles (acc/mvm) for linear highway segments; use accidents per million entering vehicles (acc/meh) for intersections.

APPENDIX F - Public Involvement

Public Involvement and Communication Activities Plan

PROJECT: PIN 778009 - Route 12E over Black River Bridge Replacement BIN 3338900

Towns of Brownville and Hounsfield, Village of Brownville

Action	Scoping	I-IV	V-VI	Award	Construction
Press Release	x				X
Media Event					
Letters to Public Officials		Х			X
Meetings with Public Officials	X	Х	X	<u>*</u>	X ¹
Coordinate with School Districts	X	X	X		X
Open House	X				
Public Meeting with Presentation	X				
Formal Public Hearing		Х			
Establish/Convene Advisory Group		2			
511NY.org					
Newsletter					
Mailings to Residents					X
Mailings to Businesses					X
Emergency Services Contacts		х	X		X
Emergency Services Meeting			X1		X1
Review Agencies			X		
Informational Brochure/Flyer					
E-mail Hot List					
Highway Message Signs					X
				/	
No Public Outreach Planned				x	

¹ – if requested

. Collie

Project Manager

Regional Public Information Officer

01-03-23

Date

Form 12/2012

Date



Watertown Jefferson County Area Transportation Council

317 Washington Street, Watertown, New York, 13601; 315-785-2354

January 9, 2018

Scott A. Docteur Director, Regional Planning & Program Management NYSDOT Region 7 <u>MPO Director</u>

Mayor Joseph M. Butler, Jr. City of Watertown <u>Vice Chairman – Policy Committee</u>

> Sharon A. Addison City Manager

Robert F. Hagemann III Jefferson County Administrator

John D. Peck Jefferson County Board of Legislators Chairman – Policy Committee

> Steven G. Kokkoris Regional Director NYSDOT Region 7 Secretary – Policy Committee

Kristopher H. Reff NYSDOT Region 7 Local Stakeholder Group Representative

Watertown Jefferson County Area Transportation Council (WJCTC) Kicks Off Brownville Bridge Planning Study

The WJCTC's Planning Study will include input from municipal leaders, agency and citizen stakeholders, residents, and members of the public.

In late 2017, the Watertown Jefferson County Area Transportation Council (WJCTC) kicked-off a planning study to explore potential new locations for the bridge over the Black River in the Village of Brownville.

The existing structure has aged out of service and as part of the replacement process, new alignment alternatives are being considered as the current location has operational and access related inefficiencies. The planning study being conducted will explore bridge replacement options as well as potential new locations for the bridge.

"The crossing over the Black River in Brownville is an important connection in our region," said Scott Docteur, Director of Regional Planning & Program Management for NYSDOT Region 7. "In developing strategic options for relocating the bridge, our goals are to improve safety, efficiency, and enhance the future prosperity of the area."

The consulting team for the project includes Barton & Loguidice and WSP who will provide engineering and technical expertise. Highland Planning will direct the public engagement process for the project.

"We're taking a very deliberate approach to the technical analysis, including a full inventory and assessment of existing conditions and an exploration of alternatives based on design criteria and best practices," said Keith Ewald, Manager of Sustainable Planning & Design at Barton & Loguidice. "In developing potential alternative locations for a crossing, we're seeking input from residents, businesses, and schools, as well users of the bridge who come from all over the region."

Highland Planning staff will conduct door-to-door outreach in the Village of Brownville on January 18, 2018 to share information with residents and businesses. Opportunities for public engagement will include stakeholder workshops and an initial public meeting, tentatively scheduled for March 2018. Dates, times and locations for upcoming meetings will be announced in the coming weeks. If

you would like to be notified by email about upcoming opportunities, please contact Susan Hopkins: <u>Susan@highland-planning.com</u>

Questions about how to get involved:

Susan Hopkins, Project Manager Highland Planning susan@highland-planning.com 585-287-2755

Media Contact: Keith Ewald, Barton & Loguidice Phone: (315) 410-6656

Stakeholder Workshops – Executive Summary

Watertown-Jefferson County Area Transportation Council Brownville Bridge Planning Study January 31, 2018 American Legion, Brownville 2:30 – 4:00 pm and 6:00 – 7:30 pm



Overview

On Wednesday, January 31st, 2018 the Watertown-Jefferson County Area Transportation Council (WJCTC), the region's Metropolitan Planning Organization, hosted two stakeholder workshops at the Village of Brownville American Legion. The purpose of the workshop was to share information about the planning study and obtain community feedback about the replacement and possible relocation of the bridge over the Black River in Brownville, NY.

This document contains a summary of feedback received at both workshops. Detailed summaries of each workshop can be found at <u>http://www.wjctc.org.</u>

Workshop Format

Representatives of the MPO and the consultant team provided a brief presentation about the project background, scope, and timeline. Attendees were then engaged in a discussion of the following questions:

- What do you like most about the Brownville bridge in its current location? What do you like least?
- What are your biggest concerns about this project?
- What are the greatest opportunities?
- What should we avoid?
- What are the most important factors the planning and design team should consider when identifying and evaluating potential new locations for a river crossing?

A copy of the presentation slides can be found on the project website. Below is a summary of feedback received during the discussion.

Summary of Feedback

A summary of the feedback received at both workshops is below. Detailed summaries of each workshop can be found at <u>http://www.wjctc.org.</u>

Positive aspects of the existing bridge:

- Relatively central location of the crossing
- Scenic views from the bridge;
- Historic character

Negative aspects of the existing bridge:

 Proximity to the Neenah paper mill and associated traffic problems with tractor trailers backing out near or across the bridge;







- Additionally, the Neenah representatives indicated that approximately 7 10 industrial forklifts cross NY 12E per hour on a daily basis which presents a serious concern for worker safety
- Challenges with visibility and curves;
- Steep grades in the approach on the south side of the bridge;
- Increased wait times due to traffic signals;
- Perceptions that the bridge is structurally unsound despite assurances of safety.

Concerns about the project:

- The disruption caused by replacement or reconstruction of the bridge in the current location or the length of time it would take to complete construction of a bridge in a new location;
- Impacts to private property owners if a new location is selected;
- Protection of the eastern small-footed and northern long-eared bats;
- Removal of properties from the tax rolls if a new location for the crossing is selected.

Opportunities:

- Enhanced opportunities for commerce including recreational activities and tourism;
- Potential utility connections;
- Enhanced tourism and better views of the river gorge;
- Improved pedestrian and cycling connections.

Other considerations:

- Traffic associated with pick-ups and drop-offs at the General Brown Elementary School;
- Consider bicycle/pedestrian access and links to future trails;
- Negative impacts on commerce in the Village center if a new crossing is sited too far east or west of the current site;
- New location should align with existing streets;
- Consider maintenance obligations of the new bridge.

Stakeholder Workshop – Daytime Session

Watertown-Jefferson County Area Transportation Council Brownville Bridge Planning Study January 31, 2018 American Legion, Village of Brownville 2:30 - 4:00 pm



Overview

On Wednesday, January 31st, 2018 the Watertown-Jefferson County Area Transportation Council (WJCTC), the region's Metropolitan Planning Organization, hosted a stakeholder workshop at the Village of Brownville American Legion from 2:30 to 4:00 pm. The purpose of the workshop was to share information about the planning study and obtain community feedback about the replacement and possible relocation of the bridge over the Black River in Brownville, NY. The workshop was attended by public officials, agency staff and members of the community. A full list of attendees is available in Appendix A.

Project website: http://www.wjctc.org.

Workshop Format



Keith Ewald, a Project Manager with Barton & Loguidice, described that the purpose of the project, which is to study replacement and possible relocation of the bridge over the Black River in Brownville. He described the project's scope (contractual and geographical) and the project's outcome. Susan Hopkins with Highland Planning then described community engagement efforts to date, future opportunities for engagement and a timeline for the project. See the project website for a copy of the full presentation.

A brief Q&A session was held prior to the start of the discussion. During the Q&A, participants asked about the timeline for construction as well as the possibility of the current bridge's weight limit being lowered in the near future for safety reasons.

The project team responded that the construction timeline is dependent upon the final recommendations and other factors and could be in the range of three to five years. Representatives of WTCTC noted that the need for a decrease in the bridge's weight limit has not yet been identified in annual safety inspections. However, it was noted that the bridge's current sufficiency rating is acceptable for safe and structurally sound passage for passenger and commercial vehicles.

Susan Hopkins explained the meaning of the term "evaluation criteria" and the role the community would play in helping shape those criteria. Attendees were then engaged in a discussion of the following questions:

- What do you like most about the Brownville bridge in its current location? What do you like least? •
- What are your biggest concerns about this project?
- What are the greatest opportunities?
- What should we avoid?







• What are the most important factors the planning and design team should consider when identifying and evaluating potential new locations for a river crossing?

A copy of the presentation slides can be found on the project website. Below is a summary of feedback received during the discussion.

Summary of Feedback

A summary of the feedback received at the daytime workshop is below.

Positive aspects of the existing bridge:

- "Nothing;"
- Central location;
- Views of the River.

Negative aspects of the existing bridge:

- Traffic is a major concern especially at peak travel hours; creates challenges for emergency vehicles that need to be able to respond in a timely manner;
- Tractor trailers sometimes get stuck and the current configuration generally heightens risk to safety of Neenah employees;
- Additionally, Neenah representatives indicated that approximately 7 10 industrial forklifts cross NY 12E per hour on a daily basis, which presents a serious concern for worker safety: northbound NY 12E traffic turning left to continue on NY 12E queues in front of the paper mill during peak traffic periods. Vehicles wishing to turn east onto CR 190 utilize the shoulder to pass the queued traffic on the right-hand side creating safety issues with the crossing fork trucks.
- Traffic signal lights are confusing and can create safety problems when drivers speed up to make it through the intersection before the light turns red.
- The geometry and vertical profile of the approach from Route 12F to the bridge, particularly during winter months, creates a very hazardous pass down to the bridge due to weather conditions, steep grades, and less than ideal sight lines.

Concerns about the project:

- Lengthy replacement time resulting in having current bridge being out of commission before new one is usable;
- Safety of current structure;
 - [Note: representatives of WJCTC and NYSDOT noted that regular inspections have found that the bridge is safe to cross.]

Opportunities:

- Neenah may be able to expand operations which would be a positive step for local employment;
- Neenah was Agreeable to an alternate location for the bridge, even though they send a flatbed truck over it daily to cross to the storage facility they lease on the opposite side. Neenah felt that the employee safety benefits of moving the bridge outweighed the inconvenience of forcing their truck to go around;
- Better amenities for pedestrians and cyclists and accommodation or encouragement of recreational activities like white-water rafting;
- Utility connections;
 - [Note: representatives of WJCTC and NYSDOT noted that the bridge can be designed to include requested utility connections. Replacement in-kind of existing utilities would be at

the project's expense. All or part of the cost of new/enhanced utilities would be at the utility owners expense.]

Other considerations:

- Current location is central, which is important for emergency services;
- Avoid industry;
- Complete streets treatment; tie in to possible future river trails;
- If located too far east, it will create conflicts with school during pick-up and drop-off times;
 - Chief of Police Larry Jobson (Village of Glen Park) noted that he had observed 82 private vehicles picking up students at Brownville Elementary School in one day.
- The cost in revenue of removing properties from the tax roll should be considered;
- Bridge should be kept close to current location to avoid negative impacts on commerce;
- A bridge located west of downtown Brownville would cause drivers to bypass the businesses located downtown and could negatively impact the village;
- New location should line up with an intersection;
- If new bridge has sidewalks rather than just emergency pedestrian exits (like current bridge) local government will become responsible for clearing snow and other maintenance costs which can be significant.

Possible locations:

- Old Rome State Road (Paddy Hill) / Gould Street (Village of Brownville)
- Storehouse Street (Village of Brownville)
- Brown Boulevard (Village of Brownville)
- Floral Drive (Town of Watertown)

Other project related materials can be found at: <u>http://www.wjctc.org.</u>

Stakeholder Workshop – Evening Session

Watertown-Jefferson County Area Transportation Council Brownville Bridge Planning Study January 31, 2018 American Legion, Village of Brownville 6:00-7:30 pm



Overview

On Wednesday, January 31st, 2018 the Watertown-Jefferson County Area Transportation Council (WJCTC), the region's Metropolitan Planning Organization, hosted a stakeholder workshop at the Village of Brownville American Legion from 6:00-7:30 pm. The purpose of the workshop was to share information about the planning study and obtain community feedback about the replacement and possible relocation of the bridge over the Black River in Brownville, NY. The workshop was attended by public officials, agency staff and members of the community. A full list of attendees is available in Appendix A.

Project website: http://www.wjctc.org.

Workshop Format



During the Q&A session, participants asked for clarification of project boundary, the timeframe of the project, possible changes to vehicle routes, the level of community impact on the decision, and who would ultimately make the decision about the placement of the bridge.

Representatives of the WTCTC and the consultant team noted that the project boundary includes the area shown in the map (see the project website for a copy of the presentation with map) and areas west of the existing bridge. The boundary does not extend very far west of the existing bridge due to proximity with the Route 180 crossing in the Town of Dexter. The timeframe of the planning process is approximately eight months, with an anticipated report on recommendations due in late summer or early fall 2018. Keith reiterated that this a planning study only. Design and construction phases would be considered different projects that will occur after the planning study is completed. NYSDOT Region 7 will select a preferred alternative based upon the findings and recommendations from the planning study, which will include numerous opportunities for public input. The WJCTC is managing the current phase of the project. WJCTC membership includes NYSDOT and local municipalities.

Susan Hopkins explained the meaning of the term "evaluation criteria" and the role the community would play in helping shape those criteria. Attendees were then engaged in a discussion of the following questions:

- What do you like most about the Brownville bridge in its current location? What do you like least?
- What are your biggest concerns about this project?







- What are the greatest opportunities?
- What should we avoid?
- What are the most important factors the planning and design team should consider when identifying and evaluating potential new locations for a river crossing?

Summary of Feedback

A summary of the feedback received at the evening workshop is below.

Positive aspects of the existing bridge:

- Located away from school zone;
- Has nice views of the waterfall on the Black River;
- Centrally located for efficient travel between destinations;
- Boon to local businesses.

Negative aspects of the existing bridge:

- Scary to cross;
- Steep approach and blind corner in Paddy Hill;
- Traffic congestion;
- Tractor trailers reversing into road from adjacent industry;
- Challenges for emergency vehicles that these conditions result in.

Concerns about the project:

- Taking of private property through eminent domain and how that is reimbursed;
 - [Note: Keith Ewald explained that an independent appraisal of the property is made and the owner is then offered fair market value on the property with some room for negotiation.]
- Increasing traffic near school zone that is already congested and dangerous during pick-up and drop-off hours.

Opportunities:

- Could have benefits for local tourism based on fishing and rafting;
- Smoother flow of traffic;
- No dangerous curves or steep grades;
- Fewer or no traffic signals;
- If the bridge remains in the current location, grades and curves could conceivably be made less extreme.

Other considerations:

- Take as few properties as possible;
- Avoid school zone;
- Ensure sufficient setback from homes;
- Properties taken off tax rolls and resulting population loss that could increase tax burden for other residents;
- If new location is too far west it will bypass businesses; bad for commerce;
- Emergency services like fire protection in Paddy Hill needs to be accommodated;
- There is a high school to the west so if bridge is located too far in one direction or another school zones become an issue;
- Appearance or aesthetic of bridge;
- Keeping the bridge in the current location would avoid taking property; however, this would result in the lack of any crossing of the Black River between the Town of Dexter and the City of Watertown for several months or years while the new structure is being built.
- Impacted property owners should be notified before the rest of the public.

Possible locations:

- Old Rome State Road (Paddy Hill) / Gould Street (Village of Brownville);
- Brownville Cemetery (west end of Village of Brownville);
- Village of Glen Park;
- Floral Drive (Town of Watertown);
- Between General Brown Elementary School and Neenah mill (Village of Brownville);
- Storehouse Street (Village of Brownville).

Other project related materials can be found at: <u>http://www.wjctc.org.</u>

DRAFT



Scott A. Docteur Director, Regional Planning & Program Management NYSDOT Region 7 <u>MPO Director</u>

Mayor Joseph M. Butler, Jr. City of Watertown <u>Vice Chairman – Policy Committee</u>

> Sharon A. Addison City Manager

Robert F. Hagemann III Jefferson County Administrator

John D. Peck Jefferson County Board of Legislators Chairman – Policy Committee

> Steven G. Kokkoris Regional Director NYSDOT Region 7 Secretary – Policy Committee

Kristopher H. Reff NYSDOT Region 7 Local Stakeholder Group Representative

Watertown Jefferson County Area Transportation Council

317 Washington Street, Watertown, New York, 13601; 315-785-2354

April 24, 2018

The Watertown Jefferson County Area Transportation Council (WJCTC) to Seek Public Input on Brownville Bridge Planning Study at May 10th Open House

The WJCTC's 8-month project will continue to collect public input from municipal leaders, agency and citizen stakeholders, residents, and members of the general public.

In late 2017, the Watertown Jefferson County Area Transportation Council (WJCTC) kicked-off a planning study exploring potential new locations for the bridge over the Black River in Brownville, NY.

The existing structure is approaching its design life and as part of the planning process, the WJCTC is evaluating alternative locations for a future bridge. The planning study being conducted will explore bridge replacement options at its current location as well as potential new locations for the bridge.

Two stakeholder workshops were held in January 2018 to introduce the project to the public and gather initial feedback. "We heard from the community that some aspects of the existing bridge are problematic," said Scott Docteur, Director of Regional Planning & Program Management for NYSDOT Region. "We also heard that any

new crossing should provide access to centralized businesses and avoid exacerbating traffic issues. We used that feedback to help identify the initial alternatives that will be shared at the open house on May 10th."

The project's consulting team includes Barton & Loguidice and WSP who are providing engineering and technical expertise. Highland Planning is directing the public engagement process.

"Our objective at this open house is to obtain feedback from the community about the criteria that will be used to evaluate alternatives," Susan Hopkins, Project Manager at Highland Planning. "We will also seek public input on up to five possible alternative bridge locations."

The open house will be held at General Brown Junior-Senior High School, 17643 Cemetery Rd, in the Town of Dexter on Thursday, May 10th from 4:30 PM to 7:30 PM, with a short presentation scheduled at 5:30. Community members are invited to drop in anytime.

Press Release April 24, 2018 Brownville Bridge Study

Information about the project as well as summaries of the January Stakeholder Workshops are available online at <u>http://www.wjctc.org/projects/proposed-projects/item/14-rt-12e-brownville-black-river-bridge.html</u>.

If you would like to be notified by email about upcoming opportunities, please contact Susan Hopkins: <u>Susan@highland-planning.com</u>

Questions about how to get involved: Susan Hopkins, Project Manager Highland Planning susan@highland-planning.com 585-287-2755

Media Contact: Keith Ewald Barton & Loguidice, D.P.C. O: (315) 410-6656 kewald@bartonandloguidice.com



Scott A. Docteur Director, Regional Planning & Program Management NYSDOT Region 7 <u>MPO Director</u>

Mayor Joseph M. Butler, Jr. City of Watertown Vice Chairman – Policy Committee

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Robert F. Hagemann III Jefferson County Administrator

John D. Peck Jefferson County Board of Legislators Chairman – Policy Committee

> Steven G. Kokkoris Regional Director NYSDOT Region 7 Secretary – Policy Committee

Kristopher H. Reff NYSDOT Region 7 Local Stakeholder Group Representative

Watertown Jefferson County Area Transportation Council

317 Washington Street, Watertown, New York, 13601; 315-785-2354

October 19, 2018

Watertown Jefferson County Area Transportation Council (WJCTC) to Share Information About the Brownville Bridge Planning Study at November 1st Open House

The WJCTC's 8-month project has collected input from municipal leaders, agency and citizen stakeholders, residents, and from the general public.

In late 2017, the Watertown Jefferson County Area Transportation Council (WJCTC) kicked-off a planning study exploring potential locations for the bridge over the Black River in Brownville, commonly known as the Paddy Hill Bridge.

The existing structure is approaching the end of its service life and as part of the planning process, the WJCTC is evaluating alternative locations for a future bridge. The planning study being conducted will explore bridge replacement options at the current location as well as exploring potential new locations for the bridge.

In addition to two stakeholder workshops held in January 2018, WJCTC held a public open house in May 2018 to share potential locations for the bridge with the community and gather feedback. Community members were invited to provide input at the open house as well as online at the Council's website. Information about the project as well as summaries of previous meetings are available online at:

http://www.wjctc.org/projects/proposed-projects/item/14-rt-12ebrownville-black-river-bridge.html.

The project's consulting team includes representatives from Barton & Loguidice and WSP who are providing engineering and technical expertise. The consulting firm of Highland Planning is directing the public engagement process.

The Fall Open House will be held at General Brown Junior-Senior High School, 17643 Cemetery Rd, Dexter, NY 13634 on Thursday, November 1st from 4:30 until 7:30 p.m., with a short presentation scheduled for 5:30. Community members are invited to drop in anytime.

If you would like to be notified by email about upcoming opportunities, please contact Susan Hopkins: <u>Susan@highland-planning.com</u>

Questions about how to get involved: Susan Hopkins, Project Manager Highland Planning <u>susan@highland-planning.com</u> 585-287-2755

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Scott A. Docteur Director, Regional Planning & Program Management NYSDOT Region 7 <u>MPO Director</u>

Mayor Joseph M. Butler, Jr. City of Watertown <u>Vice Chairman – Policy Committee</u>

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Robert F. Hagemann III Jefferson County Administrator

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> Steven G. Kokkoris Regional Director NYSDOT Region 7 Secretary – Policy Committee

Kristopher H. Reff NYSDOT Region 7 Local Stakeholder Group Representative Watertown Jefferson County Area Transportation Council

317 Washington Street, Watertown, New York, 13601; 315-785-2354

For Release March 7, 2019

The Watertown Jefferson County Area Transportation Council (WJCTC) releases final recommendation from the Brownville Bridge Planning Study

The WJCTC's 15-month project collected public input from municipal leaders, agency and citizen stakeholders, residents, and members of the general public.

In late 2017, the Watertown Jefferson County Area Transportation Council (WJCTC) kicked-off a planning study exploring potential new locations for the bridge over the Black River in Brownville, NY. In March of this year, the WJCTC accepted the final recommendation for a new bridge location, which is described in the Project Scoping Report located on the project website (more information below). The existing structure is approaching its design life and as part of the planning process, the WJCTC evaluated alternative locations for a future bridge. The WJCTC evaluated potential alternatives using a variety of screening criteria, including safety, traffic, operations, environmental impacts, potential impacts to private property, as well as opportunities to enhance regional economic development and quality of life. It was determined that the option referred to as "Alternative A" in the Project Scoping Report best meets the project objectives and evaluation criteria.

The Project Scoping Report describes the planning process and final recommendation in detail. It can be found on the WJCTC's website: <u>http://www.wjctc.org/projects/proposed-projects/item/14-rt-12e-brownville-black-river-bridge.html</u>.

The technical analysis was supported by a robust public engagement process, which included doorto-door outreach to residents and businesses, stakeholder workshops, two public meetings, individual outreach with potentially impacted property owners, an online survey, and a pop-up booth at General Brown Weekend.

The project team would like to thank the community for its feedback throughout the planning process. The feedback received was a critical part of the team's analysis. The project team learned about the history of the existing bridge, as well as opportunities for a new bridge to serve the community for years to come. All feedback was considered, along with technical factors, as part of the evaluation.

The project's consulting team includes Barton & Loguidice and WSP who provided engineering and technical expertise. Highland Planning directed the public engagement process.

Media Contact: Keith Ewald Barton & Loguidice, D.P.C. O: (315) 410-6656 kewald@bartonandloguidice.com

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APPENDIX G - Other

PIN 7780.09

Prepared By: Phil Albanese (Creighton Manning Engineering)

Smart Growth Screening Tool (STEP 1)

NYSDOT & Local Sponsors – Fill out the Smart Growth Screening Tool until the directions indicate to **STOP** for the project type under consideration. For all other projects, complete answering the questions. For any questions, refer to <u>Smart Growth Guidance</u> document.

Title of Proposed Project: New York Route 12E over Black River Bridge Replacement

Location of Project: Towns of Brownville and Hounsfield, Jefferson County

Brief Description: This project is intended to replace the existing bridge over Black River; which was found to be structurally deficient.

A. Infrastructure:

Addresses SG Law criterion a. -

(To advance projects for the use, maintenance or improvement of existing infrastructure)Does this project use, maintain, or improve existing infrastructure?

Yes 🖂 No 🗌 N/A 🗌

Explain: (use this space to expand on your answers above – the form has no limitations on the length of your narrative)

The project will replace the existing bridge which was found to be structurally deficient. The new bridge will be installed on a new roadway alignment. The new roadway and bridge will continue to provide important connections between communities, and also attempt to solve existing operational issues which were at the existing bridge location.

Maintenance Projects Only

- a. Continue with screening tool for the four (4) types of maintenance projects listed below, as defined in NYSDOT PDM Exhibit 7-1 and described in 7-4: https://www.dot.ny.gov/divisions/engineering/design/dqab/pdm
 - Shoulder rehabilitation and/or repair;
 - Upgrade sign(s) and/or traffic signals;

- Park & ride lot rehabilitation;
- 1R projects that include single course surfacing (inlay or overlay), per Chapter 7 of the NYSDOT Highway Design Manual.
- b. For all other maintenance projects, **STOP here.** Attach this document to the programmatic <u>Smart</u> <u>Growth Impact Statement and signed Attestation</u> for Maintenance projects.

For all other projects (other than maintenance), continue with screening tool.

B. Sustainability:

NYSDOT defines Sustainability as follows: A sustainable society manages resources in a way that fulfills the community/social, economic and environmental needs of the present without compromising the needs and opportunities of future generations. A transportation system that supports a sustainable society is one that:

- Allows individual and societal transportation needs to be met in a manner consistent with human and ecosystem health and with equity within and between generations.
- Is safe, affordable, and accessible, operates efficiently, offers choice of transport mode, and supports a vibrant economy.
- Protects and preserves the environment by limiting transportation emissions and wastes, minimizes the consumption of resources and enhances the existing environment as practicable.

For more information on the Department's Sustainability strategy, refer to Appendix 1 of the Smart Growth Guidance and the NYSDOT web site, www.dot.ny.gov/programs/greenlites/sustainability

(Addresses SG Law criterion j: to promote sustainability by strengthening existing and creating new communities which reduce greenhouse gas emissions and do not compromise the needs of future generations, by among other means encouraging broad based public involvement in developing and implementing a community plan and ensuring the governance structure is adequate to sustain and implement.)

- 1. Will this project promote sustainability by strengthening existing communities?
 - Yes 🛛 No 🗌 N/A 🗌
- 2. Will the project reduce greenhouse gas emissions?

```
Yes 🛛 No 🗌 N/A 🗌
```

Explain: (use this space to expand on your answers above)

The project will help maintain the connection between existing communities and also install sidewalk along the new bridge for future development. The new bridge and roadway will allow for less delay and congestion, resulting in reduced greenhouse gas emissions.

C. Smart Growth Location:

Plans and investments should preserve our communities by promoting its distinct identity through a local vision created by its citizens.

(Addresses SG Law criteria b and c: to advance projects located in municipal centers; to advance projects in developed areas or areas designated for concentrated infill development in a municipally approved comprehensive land use plan, local waterfront revitalization plan and/or brownfield opportunity area plan.)

1. Is this project located in a developed area?

Yes 🛛 No 🗌 N/A 🗌

2. Is the project located in a municipal center?

Yes 🗌 No	\bowtie	N/A
----------	-----------	-----

- 3. Will this project foster downtown revitalization?
 - Yes 🗌 No 🗌 N/A 🖂
- 4. Is this project located in an area designated for concentrated infill development in a municipally approved comprehensive land use plan, waterfront revitalization plan, or Brownfield Opportunity Area plan?

Yes 🗌 No 🗌 N/A 🖂

Explain: (use this space to expand on your answers above)

This project is located in the vicinity of the Village of Brownville; which is a small developed village with a mixture of commerical and residential land uses.

D. Mixed Use Compact Development:

Future planning and development should assure the availability of a range of choices in housing and affordability, employment, education transportation and other essential services to encourage a jobs/housing balance and vibrant community-based workforce.

(Addresses SG Law criteria e and i: to foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial

dev use	velopment and th e codes.)	ne integration o	f all income groups; to ensure predictability in building and land				
1.	Will this project foster mixed land uses?						
	Yes 🗌	No 🗌	N/A 🖂				
2.	Will the project f	foster brownfie	ld redevelopment?				
	Yes 🗌	No 🗌	N/A 🖂				
3.	Will this project	foster enhancer	ment of beauty in public spaces?				
	Yes 🗌	No 🖂	N/A				
4.	Will the project f recreation?	foster a diversit	y of housing in proximity to places of employment and/or				
	Yes 🗌	No 🗌	N/A 🖂				
5.	Will the project f and/or compact	foster a diversit development?	y of housing in proximity to places of commercial development				
	Yes 🗌	No 🗌	N/A 🖂				
6.	Will this project	foster integration	on of all income groups and/or age groups?				
	Yes 🗌	No 🗌	N/A 🖂				
7.	Will the project e	ensure predictal	bility in land use codes?				
	Yes 🗌	No 🗌	N/A 🖂				
8.	Will the project e	ensure predictal	bility in building codes?				
	Yes 🗌	No 🗌	N/A 🖂				
	Explain: (use this	s space to expa	nd on your answers above)				
	The new re aesthetics of	oadway and br the surrounding	idge will be constructed in such a manner that improves the garea.				

E. Transportation and Access:

NYSDOT recognizes that Smart Growth encourages communities to offer a wide range of transportation options, from walking and biking to transit and automobiles, which increase people's access to jobs, goods, services, and recreation.

(Addresses SG Law criterion f: to provide mobility through transportation choices including improved public transportation and reduced automobile dependency.)

1.	Will this	project	provide	public transit?
----	-----------	---------	---------	-----------------

Yes 🗌 No 🖂 N/A 🗌

2. Will this project enable reduced automobile dependency?

Yes 🗌 No 🖂 N/A 🗌

3. Will this project improve bicycle and pedestrian facilities (such as shoulder widening to provide for on-road bike lanes, lane striping, crosswalks, new or expanded sidewalks or new/improved pedestrian signals)?

Yes 🛛 No 🗌 N/A 🗌

(Note: Question 3 is an expansion on question 2. The recently passed Complete Streets legislation requires that consideration be given to complete street design features in the planning, design, construction, reconstruction and rehabilitation, but not including resurfacing, maintenance, or pavement recycling of such projects.)

Explain: (use this space to expand on your answers above)

This project does not provide public transit; and will not reduce dependecy on automobiles. Sidewalks will be installed on the new bridge for future development; which will improve pedestrian faciliites and connections in the future. The new roadway will have widened shoulders, as compared to existing, which will improve bicycle accommodations.

F. Coordinated, Community-Based Planning:

Past experience has shown that early and continuing input in the transportation planning process leads to better decisions and more effective use of limited resources. For information on community based planning efforts, the MPO may be a good resource if the project is located within the MPO planning area.

(Addresses SG Law criteria g and h: to coordinate between state and local government and intermunicipal and regional planning; to participate in community based planning and collaboration.)

1. Has there been participation in community-based planning and collaboration on the project?

Yes	\boxtimes	No 🗌	N/A
-----	-------------	------	-----

2. Is the project consistent with local plans?

Yes	\boxtimes	No 🗌
-----	-------------	------

3. Is the project consistent with county, regional, and state plans?

N/A

Yes 🛛 No 🗌 N/A 🗌

4. Has there been coordination between inter-municipal/regional planning and state planning on the project?

Yes 🛛 No 🗌 N/A 🗌

Explain: (use this space to expand on your answers above)

This project is based on a 2018 planning study conducted by the Watertown Jefferson County Traffic Council (WJCTC); which identified several proposed locations for the new bridge. This planning study included several meetings between WJCTC, NYSDOT, stakeholders and the general public to gather input on the bridge replacement options.

G. Stewardship of Natural and Cultural Resources:

Clean water, clean air and natural open land are essential elements of public health and quality of life for New York State residents, visitors, and future generations. Restoring and protecting natural assets, and open space, promoting energy efficiency, and green building, should be incorporated into all land use and infrastructure planning decisions.

(Addresses SG Law criterion d :To protect, preserve and enhance the State's resources, including agricultural land, forests surface and ground water, air quality, recreation and open space, scenic areas and significant historic and archeological resources.)

1. Will the project protect, preserve, and/or enhance agricultural land and/or forests?

Yes	\boxtimes	No 🗌	N/A
-----	-------------	------	-----

2. Will the project protect, preserve, and/or enhance surface water and/or groundwater?

Yes	\square		No
-----	-----------	--	----

- □ N/A □
- 3. Will the project protect, preserve, and/or enhance air quality?

Yes 🖂	
-------	--

N/A 🗌

4. Will the project protect, preserve, and/or enhance recreation and/or open space?

Yes 🖂	No 🗌	N/A 🗌
-------	------	-------

No 🗌

5. Will the project protect, preserve, and/or enhance scenic areas?

Yes 🗌	No 🗌	N/A [\triangleleft
-------	------	-------	-----------------

6. Will the project protect, preserve, and/or enhance historic and/or archeological resources?

Yes 🖂	No 🗌	N/A [
-------	------	-------

Explain: (use this space to expand on your answers above)

There are forests within the project area but no agricultural lands. Forest impacts will be minimized where possible as a result of the new roadway. Surface and groundwater will be protected through stormwater management practices incorporated as part of the project design. Recreation areas, i.e. Black River, will be preserved during construction and will have minimal visual impacts due to construction of the new bridge. Historic resources will be preserved by reducing impacts, if any, during construction.

Smart Growth Impact Statement (STEP 2)

NYSDOT: Complete a Smart Growth Impact Statement (SGIS) below using the information from the Screening Tool.

Local Sponsors: The local sponsors are **not** responsible for completing a Smart Growth Impact Statement. Proceed to **Step 3**.

Smart Growth Impact Statement

PIN: 7780.09

Project Name: NY Route 12E over Black River Bridge Replacement Project

Pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act. This project has been determined to meet the relevant criteria, to the extent practicable, described in ECL Sec. 6-0107. Specifically, the project:

- This project retains connectivity between communities.
- This project reduces delay and traffic congestion; which reduces the amount of greenhouse gas emissions.
- This project does not promote urban sprawl.
- 0
- €
- 0

This publically supported infrastructure project complies with the state policy of maximizing the social, economic and environmental benefits from public infrastructure development. The project will not contribute to the unnecessary costs of sprawl development, including environmental degradation, disinvestment in urban and suburban communities, or loss of open space induced by sprawl.

Review & Attestation Instructions (STEP 3)

Local Sponsors: Once the Smart Growth Screening Tool is completed, the next step is to submit the project certification statement (Section A) to Responsible Local Official for signature. After signing the document, the completed Screening Tool and Certification statement should be sent to NYSDOT for review as noted below.

NYSDOT: For state-let projects, the Screening Tool and SGIS is forwarded to Regional Director/ RPPM/Main Office Program Director or designee for review, and upon approval, the attestation is signed (Section B.2). For locally administered projects, the sponsor's submission and certification statement is reviewed by NYSDOT staff, the appropriate box (Section B.1) is checked, and the attestation is signed (Section B.2).

A. CERTIFICATION (LOCAL PROJECT)

I HEREBY CERTIFY, to the best of my knowledge, all of the above to be true and correct.

Preparer of this document:

Signature	Date
Title	Printed Name
Responsible Local Official (for local projects):	
Signature	Date
Title	Printed Name

B. ATTESTATION (NYSDOT)

1. I HEREBY:

- Concur with the above certification, thereby attesting that this project is in compliance with the State Smart Growth Public Infrastructure Policy Act
- Concur with the above certification, with the following conditions (information requests, confirming studies, project modifications, etc.):

(Attach additional sheets as needed)

- ☐ do not concur with the above certification, thereby deeming this project ineligible to be a recipient of State funding or a subrecipient of Federal funding in accordance with the State Smart Growth Public Infrastructure Policy Act.
- **2. NOW THEREFORE,** pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act, to the extent practicable, as described in the attached Smart Growth Impact Statement.

NYSDOT Commissioner, Regional Director, MO Program Director, Regional Planning & Programming Manager (or official designee):

Signature

Date

Title

Printed Name

HC 203 (6/03)

UTILITY FACILITIES INVENTORY REPORT

Sheet 1of 1

P.I.N.(s): 7780.09 Federal Aid Project Number(s): Contract "D" Number: Letting date: August 31, 2023 PROJECT DESCRIPTION: Construction of N.Y. Route 12E (Bridge Street) over Black River (BIN 1080440) S.H. 9439 Removal of BIN 3338900 – Village of Brownville Date Inventory to DQAB: Date Revised Inventory to DQAB:

REF. NAME A	NAME AND DESCRIPTION OF UTILITY COPE AND LOCATION OF WORK REQUIRED	PRESENT ROW	RELOCATION DATA			DDAD ³ DA TO	DA TO ⁴	UTILITY WORK	AUTHORIZATION AND REMARKS	
NO.		LOCATION	Y/N	R or NR ²	COST EST.	WHEN?/BY?	UTILITY	UTIENT	AGREE. DQAB	
1B	National Grid -Distribution	State	Y	NR	\$0	During Const / By Utility				
2A	National Grid -Sub T	Private	Y	R	Unknown	During Const / By Utility				
3B	Development Authority of the North Country	State	Y	NR	\$0	During Const / By Utility				
4B	Spectrum	State	Y	NR	\$0	During Const / By Utility				
5B	Verizon	State	Y	NR	\$0	During Const / By Utility				

1. 1A, 2A, etc., should be used for reimbursable relocations, and 1B, 2B, etc., should be used for nonreimbursable relocations or betterments.

2. R - Reimburseable, NR - Nonreimbursable

3. DDAD - Draft Design Approval Document

4. DA - Design Approval Memo

BROWNVILLE BRIDGE REPLACEMENT PLANNING STUDY

Watertown Jefferson County Area Transportation Council

March 2019





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LIST OF ATTACHMENTS

- A. Critical Design Elements
- B. Secondary List of Brownville Bridge Alternative Locations
- C. Completed Evaluation Matrix for Secondary Screening of Alternatives
- D. Cross-Sections and Detailed Project Information for Alternatives A, DE, E
- E. Traffic Analysis
- F. Revised Evaluation Matrix for Screening Alternatives A and DE
- G. Public Comments

PROJECT SCOPE

1.1. Introduction

This report was prepared in accordance with the New York State Department of Transportation (NYSDOT) Project Development Manual, 17 NYCRR (New York Codes, Rules and Regulations) Part 15, and 23 CFR (Code of Federal Regulations) 771 for the Watertown-Jefferson County Area Transportation Council (WJCTC). Transportation needs have been identified (Section 1.2), objectives established (1.2.3) to address the needs, and cost-effective alternatives developed (1.3). NYSDOT followed the Federal Highway Administration (FHWA) Planning and Environmental Linkages (PEL) to use information developed in this Project Scoping Report to eliminate alternatives early in the process and inform the NEPA process, leading to less duplication of effort. NYSDOT has met with FHWA to discuss the project and using this process. This project has both federal and state funding.

1.2. Purpose and Need

The purpose of this project is to complete a Bridge Replacement Planning Study for the Black River corridor between the City of Watertown and the Village of Dexter to identify alternative locations for the Brownville Bridge. The existing bridge structure over the Black River in the Village of Brownville is in need of replacement. This study examined the existing crossing location along with alternative crossing locations to identify the most suitable location for the replacement structure and corresponding highway and associated intersections. The alternative bridge crossing locations have been analyzed in broad context and evaluated according to evaluation criteria established by the WJCTC. The preferred alternative will be advanced into preliminary design by a separate effort led by NYSDOT Region 7. This study has involved extensive public and stakeholder involvement.

1.2.1. Where is the Project Located?

The project is located on Bridge Street, NY Route 12E, consisting of 185 feet between NY Route 12F and NY Route 12E in the Towns of Brownville and Hounsfield, and Village of Brownville, in Jefferson County, NY.

The existing bridge design is a polygonal Warren through truss with verticals and contains two 12-foot wide lanes- one northbound and one southbound, with a deck width of 24 feet (no shoulder). The vertical clearance is 14 feet, with a 2% cross slope. The current speed limit on the bridge is 35 mph. There is a 4-foot pedestrian walkway on the southbound side of the bridge.

1.2.2. Why is the Project Needed?

The current bridge crossing the Black River between NY Route 12E and 12F was built in 1954. It currently carries a State Condition Rating of 3.902 (2018), indicating that the bridge is a deficient bridge. The structure, currently owned by NYSDOT, was rehabilitated in 1984 under Contract #D250562 upon takeover from Jefferson County. The bridge's superstructure type is a field-welded, thru-truss. The design exhibits a high vulnerability relevant to its steel details. This type of structure is perhaps the most vulnerable to failure since all connections are welded, allowing cracks that may have formed from weld imperfections to propagate into the primary tension members. The trusses were retrofitted with tie rods and updated steel details. This rehabilitation had a life expectancy of 20 years, and has since lived its life. There is limited redundancy of bridge crossings in the area and failure of any single member in the truss could lead to the total collapse of the bridge, creating a major gap in the transportation network. These are strong factors for the need for replacement.

Additionally, there are an array of traffic and operational issues on the bridge along with geometric issues such as steep grades, sharp curves, and negligible shoulders. The close proximity of the structure to industries on either side of the river causes issues with accessibility. The owners of the adjacent mill have safety concerns related to access to the roadway at this location. A new structure at the existing location would not solve the safety operational issues at this site, therefore, the aforementioned factors inspires a planning study be conducted to identify best alternatives for a replacement bridge.

1.2.3. What are the Objectives/Purposes of the Project?

The WJCTC undertook this Bridge Replacement Planning Study to identify the most suitable location for a replacement bridge over Black River. The Objectives of the Project are as follows:

Location/ Footprint

- The Brownville Bridge location will continue to serve communities currently served by the existing bridge location.
- The Brownville Bridge location will minimize the number of properties impacted.

Operations/ Safety

• The Brownville Bridge location will accommodate existing bridge user patterns.

Community

• The Brownville Bridge location will minimize negative impacts to the community.

Environmental

• The Brownville Bridge location will minimize impacts to sensitive environmental resources.

Multi-Modal Opportunities

• The Brownville Bridge location should be multi-modal to accommodate trucks, buses, automobiles, bicyclists, and pedestrians.

Tourism & Economic Development

• The Brownville Bridge location should conform to the larger regional tourism and economic development vision.

1.3. What Alternative(s) Are Being Considered?

The study area for the Brownville Bridge alternative location was generally defined as the area between the airport to the west of the Village of Brownville and I-81 to the east. The development and evaluation of alternatives followed a multi-step process that narrowed down the number of alternatives using qualitative and quantitative evaluation criteria along with input from stakeholders and the public during each step.

1.3.1 Initial List of Potential Bridge Alternative Locations

Following initial meetings with local and regional stakeholders and the public held on January 31, 2018, the WJCTC along with NYSDOT Region 7 staff began outlining potential locations for a new Brownville Bridge to be constructed. This initial list of potential bridge alternative locations included ten different locations, including replacing the bridge in its existing location, as outlined in Figure 1 below.



Figure 1: Initial Brownville Bridge Alternative Locations

The initial screening process of the above mentioned ten alternatives include evaluating each against NYSDOT Highway Design Manual Criteria, Environmental and Transportation Conditions, and project goals. Attachment A includes the Critical Design Elements for the bridge alternatives to consider. It was determined that all bridge alternatives could be designed to meet these criteria.

Initially, all alternatives were determined to conform to the overarching project purpose and objectives. Environmental conditions were determined based upon locations of wetlands, steep slopes, historic, cultural, or archaeological features, and significant wildlife habitats. These environmental conditions are outlined further in section 1.4, and the following figure portrays topography of the study area as it relates to initial bridge alternative locations.



Figure 2: Topography of Initial Brownville Bridge Alternative Locations



Figure 3: Environmental Conditions

Preliminary Environmental Review

Following an evaluation of environmental conditions, Alternatives G and H were eliminated because of the excessively steep slopes and impacts to wetland areas present on the south side of Black River that would result in alternatives having large land impacts and cost prohibitive features.

Result: Alternatives eliminated due to Environmental Constraints – Alternatives G and H

Origin-Destination Study

An origin-destination assessment was undertaken to understand the travel characteristics of vehicles using the existing Brownville Bridge. Travel patterns of vehicles using the Brownville Bridge were analyzed using a sample of data collected in the month of June 2018. The data was collected by AirSage, a company that specializes in geolocating data based on real time mobile, GPS, and other spatial inputs for population and location based analytics. All data was rendered anonymous and only used for purposes of generalizing trip patterns across the region. The origins and destinations were calculated through a series of zones throughout the region in order to articulate general trends in where vehicles that use the Brownville Bridge originate and where trips are destined. This helps in understanding if locating a bridge alternative too far west or too far east might have an effect on more regional travel patterns. The origin-destination assessment found the following top 5 travel patterns:

- Vehicles traveling between the City of Watertown and areas northwest of the Village of Brownville
- Vehicles traveling between areas northwest of the Village of Brownville and areas southwest of the Village of Brownville.
- Vehicles traveling between areas southwest of the Village of Brownville and areas north of the region near Alexandria Bay.
- Vehicles traveling between areas southwest of the Village of Brownville and areas within the City of Watertown, primarily north of the Black River.
- Vehicles traveling between areas north of the region and areas within the City of Watertown.

Following the assessment of travel patterns, it was found that an alternative bridge location near or to the west of the existing bridge would best serve the region, continuing to accommodate those vehicles traveling between points northwest and southwest of Brownville while continuing to provide access to areas within the City of Watertown. As a result, Alternative I was eliminated because it was too far east of the existing bridge and could potential impact travel patterns. It would also increase traffic passing the General Brown School. All other remaining bridge alternatives were determined to be able to continue to serve regional travel patterns adequately.

Result: Alternatives eliminated due to Origin/ Destination Assessment - Alternative I

1.3.2 Alternatives Carried Forward for Evaluation

Following the initial evaluation of ten alternative bridge locations in which three alternatives were eliminated, WJCTC along with NYSDOT Region 7 staff advanced the remaining seven alternatives into a secondary evaluation process, and created an additional alternative which evolved from Alternatives D and E based on public input, to develop an eighth alternative – Alternative DE. Alternative DE consists of an intersection at NY Route 12E that is the same as Alternative D but has an intersection with NY Route 12F that is the same as Alternative E, resulting in a skewed bridge structure over Black River that intersects both NY Route 12E and NY Route 12F at existing intersections. Figure 4 portrays the eight alternatives, including the existing bridge location, advanced into the secondary evaluation.



Figure 4: Secondary Brownville Bridge Alternative Locations

Project information for each of the alternatives included in the secondary list of potential bridge alternative locations are included in Attachment B.

WJCTC along with NYSDOT Region 7 staff used input from the stakeholder meetings along with community input from meetings to develop the project purpose and objectives outlined in section 1.2.3 and further, to develop evaluation criteria used to evaluate the remaining eight alternatives. The evaluation criteria used in the secondary screening of alternatives is outlined in Figure 5.

It is important to note that the evaluation criteria described below were considered by stakeholder input. At the outset of the project in January/ February 2017, WJCTC hosted a series of community workshops in Brownville at which residents, agency representatives, and other stakeholders were asked to provide initial input on the project, in conjunction with the initial evaluation of alternatives.

Stakeholders described positive and negative aspects of the existing bridge as well as concerns, ideas, and opportunities for a replacement bridge. In particular, stakeholders expressed a desire to

improve circulation, reduce traffic delays, and improve safety as well as to avoid impacts to the school zone and private property owners. Stakeholder feedback is summarized in Appendix G.

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FIGURE 5. EVAILATI	on Criteria Lised I	n Secondary	Screening	
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Category	Criteria
	Bridge avoids or minimizes impact to school zone
Location/ Footprint	Bridge approaches minimize the number and nature of private land needed to acquire
	Bridge and bridge approaches minimize number and nature of land owners impacted
	Existing bridge traffic can remain open while new bridge is constructed
	Location minimizes non-standard geometric design features (i.e. avoid steep slopes, areas of limited site distance).
	Bridge approaches do <u>not</u> result in new traffic issues at either the north or south landing
	Travel distance across Black River is <u>not</u> greatly increased from existing conditions
	Bridge accommodates existing primary truck routes
Operations/	Bridge location does not greatly impact origin/ destination characteristics of existing bridge
Safety	Bridge and bridge approaches minimize the need for Non-Standard Design Features
	Bridge location reduces crash potential
	Bridge location improves existing geometrics
	Improves bicycle and pedestrian accommodations
Environmentel	Bridge and bridge approaches avoid or minimize impact to significant natural features, including wetlands and other sensitive areas
Environmental	Bridge and bridge approaches avoid or minimize impact to significant historical or cultural resources

	Bridge approaches avoid steep slopes
Multi-Modal	Bridge provides areas for public overlook/ viewing
Opportunities	Improves connectivity between Watertown and tourist areas northwest of Watertown
	Bridge continues to support and promote Brownville business district
Tourism and Economic Development	Bridge conforms to larger regional tourism and economic development vision
	Impacts major employers (i.e. school, paper mill)
	Meets roadway owner (NYSDOT) preference to optimize capital construction, operating, and maintenance costs
Cost and Performance	Meets NYSDOT's Operational Needs
	Estimated Total Project Cost

A qualitative evaluation method was used by WJCTC and NYSDOT Region 7 staff to evaluate all eight alternatives against the above outlined evaluation criteria based on the following evaluation rankings:

	Alternative fully conforms to criteria
J	Alternative mostly conforms to criteria
	Alternative partially conforms to criteria
	Alternative minimally conforms to criteria
\bigcirc	Alternative does not conform to criteria

A fully completed evaluation matrix is provided in Attachment C.

Secondary Alternatives Screening

The evaluation of the remaining eight alternatives resulted in the elimination of five locations that were deemed to not conform to the secondary evaluation criteria developed for this project. Alternatives B and C were both eliminated because they conflicted with a culturally sensitive area located on the north side of the Black River, and the span length of the bridge would require piers, thus increasing the project construction and maintenance costs. The alternative to replace the bridge in the existing bridge location was eliminated because it did not solve traffic and safety concerns, did not meet current design standards, did not solve the steep grades encountered on the south side of the Black River, and would result in impacts to traffic during construction (existing bridge would need to be removed resulting in the closure of NY Route 12E until the new bridge opened). Alternative D was eliminated because it did not intersect with an existing street along NY Route 12F (Alternative D E does intersect with Old Rome State Road), resulted in the impact of private property, and would increase traffic impacts through the school zone. Alternative F was eliminated because of its impacts to the school zone along NY Route 12E. Eliminated alternatives are outlined in Figure 6.

Result: Alternatives eliminated due to Secondary Screening – Alternatives B, C, D, F, and the existing bridge location.



Figure 6: Brownville Bridge Alternatives Eliminated Under Secondary Screening

1.3.3 Final List of Alternatives Considered

Alternatives A, DE, and E were advanced into further development and evaluation since those three alternatives were deemed to best conform to the evaluation criteria outlined above. In particular, Alternative A was advanced because it minimizes impacts to culturally and environmentally sensitive areas, allows for a single bridge span, impacts few private property owners, and is cost competitive. Alternative DE was advanced because it aligns with two existing intersections along NY Route 12E and NY Route 12F, minimizes impacts to culturally and environmentally sensitive areas, allows for a single bridge span, will accommodate pedestrians, and is cost competitive. Alternative E was advanced because it aligns with Old Rome State Road at NY Route 12F, minimizes impacts to culturally and environmentally sensitive areas to culturally and environmentally sensitive areas.

pedestrians, and is cost competitive. These three alternatives were revised slightly based on property lines and design criteria, as portrayed in Figure 7, and presented to the public for comment at a meeting held on November 1, 2018.

At the November 1, 2018 Public Meeting, community members and stakeholders were asked to provide feedback about each option, indicating positive and negative aspects of each. Regarding Alternative A, community members noted that positive aspects were the extent that it appeared to impact fewer property owners than other options and may improve congestion. Chief concerns about Alternative A were that it would not be convenient to the Village or residents who want to travel east – and that it will bypass the Village, which may have a deleterious effect on businesses located in the Village. Regarding Alternative DE, community members noted that positive aspects of the option were that is close to the existing bridge, maintains existing traffic patterns through the Village, and connects to the existing street grid. Community members noted they did not like the fact that Alternative DE crosses the river at a skew (with reverse curves) and that it may impact more private property than other options. The public also had concerns that Alternative DE, while further away that E, was too close to the elementary school when compared to Alternative A. Regarding Alternative E, community members liked that this option is closest to I-81, has no curves, and will be good for traffic flow because it aligns with Old Rome State Road. Concerns about this option included potential impacts to property owners and its proximity to the elementary school.



Figure 7: Revised Brownville Bridge Alternative Locations

Soon after presenting Alternatives A, DE, and E to the public at a meeting held on November 1, 2018, Alternative A was revised, based on feedback, to avoid property impacts on NY Route 12F and also to avoid an old dump site on its previous alignment approaching NY Route 12E. The approach to NY Route 12F was moved to the west. Alternative A was straightened and is shown in Figure 8 below.

Figure 8: Revised Alternative A



Cross-sections and more detailed project information for Alternatives A, DE, and E are included in Attachment D.

Final Screening

A traffic Level of Service (LOS) was completed for Alternatives A, DE, and E (outlined further in Section 1.4) to identify potential traffic impacts of the remaining bridge alternatives. As a result of the traffic analysis, it was found that Alternative E would result in a new 3-legged intersection with NY Route 12E, east of Gould Street. This intersection would be located closer to the General Brown School zone, potentially resulting in more school zone conflicts than would result in the other alternatives. Further, the intersection would be a 3-legged intersection, with the bridge road approach terminating at NY Route 12E across from an existing residence, resulting in headlight glare for residential properties not experienced in other alternatives. Finally, Alternative E would impact a Home Business located on NY Route 12E, which is preferred to be avoided. For these reasons, Alternative E was thus eliminated from further consideration; Alternatives A and DE2 were retained for further consideration.

Result: Alternative eliminated due to Final Screening – Alternative E.

1.4 How will the Alternatives Affect the Environment?

Exhibit 1.4-A Environmental Summary					
NEPA Classification	Class III (EA)	BY	FHWA		
SEQR Type:	Type I Action (if project disturbs 10 acres), Unlisted if ultimately less than 10 acres.	BY	NYSDOT		

The following are potential or anticipated permits/certifications/coordination for this project:

NYSDEC:

- State Pollutant Discharge Elimination System (SPDES) General Permit
- New York State Department of Environmental Conservation, Article 24- Freshwater Wetlands Permit (PP 95-02)

- Floodplain Variance
- Wild, Scenic, Recreational Rivers Permit
- Water Quality Certification (Sec 401) of the FWPCA

USACOE

- U.S. Army Corps of Engineers, Section 404 Nationwide Permit #33- Temporary Construction, Access, and Dewatering
- U.S. Army Corps of Engineers, Section 404 Nationwide Permit #14- Linear Transportation Projects

NYSDOS

- Coastal Zone Consistency Certification Statement
- Coastal Zone Local Waterfront Revitalization Certification

EPA

• NPDES General Permit

Coordination

- Coordination with NYSDEC pursuant to the "NYSDEC/NYSDOT Memorandum of Understanding Regarding ECL Article 15 & 24"
- Coordination with New York State Historic Preservation Officer (SHPO)
- Coordination with the U.S. Fish and Wildlife Service
- Coordination with FHWA
- Coordination with the New York Natural Heritage Program

Others

- Construction Staging Permit
- Construction Solid Waste Disposal Permit
- Local Permits
- Coastal Zone Erosion Permit
- Coastal Erosion Hazard Permit (Article 34)
- Indirect Source Air Quality Permit
- Historic or Archaeological Impacts on Federal 106
- New York State Agricultural and Farmland Protection Program review

Other environmental considerations in this study include habitats of plants and animals listed as endangered, threatened, or rare in the vicinity of the study area including; the Indiana and Northern Long Eared Bat and Lake Sturgeon. There aren't any wetlands that would be impacted by any of the alternatives. Surface water resources such as wetlands and floodplains are portrayed in Figure 9. Cultural resources were identified in the project study area and are outlined in Figure 10.

1.4.1. Environmental Considerations

The study area for the alternatives contains sensitive habitats as well as a riverine coastline.

Figure 9: Surface Water Resources



There are four parcels in the study area that are designated Cultural Resource Sites, as identified through the New York State Historic Preservation Office.

Figure 10: Cultural Resource Sites

Item	USN Number	Name	House	Street	City	Status
1	04546.000002	Major Samuel Brown	116	Main St.	Brownville	Listed
2	04546.000035	Vogt House	110	Main St.	Brownville	Listed
3	04564.000032	Masonic Temple	113	East Main St.	Brownville	Listed
4	04546.000034	Vanderwalker House	259	East Main St.	Brownville	Listed

Data: New York State Cultural Resource Information System



Figure 10: Cultural Resource Sites

1.4.2. Traffic Considerations

A traffic analysis was completed to identify potential traffic impacts related to the three alternatives advanced to the final list of alternatives considered. The full traffic analysis is provided in Attachment E.

Overall, traffic patterns under the alternative bridge alignments are expected to be similar to existing travel patterns. This assumes intersection improvements at the intersections of NY Route 12E and NY Route 12F with the new bridge roadway. Alternative A would reduce the amount of through traffic along NY Route 12E (E. Main Street) through Brownville and through the existing intersections of Brown Boulevard and Washington Street. Alternative DE and E are anticipated to retain similar traffic conditions along NY Route 12E through Brownville and the intersections of Brown Boulevard and Washington Street.

The new bridge intersection with NY Route 12E would operate at acceptable conditions as an all-way stop control unsignalized intersection on all approaches under all alternatives. The installation of a northbound left turn lane and an eastbound right turn lane at the intersection under Alternatives DE and E would be required to provide acceptable operational conditions at the intersection during the peak hour periods.

The new bridge intersections with NY Route 12F under Alternative DE and E was found to experience deteriorated operating conditions as an unsignalized intersection during the peak periods. The installation of a traffic signal at the intersection along with an eastbound and westbound right turn lane would be anticipated to provide acceptable operations conditions in both the AM and PM peak periods. A traffic signal installation at the new bridge intersection with NY Route 12F under Alternative A would provide acceptable operating conditions without the need for the additional turn lanes.

Acceptable intersection operations would result at the existing intersections of NY Route 12E with Washington Street and NY Route 12E with Brown Boulevard under all bridge alternative locations in the AM and PM peak periods.

Design guidance future year analysis for a +20-year design horizon was conducted for the bridge intersections with NY Route 12E and NY Route 12F. The analysis was conducted for bridge Alternatives DE and E. The analysis found acceptable intersection operations at both intersections under both alignment options in the future conditions. The analysis assumed a traffic signal installation at the intersection with NY Route 12F along with a similar lane configuration along NY Route 12F as with the existing bridge intersection. The analysis assumed an eastbound right turn

lane and northbound channelized right turn lane at the intersection with NY Route 12E. A queuing analysis intersection found similar requirements for the length of the auxiliary turn lanes between the two alternatives which are summarized as follows:

- Bridge Alternative DE Northbound Channelized Right Turn Lane 100 feet
- NY 12E Eastbound Right Turn Lane 150 feet

1.5. What Are The Costs & Schedules?

The below figure outlines the estimated cost comparison between the two alternatives carried forward into final evaluation, as outlined previously – Alternative A and Alternative DE. The estimate was broken down into the following line items:

Clearing/Building Demo – The cost to clear and grub or to demolish existing buildings within the footprint of each alternative.

Roadway Construction – The cost includes all items to construct the roadway segment of each alternative, the portions of the project between NY Route 12E and NY Route 12F excluding the bridge. This line item includes cut/fill, subbase, pavement courses, drainage swales, and guide railing.

Approach Sidewalk – The cost includes the cost to construct the sidewalk on the roadway segment between NY Route 12E and NY Route 12F excluding the bridge.

Utilities – Anticipated construction cost to accommodate an 8-inch water line and 3-inch gas line along the entire roadway segment including the bridge.

NYS 12E Turn Lanes – This cost includes the modifications required to NY Route 12E to add a turn lane on NYS Route 12E onto the new roadway segment.

Signals – The cost of traffic signals located at the intersection of NY Routes 12E and 12F and the new roadway segment.

Bridge Construction – The bridge costs were determined by calculating the anticipated shoulder break areas and utilizing the "NYSDOT Preliminary Cost Estimate Worksheet (New and Replacement Bridges)", which captures all of the anticipated costs to construct the bridge portion of the project. The bridge cost includes features such as the sidewalk, approach slabs, and consist of either curbing or a barrier on both sides preventing runoff from coming into contact with facia girders (all girders will presumably be weathering steel).

Removal of Existing Bridge – The cost to demolish the existing Brownville Bridge and install measures to close the area off to the public.

Work Zone Traffic Control – The cost to maintain traffic around and through the project site during construction. This cost includes off-site detour signage as well as flagging operations during work on NY Routes 12E and 12F.

Brownville Bridge Replacement Study Preliminary Cost Estimate							
	Alternative A	Alternative DE					
Roadway Length	1400'	1100'					
Bridge Length	190'	190'					
Spans	1	1					
Skew (degrees)	0	15					
Clearing/ Building Demo	\$50,000.00	\$125,000.00					
Roadway Construction	\$570,700.00	\$388,800.00					
Approach Sidewalk	\$ -	\$125,000.00					
Utilities	\$150,000.00	\$125,000.00					
NY Route 12E Turn Lanes	\$ -	\$100,000.00					
Signals	\$ -	\$280,000.00					
Bridge Construction	\$2,505,000.00	\$2,384,000.00					
Removal of Existing Bridge	\$600,000.00	\$600,000.00					
Work Zone Traffic Control	\$50,000.00	\$50,000.00					
CONSTRUCTION SUBTOTAL	\$3,925,700.00	\$4,177,800.00					
Incidentals (10%)	\$392,570.00	\$417,780.00					
SUBTOTAL 2	\$4,318,270.00	\$4,595,580.00					
Contingency (25%)	\$1,080,000.00	\$1,149,000.00					
SUBTOTAL 3	\$5,398,270.00	\$5,744,580.00					
Mobilization (4%)	\$216,000.00	\$230,000.00					
SUBTOTAL 4	\$5,614,270.00	\$5,974,580.00					
Field Change Payment (5%)	\$281,000.00	\$299,000.00					
SUBTOTAL 5	\$5,895,270.00	\$6,273,580.00					
Inflation (6%)	\$354,000.00	\$376,000.00					
SUBTOTAL 6	\$6,249,270.00	\$6,649,580.00					
Right-of-Way	\$38,771.00	\$656,717.00					
TOTAL PROJECT COSTS	\$6,288,041.00	\$7,306,297.00					

Figure 11: Estimated Cost Comparison of Alternatives A and DE

1.6. Which Alternative is Preferred?

On February 5, 2019, staff from the Watertown Jefferson County Area Transportation Council and NYSDOT assessed previous input from the public and stakeholders, as well as supplemental technical information presented by the consulting team regarding the two remaining alternatives – Alternative A and Alternative DE. To assist with this assessment, the evaluation matrix used for the secondary screening of alternatives was revisited to review if additional information prepared on the two alternatives changed any of the results of the evaluation criteria. Some assessments were revised, and the revised evaluation matrix for screening Alternatives A and DE is presented in Attachment F.



Figure 12: Alternative A Proposed Roadway Cross-Section





The key items of discussion between the two alternatives are as follows:

- Alternative A reduces the impact to private residences. Alternative A would not require the removal or relocation of any residences; Alternative DE would require the removal or relocation of 3 to 4 residences.
- Alternative A better addresses the community's concerns of reducing the impact to the school zone. Alternative A brings traffic, especially truck traffic, using the bridge away from the school zone along NY Route 12E; whereas Alternative DE brings some of that traffic using the bridge directly into the school zone.

- Alternative A better serves regional traffic. Alternative A better serves regional traffic and a
 greater number of users by locating the bridge away from congested areas in the Village and
 closer to regional traffic routes.
- Alternative A can achieve acceptable traffic Levels of Service. Alternative DE requires the construction of a northbound left turn/thru lane and right turn lane on the bridge approach road and an eastbound right-turn lane on NY Route 12E, both which require additional pavement, impacting more private property.
- Alternative A can be constructed for less cost than Alternative DE. A number of features such as less sidewalk distance, no need for turning lanes or traffic signals, and fewer property impacts make Alternative A a less costly alternative in terms of construction and maintenance costs than Alternative DE.
- Alternative A results in fewer social and environmental impacts. Alternative A avoids or minimizes social and environmental impacts by not requiring the relocation of residents, staying away from the school zone, and avoiding sensitive historic and environmental areas.

Based on the assessment of public input, supplemental technical information, and revised evaluation matrix and cost, Alternative DE was dropped from consideration and Alternative A chosen as the preferred alternative.

Result: The alternative that best meets the project objectives is Alternative A.

1.7. Public Involvement

The Brownville Bridge Planning Study process was supported by a robust public engagement process, which included the following components:

- 1. **Press releases about the project.** A press release was issued describing the project scope and schedule, and identifying opportunities for the community to provide input. Additional press releases were issued in advance of public meetings.
- 2. Door-to-door outreach along Routes 12F and 12E within the Village of Brownville. At the outset of the project, WJCTC representatives completed a door-to-door engagement in selected areas within the project boundary, focusing on properties that have the potential to be directly impacted by the project. This engagement was an opportunity to provide information about the project, discuss stakeholders' questions about the project, and invite stakeholders to participate in the Stakeholder Workshops.
- 3. **Stakeholder Workshops.** WJCTC hosted two public workshops on January 31, 2018 at the Village of Brownville American Legion. The purpose of the workshops was to share information about the planning study and obtain community feedback about the relocation of the bridge. Two workshops were held, one in the afternoon and one in the evening.
- 4. **Public Meeting #1.** Hosted on Thursday, May 10, 2018 at the General Brown Junior-Senior High School. The purpose of the open house was to share information about previous input received and seek feedback on six potential locations for the bridge.
- 5. **Pop-up booth at General Brown Weekend.** Held on June 2, 2018 at the General Brown Weekend Craft Fair (a major local event). The purpose of the pop-up was to share information about the project and gather input on six potential options for the bridge location.
- 6. **Public Meeting #2**. Held on Thursday, November 1, 2018 at the General Brown Junior-Senior High School. The purpose of the open house was to share information about previous input received and seek feedback on three potential locations.

- 7. **Online Survey/ Comment form.** An online survey provided feedback opportunities for community members who were not able to attend the public meetings. The online survey displayed images of each option and prompted respondents to include positive and negative aspects of each option.
- 8. **Property Owner Outreach**. WJCTC communicated with property owners potentially impacted by the options before they were presented at each meeting.
- Project updates (email and project website). WJCTC developed regular email updates and posted all relevant project information on its website: <u>http://www.wjctc.org/projects/proposed-projects/item/14-rt-12e-brownville-black-river-bridge.html</u>.

Attachment G includes summaries of the stakeholder and public meetings as well as comments received through mail, email, or the project website.

For additional information or to provide any additional comments, please contact:

Mr. Alan Ricalton, Project Manager (PIN) P217.17.882 Brownville Bridge Study Questions or comments email: <u>Al.Ricalton@dot.ny.gov</u> telephone: (315) 785-2441

Mailing Address Watertown Jefferson County Area Transportation Council 317 Washington Street Watertown, New York 13601 Attachment A: Critical Design Elements

Critical Design Elements for Bridge Street									
PIN:		7780.09 NHS (Y/N):			No				
Route No. & Name:		NYS Route 12E Bridge St.	Functional Classification		: Urban Minor Arterial				
Project Type:		Bridge Replacement	Design Classificatior		Urba	an Arterial			
% Trucks:		3.2%	Terrain:		F	Rolling			
ADT:		6943 (2014) 8230 (2018+30)	Truck Access/Qualifyi Hwy.	ng	g Access-Yes Qualifying-No				
Element		Standard		C	Existing Condition	Proposed Condition			
1	Design Speed	40 mph (min.) HDM Sectio) 45 mph (max.) tion 2.7.2.3 A		mph posted	40 mph			
2	Lane Width	Travel Lane: 11 ft. minimum; 12 ft. desirable Bridge Manual (BM) Section 2.2.1 and Table 2-1 HDM Section 2.7.2.3 B, Exhibit 2-4		12 ft.		12 ft.			
3	Shoulder Width	Curbed: 5 ft. (min.) 6 ft. (desired) Uncurbed: 6 ft. BM Section 2.2.1 Table 2-1 HDM Section 2.7.2.3 C, Exhibits 2-4 and 2-3		Highway: varies Bridge: 0 ft.		Curbed: 6 ft.			
4	Horizontal Curve Radius	356 ft. Min. (at e _{max} =4%) HDM Section 2.7.2.3 D, Exhibit 2-4		Unknown		356 ft. Min.			
5	Bridge Roadway Width	2(11.0) + 2(5.0) = 32 ft. Min. 2(12.0) + 2(6.0) = 36 ft. Desirable BM Section 2.2.1 HDM Section 2.7.2.3 B, Exhibit 2-4		2 (12.0) Travel Lanes + 2(0) Shoulders = 24 ft.		2(12.0) Travel Lanes + 2(6.0) Shoulders = 36 ft.			
6	Superelevation	4% Max. HDM Section 2.7.2.3 E and Exhibit 2-1b		Unknown		4% Max.			
7	Stopping Sight Distance (Horizontal and Vertical)	271 ft. Min. HDM Section 2.7.2.3 F, Exhibit 2-4		Unknown		>271 ft.			
8	Maximum Grade	8 ⁴ HDM Section 2.7.	8% HDM Section 2.7.2.3 G, Exhibit 2-3		Unknown	8% Max.			
9	Cross Slope	1.5% Min. to 3% Max. HDM Section 2.7.2.3 H		2% & Varies		2%			
10	Vertical Clearance	14 ft. Minimum 14.5 ft. Desirable 16'-6" ft. Min. for Thru-Truss HDM Section 2.7.2.3 I, BM Section 2.3, Table 2-2		14 ft.		Unlimited			
11	Design Loading Structural Capacity	NYSDOT LRFD Specific Live Load and NYSDOT and provide an inventor higher) per NYSDO BM Section 1.3 and	cations AASHTO HL-93 Design Permit Vehicle y LRFR factor of 1.2 or T BM Section 1.3) 1.5.1, HDM 2.7.2.3 J		Jnposted	HL-93 Live Load (LRFR Rating > 1.2), NYSDOT Design Permit Vehicle			
12	Pedestrian/ ADA Accommodations	Comply with HDM Cha	pter 18, HDM 2.7.2.3 K		t. Sidewalk on existing bridge)	5 ft. Sidewalk on Bridge			

Attachment B: Secondary List of Brownville Bridge Alternative Locations



ALTERNATIVE A







BROWNVILLE BRIDGE REPLACEMENT STUDY ALTERNATIVE B

NEW YORK
STATE OF
OPPORTUNITY.Department of
Transportation





UNITED STATES DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION