MassDOT Highway Construction Contract: 128113

Dennis-Yarmouth: Bridge Replacement, D-07-004=Y-01-003, Route 28 over Bass River including Intersection Improvements at Main Street (Route 28)/North Main Street /Old Main Street

February 26, 2025



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- This project addresses the structurally deficient bridge carrying Route 28 over Bass River in Southern Cape Cod. It will also implement pedestrian accommodations in the adjacent Yarmouth intersection such as a shared use path for bicycles and improved pedestrian safety at the intersection of Main Street and Old Main Street.
- Project Investment meets Beyond Mobility priorities for Safety, Reliability, and Resiliency.



Overview Project Location



LENGTH OF PROJECT = 4326.37 FEET = 0.819 MILES





Scope of Services

Project will address the immediate need to replace the deficient bridge structure that serves as the primary crossing of the Bass River for Southern Cape Cod (Route 28) and to modernize the Yarmouth intersection by introducing new traffic alignment and complete street measures. The bridge structure is currently rated as serious and is being inspected at 6-month intervals.

Improvements Include:

- Building bicycle lanes and a shared use path along Main Street (Route 28)
- Construction of a new parking lot at the corner of Mill Lane and Main Street
- Adjusting pedestrian timings based on MUTCD guidelines
- Reconstructing sidewalks to comply with ADA and MAAB guidelines
- Reconfiguring the Station Avenue North Main Street Intersection
- Upgrading all traffic signal equipment
- Addition of exclusive right turn and left-turn lanes
- Modifying vehicle approach lanes.





Construction Management Approach



- At all times, apart from rolling night closures, the roadway will be open to 2 lanes of traffic and pedestrian traffic. Construction activities will continue throughout summer months.
- Traffic staging will consist of 4 stages with 3 major construction stages.
- During Stage 1 the traffic will be shifted to the south of the existing bridge in two 10'-0" lanes and the north sidewalk will be constructed. This will provide pedestrian access across the river.

- The 2 10'-0" lanes will then be shifted to the north of the remaining existing bridge to construct the southern portion of the bridge. The traffic will then be carried to on the new southern bridge.
- Due to in-water work restrictions and traffic restrictions, these stages will take place over 1757 days or 4 years 10 months.



Questions from Capital Programs Committee

Q1. What is seen as being the cause of the discrepancy between the Office Estimate and submitted low bid price?

Al. After having completed a complete canvass of the technical proposal it appears that the substantial deviation in prices appears in 2 items related to the anticipated navigable waterway reconstruction work and limited site constraints for mobilization and laydown areas. The bid proposal quantities appear to be accurate for the project needs and therefore the likely differences are attributed to confined urban area on Route 28, site access constraints, and schedule risk associated with marine work and substantial utility relocations.

Q2. What is the condition of the existing bridge?

A2. The existing bridge is structurally deficient and has undergone a number of repairs to ensure travel but requires MassDOT to undertake a more permanent solution.



Procurement and Budget

- Project Advertised September 13th 2024
- Engineer's Estimate was \$44,232,000
- Bid Opening was January, 22nd, 2025
- Four (4) Bids were received:

MIG Corporation (Disqualified)	\$ 60,165,565.25
A.A. Will Corp.	\$ 64,706,362.50
JF White Contracting Co	\$ 76,026,180.00
The Middlesex Corporation	\$ 86,295,748.40

Line Item	Budget
Bid Amount	\$64,706,362,.50
Contingencies (10%)	\$6,474,726.25
Construction Engineering (5%)	\$ 3,235,318.13
Traffic Police	\$1,300,000
Trainees	<u>\$4,000.00</u>
Total	\$75,720,406.88

Funding: (FA) Federal Aid FA - Hwy Infrastructure.

- Program (HIPBR) Bridge
- Program (HSIP) Highway



The Price Proposals were reviewed by engineers in the Construction, Construction Contracts, Design-Build Sections, and Preliminary Design Consultants, was found to be reasonable and recommended to be awarded to the contract apparent low bidder.

Staff request that the MassDOT Board of Directors authorize the Secretary of Transportation, or their designee, to award and execute MassDOT Contract No. 612574 titled Dennis-Yarmouth: Bridge Replacement, D-07-004=Y-01-003, Route 28 over Bass River including Intersection Improvements at Main Street (Route 28)/North Main Street/Old Main Street, for Bridge Replacement and Highway Improvement, with A.A. Will Corporation, in the amount of \$64,706,362.50.



ThankYou



	STAF	F SUMMAR	Y	
Secretary Approval	X MassDOT Board	l Approval	Prepared by: Rob	ert Antico
Department: Highway Division	Manager: Michael O'Dowd	email: Michael.ODo	wd@dot.state.ma.us	Telephone: 617-910-8564
Route 28 over Bass River	2574-128113 titled Dennis-Y including Intersection Improv e Replacement and Highway	vements at Main Stre		
		Implications		
X Capital Budget	Operating Budget	🗆 Legal	□ Other	

PURPOSE:

The purpose of this Staff Summary is to request that the Board of Directors authorize and approve the Secretary/CEO, or her designee, to execute MassDOT Contract No. 612574-128113 titled Dennis-Yarmouth: Bridge Replacement, D-07-004=Y-01-003, Route 28 over Bass River including Intersection Improvements at Main Street (Route 28)/North Main Street/Old Main Street, for Bridge Replacement and Highway Improvement, with A.A. Will Corporation, for the amount of <u>\$64,706,362.50</u> for a total duration, not to exceed, 4 years 10 months (1,757) days from Notice to Proceed (NTP).

TOTAL PROGRAM BUDGET:

The project has a total program budget of \$75,720,406.88, which includes the following:

Bid Amount	\$64,706,362.50
Contingencies (10%)	\$6,474,726.25
Construction Engineering (5%)	\$3,235,318.13
Traffic Police	\$1,300,000.00
Trainees	\$4,000.00

Total

\$75,720,406.88

DISCUSSION:

The award of Contract No. 128113 titled Dennis-Yarmouth: Bridge Replacement, D-07-004=Y-01-003, Route 28 over Bass River including Intersection Improvements at Main Street (Route 28)/North Main Street/Old Main Street, will address the immediate need to replace the deficient bridge structure that serves as the primary crossing of the Bass River for Southern Cape Cod (Route 28) and to modernize the Yarmouth intersection by introducing new traffic alignment and complete street measures. As part of this project the drainage and utilities in the area will also be replaced reducing pollutants entering Bass River.

Bridge D-07-004=Y-01-003 carries Route 28 over the Bass River serving southern Cape Cod and is the second major crossing of the river besides Route 6. The existing structure is composed of multiple concrete deck spans. The bridge was originally constructed in 1935. Since that time it has been repaired three times, once reinforcing the piles in the 1960's and then adding additional superstructure support in 2014 and 2024. The bridge structure is currently rated as serious and is being inspected at 6-month intervals. The new bridge will be a modern pipe pile and NEXT beam bridge that will widen the corridor and provide two forms of pedestrian access with a northern isolated sidewalk and a southern isolated shared use path. The bridge will incorporate updated amenities such as LED bridge pedestrian lighting and outlook areas to view the highly trafficked river.

The intersection of Main Street (Route 28), North Main Street, and Old Main Street is currently a signalized intersection in Yarmouth located to the West of the bridge to be replaced. As Route 28 is the main Southern Cape Cod roadway travel and tourist route, the intersection services both pedestrians and vehicles traveling from western Cape Cod to Eastern Cape Cod and vis versa. The current configuration is pedestrian adverse and has no Complete Street accommodations.

Vehicle improvements include:

• Reconfiguring the Station Avenue at North Main Street intersection to the north of the primary intersection

Prepared by: Robert Antico Date: 02/05/2025

- Upgrading all traffic signal equipment
- Modifying traffic signal timing
- Addition of exclusive right turn lane on the Old Main Street approach
- Extending exclusive left-turn lanes
- Modifying vehicle approach lanes.

Pedestrian accommodations include:

- Building bicycle lanes and a shared use path along Main Street (Route 28)
- Construction of a new parking lot at the corner of Mill Lane and Main Street
- Adjusting pedestrian timings based on MUTCD guidelines
- Reconstructing sidewalks in compliance with current Americans with Disabilities Act (ADA) and Massachusetts Architectural Access Board (MAAB) guidelines.

This reconstruction will seamlessly link Dennis and Yarmouth for pedestrians and vehicles and allow tie ins to adjacent town projects to increase pedestrian movement. As part of the intersection improvement project utilities will be replaced along the corridor and an infiltration system will be added to the trunk line along Rt. 28. Coinciding with this project, a sewer line is being added to the approaches of the project which will tie into the future sewer system for Cape Cod.

PROCUREMENT:

On September 13th, 2024, the Highway Division advertised this contract for bids. On January 22nd, 2025, the Highway Division opened bids for this contract and four (4) bids were received. A.A. Will Corp. was the lowest responsible and eligible bidder with a bid price of **<u>\$64,706,362.50</u>**.

The bids were reviewed by engineers in the Construction, Construction Contracts and Project Management Sections. The Highway Division has accepted the bid submitted by A.A. Will Corp. which at <u>\$64,706,362.50</u> is 46% higher than the office estimate of <u>\$44,232,000</u>. Due to the large discrepancy, a bid assessment was undertaken where quantities were confirmed and unit prices were evaluated.

The following is the list of bidders with the corresponding bid prices:

MIG Corporation (Disqualified Due to Bond Exceedance)	\$60,165,565.25
A.A. Will Corp.	\$64,706,362.50
J F White Contracting Co.	\$76,026,180.00
The Middlesex Corporation	\$86,295,748.40

Disadvantaged Business Enterprise ("DBE") participation is required. The DBE requirement for this Project is 15.3% of the Contract.

MassDOT's Office for Diversity and Civil Rights has reviewed the DBE information included in the Proposal of the chosen bidder and recommends award of the DB Contract to this team.

FINANCIAL IMPACT/BUDGET SOURCE:

This action is funded through various Federal Aid sources HIP, BR

FUTURE ANTICIPATED AUTHORIZATIONS:

N/A

RECOMMENDATIONS:

It is recommended that the Board of Directors authorize the Secretary, or her designee, to award and execute MassDOT Contract No. 128113 titled Dennis-Yarmouth: Bridge Replacement, D-07-004=Y-01-003, Route 28 over Bass River including Intersection Improvements at Main Street (Route 28)/North Main Street/Old Main Street, for Bridge Replacement and Highway Improvement, with A.A. Will Corporation, in a form approved by the General Counsel, in the amount of \$64,706,362.50.

Contract No./Subject: 612574 titled Dennis-Yarmouth: Bridge Replacement, D-07-004=Y-01-003, Route 28 over Bass River including Intersection Improvements at Main Street (Route 28)/North Main Street /Old Main Street, for Bridge Replacement and Highway Improvement

Prepared by: Robert Antico Date: 02/05/2025

COORDINATION WITH:

Office of Diversity and Civil Rights Engineering and Maintenance Environmental Capital Programs Budget and Finance Legal Department [+additional departments, if needed]

SIGNATURE PAGE:

See Page 4.

ATTACHMENTS:

Tab A – Vote [to be completed by Legal]

RESOURCE/REFERENCE DOCUMENTS:

Bid Tabulations Eligible Bidders Listing Low Bidder by Bid Item with Affidavit Schedule of Participation by Disadvantaged Business Enterprises (DBES) Bid Comparison Memorandum

Secretary Approval	X MassDOT Bo	X MassDOT Board Approval Prepared by		Prepared by:	Robert Antico	
Department: Highway Division	Program Manager: Robert Antico	Program Manager: email:			Telephone: 617.686.2984	
003, Route 28 over Bas	12574 titled Dennis-Yarm s River including Intersec Id Main Street, for Bridge	tion Improven	nents at Main Str	eet (Route	Date Prepared: 02/05/2025	
		Implic				
Capital Budget	Operating Budget	□ Legal	□ Other			
RECOM	MMEND APPROVAL		REC	OMMEND A	PPROVAL:	
	Michael O'Dowd ctor of Major Projects			John Bechard Deputy Chief Er		
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Cr	David Pottier hief Financial Officer			Sue Cob Acting General (
RECOM	MMEND APPROVAL	:				
M	onica Tibbitts-Nutt Secretary/CEO					