ARTICLE 12. To see if the Town will vote **to appropriate the sum of \$510,000** to be expended, under the direction of Select Board **to pay costs of construction of a replacement culvert on Willow Road**, including the payment of all costs incidental or related thereto (the "Project"); and to meet this appropriation, authorize the Treasurer with the approval of the Select Board to borrow under and pursuant to Massachusetts General Laws Chapter 44, Section 7, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor, and that any premium received by the Town upon the sale of any bonds or notes approved by this vote, less any such premium applied to the payment of the costs of the issuance of such bonds or notes, may be applied to payment of costs approved by this vote in accordance with Chapter 44, section 20 of the General Laws, thereby reducing the amount to be borrowed to pay such cost by a like amount; and to authorize the Chief Procurement Officer and the Select Board to enter into any and all agreements and execute any and all instruments as may be necessary on behalf of the Town to effectuate the construction of said Project; provided further that the amount of borrowing authorized pursuant to this vote shall be reduced by any grant amount received prior to the issuance of any bonds or notes under the authority of this vote; or take any other action thereon.

Sponsored and supported by Select Board Finance Committee recommends adoption of this article

MOTION: I move to borrow and appropriate the sum of \$510,000 to be expended, under the direction of Select Board to pay costs of construction of a replacement culvert on Willow Road, as described in and in accordance with Article #12 of this warrant.

COMMENTS: This project is to replace a collapsing and antiquated culvert on Willow Road (Route 133). The Town has applied for a grant that would cover 2/3rds of the cost of the project, and we are cautiously optimistic as our project does comply with the grant requirements – we just don't know how many competing projects are seeking the same grant. The grant information will be announce later this summer.

TOWN OF BO CAPITAL PROJEC			
Department: Department of Public Works	Date: 03/03/2021		
Project Title:Willow Road Culvert Replacement_ Basis for Estimate: _ <i>Engineering Estimate, TEC</i> (please attach backup documentation)			
List project costs by fiscal year/ Estimated Project Costs FY2021 \$510,000 FY2022 \$ FY2023 \$ FY2024 \$ FY2025 \$	Project Description: This project is to fund the replacement of a collapsing and antiquated culvert near #86 Willow Road (Rte. 133). The culvert replacement has been permitted through the Conservation Commission and MA-DEP. The Town has applied for a Building Resilient Infrastructure and Communities (BRIC) Grant administered through FEMA in the hopes of offsetting costs. The status of the grant is expected to be provided sometime in the Summer of 2021. The latest engineering estimate from consulting engineer The Engineering Corp. is attached.		
Net Annual Impact on Operating Budget: Mark Molecular Department Head Signature			

	: 1/6/2021		TEC PROJ. #: T0998			
DESCRIPTION: Willow Road Culvert Replacement LOCATION: 84 Willow Road - Boxford, MA		DESIGN STAGE: 100%				
ESTIMATOR			the second s	HECKED BY: R	TOTAL	
SPEC ITEM		UNIT	UNIT PRICE	<u>QTY</u> 0.1	\$3,000.0	
101.	CLEARING AND GRUBBING	A	\$30,000.00		\$3,000.0	
120.1	UNCLASSIFIED EXCAVATION	CY	\$40.00	30		
140.	BRIDGE EXCAVATION	CY	\$55.00	760	\$41,800.0	
148.01.	DREDGING AND STOCKPILING OF STREAMBED MATERIAL	CY	\$150.00	30	\$4,500.0	
150.	ORDINARY BORROW	CY	\$40.00	50	\$2,000.0	
151	GRAVEL BORROW	CY	\$45.00	45	\$2,025.0	
151.2.	GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES	CY	\$55.00	550	\$30,250.0	
156.	CRUSHED STONE	TON	\$50,00	50	\$2,500.0	
170.	FINE GRADING AND COMPACTING	SY	\$6.00	90	\$540.0	
402.	DENSE GRADED CRUSHED STONE FOR SUB-BASE	CY	\$70.00	25	\$1,750.0	
415.1	PAVEMENT STANDARD MILLING	SY	\$11.00	60	\$660.0	
443	WATER FOR ROADWAY DUST CONTROL	MGL	\$65.00	3	\$195.0	
450.23	SUPERPAVE SURFACE COURSE - 12.5 (SSC - 12.5)	TON	\$125.00	25	\$3,125.0	
450.32	SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC - 19.0)	TON	\$125.00	40	\$5,000.0	
452.	ASPHALT EMULSION FOR TACK COAT	GAL	\$10.00	25	\$250.0	
453.	HMA JOINT SEALANT	FT	\$1.00	55	\$55.0	
482.3	SAWCUTTING ASPHALT PAVEMENT	FT	\$5.00	55	\$275.0	
620.12	GUARDRAIL, TL-2 (SINGLE FACED)	FT	\$30.00	230	\$6,900.0	
627.1	TRAILING ANCHORAGE	EA	\$2,000.00	2	\$4,000.0	
627.82	GUARDRAIL TANGENT END TREATMENT, TL-2	EA	\$4,000.00	2	\$8,000.0	
630.2	HIGHWAY GUARD REMOVED AND DISCARDED	FT	\$6.00	220	\$1,320.0	
697.	FLOATING SILT FENCE	FT	\$40.00	30 .	\$1,200.0	
748.	MOBILIZATION	LS	\$20,000.00	1	\$20,000.0	
751.	LOAM BORROW	CY	\$60.00	45	\$2,700.0	
765.	SEEDING	SY	\$2.00	290	\$580.0	
767.121	SEDIMENT CONTROL BARRIER	FT	\$7.00	400	\$2,800.0	
769.	PAVEMENT MILLING MULCH UNDER GUARD RAIL	FT	\$8.00	300	\$2,400.0	
852	SAFETY SIGNING FOR TRAFFIC MANAGEMENT	SF	\$20.00	275	\$5,500.0	
853.2	TEMPORARY BARRIER	FT	\$50.00	50	\$2,500.0	
859.1		DAY	\$5.00	180	\$900.0	
	REFLECTORIZED DRUM WITH SEQUENTIAL FLASHING LIGHTS					
866.106	6 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC)	FT	\$2.00	180	\$360.0 \$360.0	
867.106	6 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC)	FT	\$2.00	180	\$5,460.0	
983.1.	RIPRAP	TON	\$76.00	85	and the second s	
991.	CONTROL OF WATER - STRUCTURE NO	LS	\$20,000.00	1	\$20,000.0	
995.01.	BRIDGE STRUCTURE, BRIDGE NO	LS	\$ 253,601.52	1	\$253,601.5	
			CONSTRUCTION SUBTOTAL =		\$438,706.5	
			CONSTRUCTION PERIOD SERVICES=		\$43,870.6	
			5% CONTINGENCY=		\$21,935.3	
			CONSTRUCT	ION TOTAL =	\$504,512.5	
	Earth-works and material			Subtotal=	\$93,735.0	
	Pavement Items			Subtotal=	\$11,850.0	
	Roadway Safety and Pavement markings			Subtotal=	\$32,240.0	

Environmental and Erosion Control Mobilization Bridge Structure Subtotal= \$95,753.00 Subtotal= \$11,850.00 Subtotal= \$32,240.00 Subtotal= \$27,280.00 Subtotal= \$20,000.00 Subtotal= \$253,601.52 TOTAL= \$438,706.52

U:\Willow Rd Culvert - TEC\FEMA Grant\Application Backup Docs\BCA BACKUP\Copy of T0998_100%_Estimate-Revised 1-4-2021 Estimate 1 of 1