

# Single Application for Assistance

Web Application Id: 9071074

Single Application Id: 202201074927

Applicant: Manheim Borough

Program Selected: Hazard Mitigation Grant Program (HMGP)

## Applicant Information

Applicant Entity Type:	Government
Applicant Name:	Manheim Borough
NAICS Code	9211
FEIN/SSN Number	XXXXXXXXXX
DUNS Number:	048326177
UEI Number:	U981NZNVPYZ7
Top Official/Signing Authority:	James R Fisher
Title:	Chief Administrative Officer, Borough Manager
SAP Vendor #:	XXXXXX
Contact Name:	James R Fisher
Contact Title:	Chief Administrative Officer, Borough Manager
Phone:	(717)-665-2461 Ext.
Fax:	
E-mail:	jimfisher@manheimboro.org
Mailing Address:	15 E High St
City:	Manheim
State:	PA
Zip Code:	17545

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### Enterprise Type

Indicate the types of enterprises that describe the organization listed above. You may select more than one type.

<input type="checkbox"/> Advanced Technology	<input type="checkbox"/> Agri-Processor	<input type="checkbox"/> Agri-Producer	<input type="checkbox"/> Authority	<input type="checkbox"/> Biotechnology / Life Sciences
<input type="checkbox"/> Business Financial Services	<input type="checkbox"/> Call Center	<input type="checkbox"/> Child Care Center	<input type="checkbox"/> Commercial	<input type="checkbox"/> Community Dev. Provider
<input type="checkbox"/> Computer & Clerical Operators	<input type="checkbox"/> Defense Related	<input type="checkbox"/> Economic Dev. Provider	<input type="checkbox"/> Educational Facility	<input type="checkbox"/> Emergency Responder
<input type="checkbox"/> Environment and Conservation	<input type="checkbox"/> Exempt Facility	<input type="checkbox"/> Export Manufacturing	<input type="checkbox"/> Export Service	<input type="checkbox"/> Food Processing
<input checked="" type="checkbox"/> Government	<input type="checkbox"/> Healthcare	<input type="checkbox"/> Hospitality	<input type="checkbox"/> Industrial	<input type="checkbox"/> Manufacturing
<input type="checkbox"/> Mining	<input type="checkbox"/> Other	<input type="checkbox"/> Professional Services	<input type="checkbox"/> Recycling	<input type="checkbox"/> Regional & National Headquarters
<input type="checkbox"/> Research & Development	<input type="checkbox"/> Retail	<input type="checkbox"/> Social Services Provider	<input type="checkbox"/> Tourism Promotion	<input type="checkbox"/> Warehouse & Terminal

Government,

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### Project Overview

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### Project Overview

**Project Name:**

Manheim Borough Advance Assistance Application

**Is this project related to another previously submitted project?**

No

**If yes, indicate previous project name:**

**Have you contacted anyone at PEMA about your project?**

No

**If yes, indicate who:**

**Program Selected:** Hazard Mitigation Grant Program (HMGP)

## Project Site Locations

<b>Address:</b>	40.157290, -76.388130
<b>City:</b>	Manheim
<b>State:</b>	PA
<b>Zip Code:</b>	17545
<b>County:</b>	Lancaster
<b>Municipality:</b>	Manheim Borough
<b>PA House:</b>	Mindy Fee (37)
<b>PA Senate:</b>	Ryan Aument (36)
<b>Designated Areas:</b>	

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## Project Budget

	Hazard Mitigation Grant Program (HMGP)	25% Match State	Total
<b>Project costs</b>	\$3,463,170.75	\$1,154,390.25	
Pre-Award Costs (App Dev)	\$43,050.00	\$14,350.00	\$57,400.00
Engineering/Design	\$61,125.00	\$20,375.00	\$81,500.00
Labor	\$90,000.00	\$30,000.00	\$120,000.00
Land Restoration & Stabilization	\$3,108,870.75	\$1,036,290.25	\$4,145,161.00
HMGP Other	\$160,125.00	\$53,375.00	\$213,500.00
<b>Total</b>	\$3,463,170.75	\$1,154,390.25	
		<b>Budget Total:</b>	\$4,617,561.00

### Basis of Cost

Provide the basis for calculating the costs that are identified in the Project Budget.

### Budget Justification

### Budget Narrative

The narrative must specifically address each of the cost items identified in the Project Budget section. If an amount is placed in any of the OTHER categories, you must specify what the money will be used for. **NOTE:** Some programs have specific guidelines regarding the narrative necessary to qualify for that particular resource. Please read the Program Guidelines for details.

Pre-Award Costs (App Dev) - As per contract between the Borough of Manheim and Tetra Tech.

Engineering/Design - 30% design specifications completed by Tetra Tech.

Site/Land Acquisition - 30% design specifications completed by Tetra Tech.

Labor - 30% design specifications completed by Tetra Tech.

Land Restoration & Stabilization - 30% design specifications completed by Tetra Tech.

Other - 5% management/contingency costs from 30% design specifications completed by Tetra Tech.

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## Project Narrative

### DETAILED PROJECT DESCRIPTION

Explain the proposed project in very specific detail so that a reviewer who doesn't know your community can fully understand what you intend to do. This is the scope of your project.

Answer each question completely with who, what, where, why and how in detail.

(Answering only Yes or No may cause application to be ranked as ineligible for funding).

What is the problem this project will solve? HOW will you solve the problem?

Is it a repetitive problem? Give all specifics? How often?

(Example: Flooding has occurred 10 times since 1972 since the construction of Park Mall upriver. (Ross River)

Does it pose a significant health or safety risk if left unsolved? What kind of risk?

What is/are the name(s) of the bodies of water (creek, river, stream, etc?) Contributing to this problem?

How often does this flooding or disaster occur?

What is the amount of rainfall for each event

Give hydrology information. (See instructions for explanation)

Where did your information come from? (Official records, newspaper articles, etc-attach a copy

### PROJECT SYNOPSIS

Located in Pennsylvania's historic Lancaster County, Manheim Borough has existed as a community longer than the United States has existed as a nation, having been first laid out in 1762. This long-standing locality is submitting a Hazard Mitigation Grant Program (HMGP) application to PEMA for consideration for grant funding. The project which Manheim Borough is seeking grant support for is the Chiques Creek Channel Improvements developed from the Chiques Creek Flood Resiliency Study. Published in April 2018 by the Susquehanna River Basin Commission (SRBC) and the U.S. Army Corps of Engineers (USACE), the Chiques Creek Flood Resiliency Study used hydrological and hydraulic models to evaluate a total of 16 potential modifications – or “alternatives” – to Chiques Creek. Two of these alternatives, stream improvements designated as Alternative C2 and Alternative C3, were deemed to be the most viable. It is for these stream improvements that an MHGP grant is being pursued.

### PROBLEM TO BE MITIGATED

According to the Chiques Creek Flood Resiliency Study, flooding is a “regular occurrence” along this body of water, specifically at the stretch of the creek that runs along the south side of Manheim. In fact, flooding is so closely associated with this borough that it's part of Manheim's reputation in the wider region, as well as a major concern for the borough's leaders and residents. All of Manheim's stormwater runoff flows into Chiques Creek. Because of this, during heavy rains the creek will not just fill up directly with falling rainwater, it will also collect the resulting deluge of runoff flowing through the town, adding to the potential floodwaters forming in the creek.

A historic weather event that looms large in local memory took place in September of 2011, when Tropical Storm Lee caused the Chiques Creek to overflow into adjacent parts of Manheim, releasing a 100-year-flood with waters as high as 4 feet. Nearby buildings were inundated with water at their lower levels, resulting in the total loss of five buildings, damage to hundreds of other buildings, and millions of dollars in losses. One business that that endured particularly heavy damage is Hondru Ford, an automobile dealership near the creek, which experienced over three million dollars in total damage, about \$138,000 in lost revenue due to the suspension of business, and an estimated minimum of four million dollars in cleanup costs. The flooded area also included a key five-way road intersection (where New Charlotte Street meets with Eby Street and South Main Street), and this

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disrupted key transportation routes to and from the community, including those which connect to emergency medical services. While Tropical Storm Lee may feature prominently in local history, it is not the only event of this sort to strike Manheim. There was also the Great Flood of 1936 and Hurricane Agnes in 1972, both of which caused 100-year-floods in this part of the state. Moreover, Tropical Storm Lee was not even the only major local weather event to take place here in 2011. Less than two weeks prior in August, the dying remnants of Hurricane Irene also visited Lancaster County. Considering how frequently storms and flooding have come to Manheim and neighboring communities, it is not difficult to see how worse things could be in the future, as global climate change causes even more frequent and severe storms, floods, and other weather events.

### HOW THIS PROJECT CAN HELP

Along with utilizing nature-based solutions, this project should render a number of additional natural benefits along the creek. These include erosion protection, sediment reduction, floodplain restoration, and the creation of a sizable riparian buffer of about 5.5 acres. Chiques Creek is part of a larger local watershed that has numerous tributaries, covers 126 square miles of Lancaster County, and connects to seven other communities besides Mannheim. Public outreach performed by such stakeholders – as reported in the 2020 Report Card and Action Update for the watershed – outline for us some of the natural and public benefits which local residents associate with Chiques Creek and its watershed. These include healthy natural environments, sources of clean drinking water, access to nature, and opportunities for fishing and swimming.

Of course, though Chiques Creek has much to offer in the benefits it provides to the people of Manheim and Lancaster County, it still poses a threat in the form of flooding. Previously, Manheim Borough has implemented flood control improvements upstream and downstream from this part of the creek, at the locations of Rife Run and Memorial Park, showing that this next project is part of a longer continuation of local flood control efforts. In these projects, the borough has also made opportunities for the public to be involved through focus groups, has worked to increase public awareness of these undertakings through advertising, and has covered these projects in the course of their regular Borough Council meetings. Unfortunately, despite the obvious flooding risks to Manheim and neighboring communities, Manheim Borough is the only locality in this area actively pursuing flood control planning efforts. Once the project is successfully funded and completed, it is possible that the Manheim's Chiques Creek Channel Improvements might prompt neighboring communities to pursue flood control planning projects of their own, so that they too might experience similar hazard mitigation and environmental benefits. Further signifying the importance of the Chiques Creek Channel Improvements in regard to hazard mitigation, the project is specifically included in the Lancaster County Hazard Mitigation Plan (HMP).

### PROJECT OVERVIEW

This project seeks to implement two of the alternatives – specifically Alternative C2 and Alternative C3 – developed in the SRBC/USACE Chiques Creek Flood Resiliency Study. Alternative C2 is a stream improvement project to take place between Eby Street and South Main Street in Manheim. The stream will be re-aligned, with a natural channel being created to improve the flow of the creek. When compared to existing flood elevation measurements for this stretch of Chiques Creek, computed flood elevations for Alternative C2 predict a maximum decrease in flood depth of 2.5' for a 10-year flood event. While Alternative C2 would be beneficial as a stand-alone measure for flood mitigation at Chiques Creek, it has been decided that adding Alternative C3 to this project can increase its flood

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mitigation potential by geographically expanding it to include another troublesome stretch of the creek. Alternative C3 is situated between Fruitville Pike and Steigel Street, the latter of which includes a bridge over the creek that itself might be closed two or three times a year when the waters runs high, and will restore a natural floodplain on the creek's east bank by adding a floodplain bench with a stone or concrete wall. With this stream improvement the existing streambed would be maintained, and the conveyance of water and sediment under the existing railroad bridge (just downstream from the often-closed Steigel Street bridge) would be improved. According to computer models, the implementation of both C2 and C3 would add an extra 1.4 feet in flood depth reduction for a 10-year level event, on top of the 2.5-foot reduction that could be achieved with C2 alone, for a grand total of 3.9 feet in flood depth reduction. Along with affording Hondru Ford and other local businesses greater safety from flooding, the combined results of C2 and C3 could likely eliminate the threat of flooding at the key road intersection of South Main Street and Fruitville Pike during a 10-year flood, as well as remove multiple homes in this less-affluent part of Manheim from the projected 10-year floodplain.



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### PROJECT TYPE:

Advance Assistance (HMGP Only)

#### 1. APPLICANT'S INFORMATION

a. Name of News Paper: Local largest newspaper covering the area of the project.

Lancaster Newspaper

b. Address

PO Box 1328 Lancaster, PA 17603

c. Telephone

717-291-8611

d. Fax

e. Email

legals@lnpnews.com

#### 2. DETAILED PROJECT DESCRIPTION

a. Explain HOW you will do the project, include copies of plans, any appropriate shop drawings, specifications, and design criteria, etc.

Tetra Tech has developed the 30% Design Drawings, Specifications, and Cost Estimates for the Chiques Creek stream channel realignment and floodplain bench widening, within a portion of the stream reach in Manheim Borough, Pennsylvania. The purpose of the project is to improve flooding conditions along the creek by increasing the flow conveyance within the floodplain, thus lowering flood elevations. Flooding is a regular occurrence along Chiques Creek, especially in Manheim Borough. According to the Lancaster County Emergency Management Agency, five (5) buildings were destroyed due to flooding from Tropical Storm Lee (11 of inches of rain in 4 days), in September 2011, while hundreds more sustained major or minor damages. Several smaller storms have caused minor damages and roadway closures since the September 2011 storm in Manheim Borough. In April 2018, the Susquehanna River Basin Commission (SRBC) and U.S. Army Corps of Engineers (USACE) prepared the Chiques Creek Flood Resiliency Study (FRS) to develop hydrologic and hydraulic modeling to evaluate design alternatives for enhancing flood resiliency in the watershed. The design alternatives, C2 and C3, outlined in the FRS, were used as a basis of design. The following summarizes each design alternative: Channel reach between Eby Street and South Main Street (Design Alternative C2) • Re-align existing stream to improve flow conveyance. • Construct an earthen trapezoidal channel approximately 1,700' long with a 40' bottom width, 64' top width, 3' depth, 4:1 (H:V) side slopes, and floodplain bench. • Tie the proposed floodplain bench into existing high ground with 4:1 (H:V) side slope. • Match channel invert at upstream and downstream limits. • Hydroseed proposed floodplain bench. Channel reach between Fruitville Pike and East Steigel Street (Design Alternative C3) • Create floodplain bench on left bank looking upstream at elevation 389.0' and grade back 1% to proposed bench extents, then slope 4:1 (H:V) to meet existing grade. • Remove sediment under the existing railroad to improve flow conveyance. • Construct retaining wall along left

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bank. Top of wall elevation 393.0'. • Protect in place existing Chiques Creek low flow channel. As these details come from the 30% Design of the Chiques Creek Channel Stream Improvements, more detailed plans will be developed in the future when a contractor develops the 100% design plans.

b. Will the proposed project independently solve the problem?

No

i. (If No Explain)

Flood risk around Chiques Creek will not be fully eliminated. However, it will be severely reduced thanks to this project.

c. Will the proposed project reduce future damage, hardship, affect emergency personnel or loss of life resulting from a major disaster.

Yes

i. (If yes - explain what will be affected and HOW, include \$'s) What level of protection will this project provide? (What magnitude of a disaster?)

According to computer models, the implementation of this project would add an extra 1.4 feet in flood depth reduction for a 10-year level event, on top of the 2.5-foot reduction that could be achieved with C2 alone, for a total of 3.9 feet in flood depth reduction. This will reduce the chance of flooding, thereby reducing the threat of flood damage to nearby homes and businesses, and also reducing the threat of flood-related injury and death for local residents.

d. For the CURRENT disaster describe all damages caused, give as many details as possible, include \$ amounts. (Acquisitions/elevations –include damage and \$ specifics for each structure and grand total \$)

Manheim Borough did not have substantial impacts in the project area from the current disaster.

e. Grand Total \$

\$7,149,676

f. For PREVIOUS disasters/events describe the damages to the project area. Do this for each occurrence.

PAST Date(s)

The most notable recent disaster to strike this community was Tropical Storm Lee in 2011 (FEMA-4030-DR). This event effected the majority of counties in eastern Pennsylvania, including Lancaster County where Manheim is located. According to the Preliminary Damage Assessment (PDA) for this storm, 4,542 residences were impacted, 346 of which were destroyed and 1,747 of which experienced major damage.

g. Name of the Disaster/Event

Tropical Storm Lee in 2011 (FEMA-4030-DR).

h. Amount of Damages (Includes Direct and Indirect costs)

The PDA for TS Lee lists an initial Total Individual Assistance cost estimate of \$6,353,122. More locally, one particular business in Manheim next to Chiques Creek - the Hondru Ford automotive dealership - experienced \$3,011,676 in physical damage, \$138,000 in lost revenue due to the temporary suspension of business, and an estimate 4,000,000 in clean-up costs.

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i. How many people and/or the number of homes, businesses, bridges, etc., will be protected by the proposed project.

Total # of People~residential

**537**

Residential properties

**215**

Business or Commercial Properties

**172**

Bridges

**9**

Public Buildings

**1**

Schools/Hospitals/houses of worship

**1**

Public

Private

j. Are you submitting this application at the direction of any agency?

**Yes**

i. If yes, is this application associated with one of the following:

<input type="radio"/> County	<input type="radio"/> State	<input type="radio"/> Federal
<input checked="" type="radio"/> Municipal	<input type="radio"/> Municipal Authority	<input type="radio"/> Non-Profit

ii. If yes, please give details:

**The Pennsylvania Emergency Management Agency requested the Borough to apply for HMGP funding based on an application the Borough submitted for Building Resilient Infrastructure and Communities (BRIC) funding.**

k. Indicate all hazards being mitigated in this project.

<input checked="" type="checkbox"/> Flooding	<input type="checkbox"/> Severe Winter Storms	<input type="checkbox"/> Drought	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Tropical Storm
<input type="checkbox"/> Landslide	<input type="checkbox"/> Extreme Temperatures	<input type="checkbox"/> Sinkhole	<input type="checkbox"/> Tornado/Wind	<input type="checkbox"/> Environmental

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<input type="checkbox"/> Pandemic	<input type="checkbox"/> Transportation Accidents	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Lightning Strike	<input type="checkbox"/> Urban Fire
<input type="checkbox"/> Utility Interruption	<input type="checkbox"/> Other			

I. Have there been any advertised/marketed Public Meetings or outreach on this project?

No

i. If Yes, when:

Public engagement will take place after final 100% design is completed in the future.

### 3. PROJECT LOCATION

a. In what Flood Zone(s) is your project located? Please select all the hazards that apply.

<input checked="" type="checkbox"/> AE or A 1-30	<input type="checkbox"/> A (No Base elevation given)	<input type="checkbox"/> AO or AH	<input type="checkbox"/> B or X (Shaded)	<input type="checkbox"/> No FIRM MAP (see maps below)
<input checked="" type="checkbox"/> Floodway	<input type="checkbox"/> C or X (Un-shaded)			

b. Flood Insurance Rate Map (FIRM) showing project site

Attach a copy of the panel(s) from the FIRM, and if available, the Floodway Map.

\* Clearly mark the project site and all properties and structures. (For information on getting FIRMS see instructions)

\* If FIRM is unavailable- attach a Flood Hazard Boundary Map (FHBM) and mark project site/properties

#### Uploaded Documents

Manhein\_DFIRMs.pdf [View](#)

c. Is a D-FIRM available?

Yes

d. MAPS--City, County, Topography and Parcel

Attach a copy of the following & clearly mark the project site and place the specific project structure(s) on map(s).

\* City or county scale map large enough to include entire project site.

\* USGS 1:24,000 Topo Map with project marked and showing all.

\* "Quad Map" also marks project area.

#### Uploaded Documents

quad\_map\_edited.jpg [View](#)

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## Addenda

e. For Acquisition and Elevation Projects, ADD a copy of:

\* Parcel Map (also called Tax Map, Property Identification Map, etc.). \* Map should include Tax ID numbers for each parcel. \* Mark each structure on the maps.

### Uploaded Documents

f. LATITUDES and LONGITUDES - Digital

Please provide digital latitudes and longitudes for your project site. (Can also add to maps) Acquisition and Elevation Projects – digital latitudes and longitudes for each property

Latitude

**40.157290**

Longitude

**-76.388130**

g. PHOTOGRAPHS Please include: (Digital)

One picture per side of structure-each clearly marked with address and which side of the house (i.e. 121 Ash St. Left side) If more than 1 structure is in the picture, using arrows, clearly mark, the structure you wish to represent! Don't forget to mark streetscape photos. . (\*\*Please note: photographs must be digital and in color. Please do not scan photographs. Accepted formats include: .jpg, .jpeg, .tif, .tiff, .gif, .png).

i. Structural/Earthquake Projects:

2 Photos minimum streetscape views- should be representative of project area, include any relevant waterways and drainage area which affect the project. If any structures are included, do as below

ii. Acquisition and Elevation Projects: (4 total per structure- front, back, left side, right side) + streetscapes

### Uploaded Documents

**10-year Storm Event Flooding with Alternative C2C3.PNG** [View](#)**google\_streetview1.PNG** [View](#)**google\_streetview2.PNG** [View](#)**google\_streetview3.PNG** [View](#)**google\_streetview4.PNG** [View](#)**google\_streetview5.PNG** [View](#)**google\_streetview6.PNG** [View](#)

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### h. SUBSTANTIALLY DAMAGED PROPERTIES - Acquisition Projects Only

i. Attach SDP Form for each substantially damaged structure. (damages 50% or more)

#### Uploaded Documents

ii. Name of body of water that is flooding the properties.

### i. DIRECTIONS

Provide detailed directions to project

\* Acquisition and elevation projects- Provide directions to each property.

-- Don't forget! Add a list of all names and addresses of all properties included in this project to your submittal cover letter. (Include substitution addresses as well.)

#### Uploaded Documents

Driving\_directions.pdf [View](#)

## 4. COST ESTIMATES

a. Who will be responsible for and provide/perform the future maintenance?

N/A

b. Has the Maintenance Agreement Certification letter been signed?

No

c. Attach the signed Maintenance Agreement Certificate and show each of your maintenance activities and their costs.

#### Uploaded Documents

**5. COST AND BENEFIT ANALYSIS- Provided to PEMA** Benefit-Cost Analysis (BCA) is a method that determines the future risk reduction benefits of a hazard mitigation project and compares those benefits to its costs. The result is a Benefit-Cost Ratio (BCR). A project is considered cost-effective when the BCR is 1.0 or greater. Applicants and sub applicants must use FEMA-approved methodologies and tools—such as the BCA Toolkit—to demonstrate the cost-effectiveness of their projects.

To help complete an analysis within the required guidelines, the sub-applicant must use the BCA Toolkit or an approved FEMA Pre-Calculated Benefit. The BCA Toolkit is a calculation developed platform, using FEMA-approved methodologies and tools to show the cost-effectiveness of your projects. Sub applicants need to determine their BCA methodology very early in the project development process to make sure you will meet the cost-effectiveness eligibility requirement.

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Link for the Benefit-Cost Analysis Tool Kit and Approved Pre-Calculated benefit can be found at this link below:

<https://www.fema.gov/grants/guidance-tools/benefit-cost-analysis>

### a. Please add all the supporting Documents for PEMA

#### Uploaded Documents

ManheimBorough\_BCAMemo\_111721-compressed.pdf [View](#)

## 6. DISCUSSION OF ALTERNATIVES- (Must have Three)

The Hazard Mitigation Grant Program regulations require that the project “Has been determined to be the most practical, effective and environmentally sound alternative after consideration of a range of options.”

a. For each alternative be specific, be accurate, and give complete information and explain what would happen if this alternative is chosen.

(One of the alternatives may be the “do nothing” alternative, explain what will happen if this was chosen.)

i. First Alternative: (Your proposed project)

**Alternative - C2 & C3** Published in April 2018 by the Susquehanna River Basin Commission (SRBC) and the U.S. Army Corps of Engineers (USACE), the Chiques Creek Flood Resiliency Study used hydrological and hydraulic models to evaluate a total of 16 potential modifications – or “alternatives” – to Chiques Creek. Two of these alternatives, stream improvements designated as Alternative C2 and Alternative C3, were deemed to be the most viable. While Alternative C2 would be beneficial as a stand-alone measure for flood mitigation at Chiques Creek, it has been decided that adding Alternative C3 to this project can increase its flood mitigation potential by geographically expanding it to include another troublesome stretch of the creek. The implementation of both C2 and C3 together would add an extra 1.4 feet in flood depth reduction for a 10-year level event, on top of the 2.5-foot reduction that could be achieved with C2 alone, for a grand total of 3.9 feet in flood depth reduction.

ii. Second Alternative:

**Alternative - C2** Alternative C2 is a stream improvement project to take place between Eby Street and South Main Street in Manheim. The stream will be re-aligned, with a natural channel being created to improve the flow of the creek. The natural channel, at a length of approximately 1,700 feet (when measured in a linear fashion), would be trapezoidal with a 40’ wide bottom width, a 64’ wide top width, and a 3’ depth. The top of banks would be at the same elevation of a large floodplain bench that would tie into existing high ground on the outer edges. The bottom of the channel would remain at the existing elevation, so no dredging will be necessary. The floodplain bench would contain low vegetative cover, making for a more natural aesthetic. When compared to existing flood elevation measurements for this stretch of Chiques Creek, computed flood elevations for Alternative C2 predict a maximum decrease in flood depth of 2.5’ for a 10-year flood event. While Alternative C2 would be beneficial as a stand-alone measure for flood mitigation at Chiques Creek, it has been decided that adding Alternative C3

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to this project can increase its flood mitigation potential by geographically expanding it to include another troublesome stretch of the creek.

iii. Third Alternative:

**Alternative - C3** Alternative C3 is situated between Fruitville Pike and Steigel Street, the latter of which includes a bridge over the creek that itself might be closed two or three times a year when the waters runs high, and will restore a natural floodplain on the creek's east bank by adding a floodplain bench with a stone or concrete wall. With this stream improvement the existing streambed would be maintained, and the conveyance of water and sediment under the existing railroad bridge (just downstream from the often-closed Steigel Street bridge) would be improved. However, a comparison of the existing-conditions flood elevations with the computed flood elevations with this alternative show minimal reductions in flood depths (0.0-0.2 feet).

b. Why did you choose this proposed alternative over the others?

The implementation of both C2 and C3 together would add an extra 1.4 feet in flood depth reduction for a 10-year level event, on top of the 2.5-foot reduction that could be achieved with C2 alone, for a grand total of 3.9 feet in flood depth reduction.

c. Acquisition Projects Only

i. How will the acquired land be used after the project is completed?

ii. Who will maintain the acquired land in perpetuity?

## 7.PROJECT WORK SCHEDULE

The Period of Performance (POP) is the period of time during which the Grantee is expected to complete the grant activities and to incur and expend approved funds. The POP for the each HMA program begins with the opening of the application period and ends no later than 36 months from the close of the application period; however, some complex projects may be awarded up to no later than 42 months. FEMA will not establish activity completion timelines for individual subgrants. Pennsylvania, as the Grantees are responsible for ensuring that all approved activities are completed by the end of the grant POP and may reduce this timeline where necessary and reasonable. For this application POP, use the 36-month timeline or sooner.

a. List the steps or activities of the project and the estimated time frame for each, from the beginning to the end of the project.

b. See corresponding addendum (further down in the addenda)for your project type for a work schedule example and modify it to your project.

### Uploaded Documents

project\_work\_schedule.pdf [View](#)



# Single Application for Assistance

Web Application Id: 9071074

Single Application Id: 202201074927

Applicant: Manheim Borough

Program Selected: Hazard Mitigation Grant Program (HMGP)

## Addenda

### ADDENDUM

Please check the following Addendums corresponding to your project type. &amp; Attach all Pertinent Information

<https://www.pema.pa.gov/grants/hmgp/forms/pages/default.aspx>

1. Phased Projects, emergency work, and already completed work

Download 12-HMGP-Addendum-1-Phased-Structural-Projects.doc

#### Uploaded Documents

12-HMGP-Addendum-1-Phased-Structural-Projects.doc View

2. Acquisitions- More specific information will be needed (Don't miss the Spreadsheet)

Download 13-HMGP-Addendum-2-Acquisitions.doc

#### Uploaded Documents

3. Elevations –More specific information will be needed

Download 14-HMGP-Addendum-3-Elevations.doc

#### Uploaded Documents

4. Structural &amp; Earthquakes

Download 15-HMGP-Addendum-4-Structural.doc

#### Uploaded Documents

5. Others; Plans/Education, Equipment

Download 16-HMGP-Addendum5-Plans-Education-Equipment-Other 2010.doc

#### Uploaded Documents

## PROJECT COMPLIANCE ASSURANCES

1. Code Compliance

a. Will the project meet all applicable codes and standards for the project location, such as building, plumbing &amp; electrical codes, public notification, bidding and contracting, etc.

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## Addenda

**Yes**

i. If NO, what specifically does the project require and why does the project require it. (Example: Project requires a \_\_\_\_\_ variance due to)

**b. Have any permits been applied for or granted in relationship to this project?**

**No**

i. If yes list:

## 2. Regulatory Compliance

**a. Will project comply with ALL Federal, State and Local laws and regulations including but not limited to the following;**

i. Applicable Health Codes

**Yes**

ii. Water & Air Quality

**Yes**

iii. Wetland Management

**Yes**

iv. Floodplain Management

**Yes**

v. Other Regulatory Requirements

**No**

If Other, please list:

## 3. National Flood Insurance (NFIP)

**a. Is the Community a participant in NFIP in good standing?**

**Yes**

**b. Is proposed project located in a designated floodway?**

**Yes**

**c. Is proposed project located in a designated floodplain?**

**Yes**

**d. Is this designated on a FEMA Flood Insurance Rate Map (FIRM):**

# Single Application for Assistance

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**Yes****e. Is there a D-FIRM Available?****Yes****f. Does this Community participate in the National Flood Insurance Program's (NFIP) Community Rating System (CRS)?****No****i. If No, Please explain**

**Manheim Borough applied to enter the CRS Program in early 2019, but its application has still not resulted in progress by ISO/Verisk or FEMA Region III to conduct a Community Assistance Visit or evaluate the Borough's programs.**

**4. Voluntary Participation (Acquisition Projects Only)****a. Are all property owner's voluntary participants?****b. Please attach "Voluntary Participation Agreement" forms (VPA's).****Uploaded Documents****5. Local Mitigation Plan****a. Does your county have FEMA approved Local Multi-hazard Mitigation Plan?****Yes****b. Has your municipality adopted this plan?****Yes****c. Which Goal/objective does this project address?****Uploaded Documents****Lancaster Co HMP Goals Objs for Manheim.pdf** [View](#)**d. Has your proposed project been identified in this adopted/approved county plan?****Yes****i. Attach plan page where this project is listed****Uploaded Documents****420556 Lancaster County Manheim Borough Amendment Letter 08112021.pdf** [View](#)

# Single Application for Assistance

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## Addenda

### ENVIRONMENTAL AND HISTORICAL REVIEW & INFORMATION

#### 1. ENVIRONMENTAL ISSUES

a. Please select ALL that apply to your project:

<input checked="" type="checkbox"/> 100 Year Floodplain	<input checked="" type="checkbox"/> Floodway	<input type="checkbox"/> Runoff	<input type="checkbox"/> Wetlands	<input type="checkbox"/> River	<input checked="" type="checkbox"/> Stream, creek
<input type="checkbox"/> Mudflats	<input type="checkbox"/> Intermittent Stream	<input type="checkbox"/> Lake, Pond	<input type="checkbox"/> Intermittent pond	<input type="checkbox"/> Other	

i. If Other (Explain)

b. Will the project impact (flood, drain, excavate, dredge, fill or otherwise affect) wetlands?

No

i. If yes, please explain:

c. Are you aware of any hazardous materials or substances located on the project site or properties?

No

i. (If yes, add a separate attachment describing the hazardous material – MSDS sheet, Community's answer)  
Also attach a Hazardous Material Survey Form (MSDS) for each property, completed and signed by all property owners

Uploaded Documents

#### 2. HISTORICAL ISSUES

a. Please check all that describe your project site(s). (Read carefully.) Caution: Failure to mark this section correctly could delay your FEMA Environmental and Historic Preservation review by months

[If Acquisition or Elevation, in addition to below, - See Addendum 2 and Complete one "Historical Property Evaluation Form" per structure, 50 years and older]

Please indicate ALL, SOME, or NONE for the following:

<input type="checkbox"/> 45-50 years or older	<input type="checkbox"/> Located IN Historic district	<input type="checkbox"/> On the National Registry	<input type="checkbox"/> Near a historical PROPERTY	<input type="checkbox"/> Near a historic DISTRICT	<input type="checkbox"/> Property/neighborhood reviewed for National Registry Listing
<input checked="" type="checkbox"/> None					

b. If on Registry or IN a district, please give its official name and the agency which designated it.

c. Has a survey to locate archeological sites and/or historic structures been carried out on the property?

# Single Application for Assistance

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## Addenda

**No**

i. If yes, explain:

**d. Date of Survey****e. Name of firm****f. Is a report on file with the State Historic and Museum Commission?****No**i. If YES, was any historic property located? <https://share.phmc.pa.gov/pashare/landing>

Note: historic properties include, but are not limited to, archeological sites, Civil War earthworks, graveyards, buildings, bridges, canals, etc.)

**g. Do you have a local historic society?****Yes**

i. If Yes, please provide details

**There is the Manheim Historical Society, and the Borough of Manheim also has a Historic Commission.**

### 3. ENVIRONMENTAL JUSTICE

**a. Will project have any adverse effects on the low to moderate income or underserved population?****No****b. Will the project have any adverse effect on a minority population?****No****c. Please upload a copy of your Local Review & Compliance Letter to document these answers.**

04 – Local Compliance Review Sample Letter

**Uploaded Documents****Local Compliance Review signed.pdf** [View](#)**d. Was an advertised/marketed public meeting or public outreach held?****No**i. If yes, please attach a description of the public participation and include public review of the mitigation options.  
(Add copy of AD, news articles, minutes, etc.)**Uploaded Documents**

# Single Application for Assistance

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## Addenda

### ATTACHMENTS

#### 1. Designation of Agent

Download HMGP Planning Attachment 1 - DesignationofAgent (12-01-21).doc

#### Uploaded Documents

#### 2. County Commitment Letter

Download HMGP Planning Attachment 2 - County Commitment Letter 12-01-21.docx

#### Uploaded Documents

#### 3. Planning Grant Statement Of Work

Download PA 2021 Hazard Mitigation Planning Grant Statement Of Work 3 Nov 21.docx

#### Uploaded Documents

#### 4. Project Scoping (BRIC) [https://www.fema.gov/sites/default/files/documents/fema\\_fy21-bric-project-scoping-psm.pdf](https://www.fema.gov/sites/default/files/documents/fema_fy21-bric-project-scoping-psm.pdf)

#### Uploaded Documents

#### 5. Project Scoping (FMA) [https://www.fema.gov/sites/default/files/2020-08/fema\\_fma-project-scoping-support-document\\_08-01-2020.PDF](https://www.fema.gov/sites/default/files/2020-08/fema_fma-project-scoping-support-document_08-01-2020.PDF)

#### Uploaded Documents

#### 6. Advance Assistance (HMGP Only)

Section 1104 of the Sandy Recovery Improvement Act (SRIA) authorizes the use of Advance Assistance, which allows advancing up to 25 percent of the HMGP ceiling or \$10 million to Applicants/sub applicants (whichever is less), to accelerate the implementation of the Hazard Mitigation Grant Program (HMGP). Sub applicants may use Advance Assistance to develop mitigation strategies and obtain data to prioritize, select and develop complete HMGP applications in a timely manner. Advance Assistance is not automatic and is included in the HMGP ceiling amount.

Download HMA\_AdAsst\_Instructions\_9-17-21.docx

Download Advance Assistance PnP Package.pdf

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## Addenda

### Download HMA\_AdAsst\_Application Form\_9-17-21.docx

#### Uploaded Documents

**7. Flood Risk Reduction Measures** [https://www.fema.gov/sites/default/files/2020-04/Final-FIMA-Flood-Risk-Reduction-Policy-FP-204-078-112-1\\_6-27-14\\_corrects-definitions2.pdf](https://www.fema.gov/sites/default/files/2020-04/Final-FIMA-Flood-Risk-Reduction-Policy-FP-204-078-112-1_6-27-14_corrects-definitions2.pdf)

#### Uploaded Documents

**8. Dry Floodproofing Non-Residential Buildings** [https://www.fema.gov/sites/default/files/documents/fema\\_technical-bulletin-3\\_1-2021.pdf](https://www.fema.gov/sites/default/files/documents/fema_technical-bulletin-3_1-2021.pdf)

#### Uploaded Documents

**9. Building Code Enhancement (Ordinance)(BRIC Only)**

[https://www.fema.gov/sites/default/files/documents/fema\\_fy21-bric-building-code-activities-psm.pdf](https://www.fema.gov/sites/default/files/documents/fema_fy21-bric-building-code-activities-psm.pdf)

#### Uploaded Documents

**10. Retrofitting (HMGP/BRIC)** [https://www.fema.gov/sites/default/files/2020-08/FEMA\\_P-312.pdf](https://www.fema.gov/sites/default/files/2020-08/FEMA_P-312.pdf)

#### Uploaded Documents

**11. Financial Technical Assistance (FMA Only)** <https://www.fema.gov/grants/mitigation/floods/fma-resources>

#### Uploaded Documents

**12. Direct Technical Assistance (BRIC Only)** [https://www.fema.gov/sites/default/files/documents/fema\\_fy21-bric-direct-technical-assistance-psm.pdf](https://www.fema.gov/sites/default/files/documents/fema_fy21-bric-direct-technical-assistance-psm.pdf)

#### Uploaded Documents

**13. Infrastructure-Levee Enhancement (BRIC & HMGP)** [https://www.fema.gov/sites/default/files/2020-07/fema\\_DRRA-1210b-fact-sheet\\_2019.pdf](https://www.fema.gov/sites/default/files/2020-07/fema_DRRA-1210b-fact-sheet_2019.pdf)

#### Uploaded Documents

# Single Application for Assistance

Web Application Id: 9071074

Single Application Id: 202201074927

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## Addenda

**14. Infrastructure-Dam Removal (BRIC & HMGP)** <https://www.fema.gov/press-release/20210318/fema-helps-fund-dam-removal-part-innovative-public-private-partnership>

### Uploaded Documents

**15. Community Flood Mitigation (FMA Only)** <https://www.fema.gov/grants/mitigation/floods/fma-resources>

### Uploaded Documents

## POWER GENERATION

**1. Please indicate the type of power generation?**

**2. Please add the following documents and any additional documents for Generators**

Eligibility of Generators as a Fundable Project (PDF)

FEMA Eligibility of Generators Under HMGP FAQs (DOC)

Emergency Power Facility Assessment Tool (PDF)

FEMA Mitigation Grant Application Cycle Tips (PDF)

HMGP Generator Data Sheet (DOC)

HMGP Power Generation Worksheet (DOC)

### Uploaded Documents

## FEMA Community Lifelines

**1. What is your main primary community lifeline?**

Transportation - Highway/Roadway

**2. What is your secondary community lifeline?**

Transportation - Highway/Roadway

**3. What is your third community lifeline?**

Transportation - Railway

## For additional FEMA Resources

Please Click here

<https://www.pema.pa.gov/Mitigation/Grants-Projects/Pages/Additional-Resources.aspx>

Please add any relevant additional documents



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## Addenda

### Uploaded Documents

CERTIFICATION\_REGARDING\_LOBBYING (002).pdf [View](#)

## ADDENDA ACKNOWLEDGEMENT

I certify all information in this application to be true, correct, and complete to the best of my knowledge.

Yes

Applicant's Agent Name

James R. Fisher

Date

01/07/2022

If you do not understand any part of this application, contact PEMA immediately. Waiting may cause your application to be untimely and therefore ineligible.

## Single Application for Assistance

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### Requirements

Please enter approved LOI application#

202112060871



# Pennsylvania Emergency Management Agency

Single Application for Assistance

**Single Application #: 202201074927**

This page must accompany all required supplemental information **Mail to:**

**Pennsylvania Emergency Management Agency**

**At this time, Pennsylvania Emergency Management is not requesting any U. S. Postal mailings.**

,

I hereby certify that all information contained in the single application and supporting materials submitted to PEMA via the Internet, Single Application # 202201074927 and its attachments are true and correct and accurately represent the status and economic condition of the Applicant, and I also certify that, if applying on behalf of the applicant, I have verified with an authorized representative of the Applicant that such information is true and correct and accurately represents the status and economic condition of the Applicant. I also understand that if I knowingly make a false statement or overvalue a security to obtain a grant and/or loan from the Commonwealth of Pennsylvania, I may be subject to criminal prosecution in accordance with 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities) and 31 U.S.C. §§ 3729 and 3802 (relating to false claims and statements).



**Signature: James R Fisher**

The Pennsylvania Emergency Management Agency reserves the right to accept or reject any or all applications submitted on the Single Application for Assistance contingent upon available funding sources and respective applicant eligibility.