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PA-01-VT-4066-PW-00027(0) <u>P</u>	
Applicant Name: LOWELL (TOWN OF)	Application Title: JCLOC10 Mines Rd Culvert 26
Period of Performance Start: 06-22-2012	Period of Performance End: 12-22-2013

Bundle Reference # (Amendment #)	Date Awarded

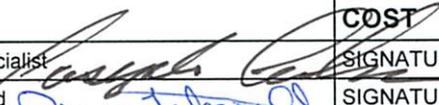
Subgrant Application - FEMA Form 90-91

Note: The Effective Cost Share for this application is 75%

FEDERAL EMERGENCY MANAGEMENT AGENCY PROJECT WORKSHEET					
DISASTER		PROJECT NO.	PA ID NO.	DATE	CATEGORY
FEMA	4066 - DR -VT	JCLOC10	019-40525-00	08-06-2012	C
APPLICANT: LOWELL (TOWN OF)				WORK COMPLETE AS OF: 08-15-2011 : 17 %	
Site 1 of 1					
DAMAGED FACILITY: Mines Rd Culvert 26 (Town of Lowell)			COUNTY: Orleans		
LOCATION: Current Version: Cheney Rd. A class III rural local asphalt road is located .421 miles from the intersection with VAG Rd. in the town of Lowell, VT.				LATITUDE: 44.77016	LONGITUDE: -72.51835
DAMAGE DESCRIPTION AND DIMENSIONS: Current Version: During the incident period of May 29, 2012, a severe storm traversed northern Vermont resulting in flooding, high winds and a possible tornado. This resulted in Addison, Lamoille and Orleans counties being designated as eligible to receive reimbursement for recovery efforts that included both emergency and permanent work. This project worksheet (PW) covers the permanent repairs to be completed on the stream crossing where Burgess Branch crosses Mines Road (TH-2), a class 2 road (GPS Coordinates 44.77016, -72.51835 The Stream crossing consists of a 72 inch x 65 foot corrugated metal pipe (CMP) culvert. Heavy rain water flow caused the stream to run under the culvert damaging more that 50 per cent of the culvert.					
SCOPE OF WORK: Current Version: Scope of Work The repairs at this site will require the removal and disposal of the existing 72in x 65ft CMP and replacement with a new culvert. The Vermont Agency of Transportation (VAOT) completed a preliminary hydraulic study for this site which determined the Q25 for this site and recommended replacement structures as well; however, eligible reimbursement costs under FEMA's Public Assistance (PA) Program are limited to an "in-kind" replacement structure that is upgraded in accordance with eligible codes and standards. Consistent with the Road and Bridge Standards adopted by the Town of Lowell (29 March 2011), FEMA performed a Culvert Sizing Evaluation (attached) to determine the size of an hydraulically adequate in-kind replacement structure. While the Culvert Sizing Evaluation determined that a 78 in x 65ft diameter was adequate for this location FEMA considers Corrugated Metal Multi-plate Arch Culvert measuring 69in x 98in x 65ft to be a cost-effective replacement to limit the need to change road grades to assure sufficient depth of cover material over the culvert. This approach will require excavation of material over an area 65ft x 24ft x 8ft (approx. 462 cubic yards (CY)). The new culvert will be re-covered with gravel and soil and a new roadway approach consisting of sub-base gravel will be installed over the excavation ((24ft x 65ft x 8in)/27 = 38 CY). The road surface will be finished with a 3 in-thick layer of bituminous concrete pavement 24' x 65' x.25 = 28.71T and 4" yellow line will be applied. Additional costs associated with non-permanent items during construction were accounted for in the attached Cost Estimate Format (CEF) and include: a sandbag check dam, a 130 gpm water pump to serve as a by-pass for stream flow across the installation site, and highway barricades to close the road during culvert work. The attached CEF itemizes the estimated costs associated with the completion of this scope of work. In addition to the eligible scope of work described above, Hazard Mitigation					

opportunities were identified for this project and include the construction of concrete Class B, steel reinforced head wall and wing-walls at both the entrance and outlet of the culvert. The estimated cost of the HMP is \$12,193.00. The total estimated cost for the eligible scope of work, including the HMP and potential construction contingencies is \$82,930.00. The Applicant has elected to not request any direct administrative costs directly chargeable to this specific project. The costs associated with the eligible scope of work for this project have been estimated. Large project funding (>\$63,900) is based on documented actual costs for the eligible scope of work. This will require an amendment to the original project worksheet to be written, after the work is complete, to capture the over-run/under-run. If the applicant decides to make improvements to the facility beyond that described in the eligible scope of work (e.g. changes in size, footprint, structure type), the applicant must request approval for an improved project from the State of Vermont prior to the start of construction. If approved, reimbursement through the PA program will be capped at the cost of the eligible scope of work. Failure to obtain approval for an improved project can place funding at risk. Federal funding is contingent upon the Applicant acquiring all necessary federal, state and local permits. Non compliance with this requirement may jeopardize the receipt of federal funds. The Applicant has indicated that this work will be completed using a contractor. The Applicant must comply with its Local, State and/or Federal procurement laws, regulations and procedures when seeking proposals and letting contracts for eligible work. The Project Specialist has reviewed all documentation required for this Project Worksheet (PW). These documents are attached to the PW and are on file at the Applicant's offices. The project specialist has advised the Applicant to retain these records for a period of three years from the date of closeout.

Does the Scope of Work change the pre-disaster conditions at the site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Special Considerations included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Hazard Mitigation proposal included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is there insurance coverage on this facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

PROJECT COST					
ITEM	CODE	NARRATIVE	QUANTITY/UNIT	UNIT PRICE	COST
1	0000	Work to be Completed	0/LS	\$ 0.00	\$ 0.00
2	9000	CEF COST ESTIMATE	1/LS	\$ 70,737.00	\$ 70,737.00
3	0909	Hazard Mitigation Proposal	1/LS	\$ 12,193.50	\$ 12,193.50
				TOTAL COST	\$ 82,930.50
PREPARED BY JOSEPH COMBES		TITLE Project Specialist	SIGNATURE 		
APPLICANT REP. Alden Warner		TITLE Select Board	SIGNATURE 		