

TOWN OF WAYLAND

41 COCHITUATE ROAD WAYLAND, MASSACHUSETTS 01778 www.wayland.ma.us

WAYLAND COMMUNITY PRESERVATION COMMITTEE

Since adopting the Community Preservation Act (CPA) in 2002, the Town of Wayland has collected a 1.5% surcharge on Wayland real estate tax bills. Those monies are deposited in the Wayland Community Preservation Act Fund (CPF). The Wayland CPF also receives contributions from the Commonwealth of Massachusetts and earns interest on deposited funds.

The Wayland Community Preservation Committee (CPC) administers the CPA Fund by seeking and evaluating proposals and making recommendations to Town Meeting for the expenditure of CPA funds. The CPC welcomes requests for funding from Town departments, boards, committees, and commissions, as well as organizations, for projects in Wayland. Please review this information and refer to the 2021 Wayland Community Preservation Plan (on the Community Preservation Committee webpage at wayland.ma.us) to learn about eligibility, timelines, and the process.

Mission Statement (adopted by CPC April 2002)

The mission of the Wayland Community Preservation Committee is to create, maintain, and implement a Community Preservation Plan to preserve, expand, and enhance open space, historic resources, community housing, and specified recreational uses. The Plan serves as the basis for the Committee's recommendations to Town Meeting for the disposition of Community Preservation Funds.

Eligible Uses (per the Community Preservation Act, M.G.L. c. 44B, as amended July 2012)

The Wayland CPC can only consider proposals that are eligible for CPA funding according to the use and purpose requirements described in the CPA legislation. These are limited to

- acquisition, creation, and preservation of open space
- acquisition, preservation, rehabilitation, and restoration of historic resources
- acquisition, creation, preservation, rehabilitation, and restoration of land for recreational use
- acquisition, creation, preservation, and support of community housing
- rehabilitation or restoration of open space and community housing that is acquired or created using monies from the fund.

Application for Funding (adopted by CPC September 2014)

The Wayland Town Meeting determines the use of CPA funds. To be considered at Town Meeting, an application for an eligible project or use must be submitted to the CPC along with supporting information, such as surveys, estimates, plans, etc. After deliberation, if the CPC approves the project for consideration by Town Meeting, the CPC must approve an article that recommends funding for the proposed activity. Please provide as much information as possible so that the CPC is able to make an informed decision on funding requests.

The CPC <u>highly recommends</u> that applicants meet with the Community Preservation Committee to discuss potential proposals. The CPC generally meets once a month from September through April. Please submit your application and supporting information at least one week prior to the CPC meeting at which the application will be considered.

If you are using this fillable Word form, please save with a file name referencing your board or committee and the project (e.g., HistComm_OldBarn_2022). Submit your signed application and supporting information and materials to the CPC mail slot at Town Building by hand or mail; or by email to BOTH the CPC Chair at sweinstein@wayland.ma.us and the CPC Vice-Chair at dstotz@wayland.ma.us. The deadline for submissions is 5:00pm ET on Thursday, November 30, 2023.

WAYLAND COMMUNITY PRESERVATION ACT PROJECT APPLICATION FORM

Note: The form fields will expand as you type. Use tab or your cursor to advance to the next field. If you prefer, you can download a .pdf version of this Project Application Form to complete by hand from the Community Preservation Committee page on the Town's website (https://www.wayland.ma.us/community-preservation-committee).

Please provide all applicable information to help the CPC evaluate your proposal. If you are using this fillable Word form, please save with a file name referencing your board or committee and the project (e.g., HistComm_OldBarn_2022). Submit your signed application and supporting information and materials to the Community Preservation Committee mail slot at Town Building by hand or mail; or by email to BOTH the CPC Chair at sweinstein@wayland.ma.us and the CPC Vice-Chair at dstotz@wayland.ma.us. The deadline for submissions is 5:00pm ET on Thursday, November 30, 2023.

SECTION 1: PROJECT INFORMATION

Project Title: Preservation of Stone's Bridge

Project Summary: Stone's Bridge is the oldest bridge in Wayland. It dates back to at least to the mid 1800's, and the bridge is located on the site of the Knox trail. It is the only dry laid stone bridge still in existence in Wayland. It was preserved in the 1950's due to the efforts of the Wayland Historical Society.

In 2015, the Town voted to grant \$480,000 in Community Preservation Funds to restore the first two arches of the four-arch bridge. Since that time, the Permanent Municipal Building Committee has worked to secure permits for the project and requested bids from engineers to complete the project. During this process, it became clear that it would be more cost-effective to restore all four arches at the same time. As a result, in 2019, the town voted to grant \$300,000 to preserve Stone's Bridge in its entirety. Since that time, permits, COVID, and rising construction costs have put the overall project budget over the existing \$780.000 available funds.

On 11/28/23 the PMBC approved a motion to recommed an additional \$400,000 to complete the project. Discussion of the project begins at 8:50 and motion made at 25:04 on the WayCam recording. Along with this recommendation and a letter of support from the Historical Commission, I am requesting this additional funding to preserve Stone's Bridge.

Map # Adjacent to 36B-002 on Old Stonebridge Rd and Parcel # Estimated completion date: Summer 2024

CPA Program Area (check all that apply):

□ Open Space □ Community Housing

Recreation

SECTION 2: APPLICANT/DEVELOPER INFORMATION

Contact Person and/or Primary Applicant: Linda Malenfant

Property Owner (if applicable): Town of Wayland

Organization (if applicable):

Mailing Address: 4 Shore Drive Wayland, MA 01778

Daytime phone #: 857-231-6737 Other phone #:

E-mail address: linda.malenfant@bc.edu

Website (if applicable):

SECTION 3: BUDGET SUMMARY

A. Total budget for project: \$1,084,758.36 B. CPA funding request: \$400,000

CPA request as percentage of total budget: 100% (Calculate as (B/A)*100)

Applicant Signature:

Date Submitted: 11/30/2023

Your application is not complete unless you provide the information requested on the following page. Please make sure you address each of the issues.

PLEASE ATTACH PAGES TO PROVIDE THE REQUESTED INFORMATION, IN ORDER.

You are welcome to use this form but may address any or all of the issues in one or more separate document(s)

PROJECT DESCRIPTION

1. Scope or concept of project: Be specific about the scope of work. Provide photographs of existing conditions and proposed plans, if applicable.

The attached reports from Structures North accompanied the original project request and remains the guiding document for this project.

2. Projected action plan and timeline: List the steps needed to complete the project along with an estimated timeline. The CPC will rely on this information, plus your periodic updates, to prepare its annual Project Status Report to the Town Meeting.

The anticipated work will be completed in the late summer/early fall of 2024, when the water level is expected to be at its lowest.

FINANCES

3. Anticipated project cost: Provide a budget with line itemization (e.g., real property acquisition, preservation consultant, etc.). Also indicate why each type of expense is needed. *This is an example of how it might look. You are encouraged to attach your own spreadsheet.*

Expense category/description	Justification/explanation	Budgeted amount			
1)		\$			
2)		\$			
3)		\$			
4)		\$			

4. Other funding sources: Include private, public, in-kind, and other, and the anticipated amounts and/or percent of the total cost.

2015 ATM voted to grant \$480,000 in Community Preservation Funds to restore the first two arches of the four arch bridge.

2019 ATM voted to grant \$300,000 in Community Preservation Funds to fully restore all four arches

5. CPA funding request amount (should be the same as application 3-B): \$400,000

PURPOSE OF PROJECT

6. Relevance to community: Indicate how the project is relevant to the current and/or future needs of Wayland. Does it serve multiple needs?

The town has purchased and created a park next to the Old Stone's Bridge. The bridge is an historic landmark to the town and a visual focal point. This is an attempt to Preserve this piece of American history along the Knox Trail.

7. Support of CPC category: Explain how the project will meet goals and objectives of the category (or categories) under which you are applying (at least one of these: Community Housing, Historic Preservation, Open Space, and Recreation):

Jutting into the Sudbury River off of Old Stonebridge Road, historic Stone's Bridge remains one of the most picturesque spot's in Wayland and is historically significant as a rare stone bridge still standing after more than 150 years despite being constructed from dry-laid stones without the use of mortar. Built in the 1850's to replace wooden structures dating back to the mid-1600's, Stone's Bridge is located at a river crossing that has accommodated horses, carts, cars, Revolutionary War soldiers and Henry David Thoreau. Even though the remaining structure no longer serves as a bridge, it is an impressive reminder of the history of this site.

The significance of this site as a river crossing dates back hundreds of years. As Alfred Hudson states in The Annals of Wayland, as early as 1674 there is reference to a 'horse bridge' near Daniel Stone's home at this site. Then in later years a 'cart bridge' was built here for which a toll was collected. Surprisingly, the name of the bridge does not derive from the building material of the bridge but rather from the Stone family which lived in the neighborhood from almost the earliest European settlement.

In her detailed research into the building of Stone's Bridge, Helen Emery found town meeting records dating back to October 1747 showing credit for "one quart of rum for raising ye new bridge" to replace an older structure at this site. As Emery states, "raising' is the term applied to the assembling of strong men (made stronger by rum or the like) to put up the main structural pieces of a wooden framed structure."

A bridge at this site played a role in the Revolutionary War. Hudson states that in March 1775, British spies crossed a bridge at this site when on a tour of observation in preparation to march British regulars into the country. There is also a plaque at the entrance to the bridge which states that "(t)hrough this place passed General Henry Knox in the winter of 1775 - 1776 to deliver to General George Washington at Cambridge the train of artillery from Fort Ticonderoga used to force the British Army to evacuate Boston."

The current stone bridge was mentioned by Henry David Thoreau in his journal. When discussing the flooding of the Sudbury River, a man showed Thoreau the height of the flooding on Stone's Bridge to indicate that the River rose five feet.

Rising waters were again an issue in 1955, when the bridge was damaged by Hurricane Diane. However, the bridge was not torn down. Instead, due to the efforts of the Wayland Historical Society and community support, a new bridge for car traffic was built farther up-stream and the washed-out portions of Stone's Bridge were repaired. At that time, the Framingham approach was removed and replaced by an end support that now dead-ends in the river. The Sudbury River was re-routed to flow under the new bridge and to the west of the repaired Stone's Bridge. As a result, the only current access to the bridge is from Old Stonebridge Road in Wayland.

In 2012, the Wayland Historical Commission had engineers examine the bridge and they determined that the bridge was made without mortar and is entirely dry-laid stone. To begin construction, the builders dry-laid footings within the riverbed using a combination of buried rubble and solid cap stones. Vertical piers were then dry-stacked atop the footings from which the arches would immediately spring up from each side. Arched wooden forms would then have been constructed between the piers to support the construction of rough cut stone arches

that were chinked and dry laid on top of them. The spaces between the arches were partially filled in with stone rubble to help stabilize the arches, and after some initial filling, the wooden arch forms could then have been removed. Earth was then placed over the arch structure up to the tops of the parapet walls in order to create the level surface for a roadway.

8. Supporting documents: Applicants are strongly encouraged to seek support from relevant Town entities (e.g., commissions, boards, committees). Report the outcome of such efforts. Provide supporting letters, references, studies, Town plans, maps, and statistics.

Wayland Community Preservation Committee



TOWN OF WAYLAND

MASSACHUSETTS 01778 WAYLAND HISTORICAL COMMISSION

TOWN BUILDING 41 COCHITUATE ROAD TELEPHONE: (508) 358-7701

November 16, 2023

Susan Weinstein, Chair Community Preservation Committee Town of Wayland 41 Cochituate Road Wayland, MA 01778

Dear Susan and Community Preservation Committee,

The Wayland Historical Commission strongly supports Wayland resident Linda Malenfant's application for additional funding to preserve Stone's Bridge.

This historically significant and rare stone bridge still stands after more than 150 years, despite being constructed from dry-laid stones without the use of mortar. Built in the 1850's to replace wooden structures dating back to the mid-1600's, Stone's Bridge is located at a river crossing that has accommodated horses, carts, cars, Revolutionary War soldiers and Henry David Thoreau. Even though the remaining structure no longer serves as a functioning bridge, it is an impressive reminder of the history of this site.

The significance of this site as a river crossing dates back hundreds of years. As Alfred Hudson states in *The Annals of Wayland*, as early as 1674 there is reference to a 'horse bridge' near Daniel Stone's home at this site. Then in later years a 'cart bridge' was built here for which a toll was collected. Surprisingly, the name of the bridge does not derive from the building material of the bridge but rather from the Stone family who lived in the neighborhood from almost the earliest European settlement.

In her detailed research into the building of Stone's Bridge, Helen Emery found town meeting records dating back to October 1747 showing credit for "one quart of rum for raising ye new bridge" to replace an older structure at this site. As Helen Emery states, "'raising' is the term applied to the assembling of strong men (made stronger by rum or the like) to put up the main structural pieces of a wooden framed structure."

A bridge at this site played a role in the Revolutionary War. Hudson states that in March 1775, British spies crossed a bridge at this site when on a tour of observation in preparation to march British regulars into the country. There is also a plaque at the entrance to the bridge which states that "(t)hrough this place passed General Henry Knox in the winter of 1775 - 1776 to deliver to General George Washington at Cambridge the train of artillery from Fort Ticonderoga used to force the British Army to evacuate Boston."

The current stone bridge was mentioned by Henry David Thoreau in his journal. When discussing the flooding of the Sudbury River, a man showed Thoreau the height of the flooding on Stone's Bridge to indicate that the River rose five feet.

This bridge is a unique monument to an historically rare feat of engineering and to a place of importance in local history. Missed opportunities in the recent past to conserve the bridge have exacerbated its deterioration and have put it at continuing risk. The need to save this special structure is now urgent.

The Wayland Historical Commission believes is an extremely worthy project for the Community Preservation Committee to fund. At our Nov. 6, 2022 meeting, we voted unanimously to support this project, and send this letter of support.

Sincerely,

atherine Gardner-Westcoth Katherine Gardner-Westcott

Chair, Wayland Historical Commission



60 Washington St, Suite 401
Salem, Massachusetts 01970-3517
P.O. Box 01971-8560
T 978.745.6817 | F 978.745.6067
www.structures-north.com

22 October 2012

Wayland Historical Commission Wayland Town Building 41 Cochituate Road Wayland, MA 01778

Attention: Elizabeth Von Goeler

Reference: Old Stone Bridge, Wayland, MA

Dear Liz:

On 10 August 2012 we performed an investigation of the Old Stone Bridge in Wayland. This included visual observations from the top, sides, and undersides of the bridge, two test pits, and several samplings and probes.

The following is a summary of our observations and findings.

Structural Description

The Old Town Bridge was constructed around as an east-west crossing of the Sudbury River on the former alignment of what is now Old Stonebridge Road, which continued west into what is now Potter Road.

According to historical research, the present bridge is the final replacement of several wood-framed permutations that were built before it. This said. being no conclusive evidence as to the date of its construction has been found, but it is thought to be no older than the Old Town Bridge, which was apparently



built in 1848. I find this surprising because the dry laid stone construction is very primitive for a time when water resistant mortar materials were commonly available.

During the 1950s the river was widened and straightened and the western approach and buttress were removed and replaced with a stone faced concrete pier that juts out to the edge of the re-directed river flow, creating a dead-ended structure.

The Old Stone Bridge is approximately 70-feet long by 15-feet wide, and has four barrel vault arch spans of approximately 14-feet across. This combined with the added end pier which is approximately 10-feet long and an angled wing wall at the southeast corner makes the total length of construction approximately 95- to 100-feet.

Based upon our visual observations, test pits and probes, the Old Stone Bridge is an entirely dry laid stone masonry structure. The bridge was constructed as follows:

- 1. A combination of buried rubble and solid cap stones were dry laid as footings within the riverbed, and then 3-feet wide by 15-foot long vertical piers were dry-stacked atop the footings from which the arches would immediately spring up from each side. The riverbed was of variable depth, with exposed bedrock under the east end of the bridge, and a muddy bottom at the center. One still to this day detects a decrease in depth as one approaches the bridge's west end, as this was the original west embankment before the main flow was re-directed further west.
- 2. Arched wooden forms were then constructed between the piers to support the construction of single wythe rough cut stone arches that were chinked and dry laid on top of them.
- 3. The wedge-shaped "valleys" between the arches were partially filled in with angular stone rubble to help stabilize the arches, and wedge shaped trust blocks would have been created at the ends to help prevent the line of arches from spreading. After some initial filling, the wooden arch forms could have been removed.
- 4. Using the completed arch spans as a base, the parapet walls were constructed along the sides and splayed wing walls were constructed to create approach ramps at the ends.

5. Earth was then placed over the arch structure up to the tops of the parapet walls in order to create the level surface for a roadway. According to our

test pits, little or no attempt other than chinking (wedging of small, usually angled into ioints) stones seems to have been made to seal the stone construction against pass-through water flow and sifting of soil. This being said. the original builders seem to have been at least marginally successful in containing the soil



as there are few detectable sink holes on the surface.

- 6. The modern-era pier at the west end appears to have been constructed by building a three-sided "box" of semi wet laid stone walls within dunnage or containment forms, with the fourth side of the box being the far abutment of the westernmost arch. This box was then filled with bar reinforced concrete. The stone masons were clever to hold back the mortar from the outer faces of the stone walls to that they so one would not easily detected it when viewing the partially mortared pier and the unmortared bridge together as a whole.
- 7. Dimensional, sawn wooden fence railings presently bound the grassed-in top surface of the bridge which now serves as a small park. These are probably a several-generations-later replacement to the original railing system.

Noted Conditions

The following conditions were noted during our investigation:

 The vertical sides of the bridge are irregular and have undergone out-ofplane deviations as the parapet walls are bulging and the sides of the bridge are spreading apart. In some places, these movements, which include the vertical edges of the arches themselves, are more than 6- to 8inches.

Structures North Old Stone Bridge 22 October 2012 Wayland, MA

On the introdos (underside) of arch one can see oriented widenings of head ioints that follow lineal orientations that run circumferentially to the arch. These are in essence longitudinal structural "cracks" in the unmortared structure that directly correspond to above-noted out-of-plane deviations of the side walls. Some of the widenings total



more than 8", which again correspond to the summed widths external deviations.

Where the widenings occur, there is a loss of chinking and an eventual loss of soil. We experienced such soil loss first hand when we excavated one of our test pits near but not directly over one of these widenings and encountered a cavity within the soil at the side of the test pit that quickly turned into a sink hole.



- In addition to the overall spreading movements, there are localized bulges in the sidewalls where the stonework has become unstable and has moved out. The worst of this is along the south side of the bridge where there is massive vegetation growth.
- There are also places where stones are missing or chinkers have fallen out, revealing cavities within the arch and sidewall

construction.



At the west end's concrete pier, stones are becoming detached from the north face and, to a greater extent, south face (the far west face seems Structures North
22 October 2012
Old Stone Bridge
Wayland, MA

basically intact). Behind the fallen stones, one can see concrete and a few rusted rebars. At the south face, a significant patch of stones has moved out by as much 12" creating an earth filled pocket that is supporting the base of a tree.





 In addition to the structural masonry issues, the residential grade split rail wooden fencing the circles the top of the bridge is insufficient, rotting and in places falling over. This does not meet code and is a potential hazard to anyone who might lean on it.

Discussion

Based upon the above conditions, it seems that the primary damage involves the lateral spreading of the bridge and outward bulging of the parapet walls under soil pressures. If the Old Stone Bridge has one basic construction flaw, it is its lack of transverse resistance to the lateral pressures from the soil fill that is retained by it. This would have been magnified during its years of vehicular service by the outward spreading of wheel loads, and it is possible that much of the movement took place during its past.

According to our rough calculations, the structure is sufficiently robust to retain the existing 2- to 3- foot maximum depth of soil. However, wheel loads of even half of today's truck loads, which they might have been sustained near the end of the roadway's service life, create lateral pressure that is four times greater than the soil load alone. Therefore, it is seems likely that most of the spreading occurred as a result of heavy wheel loads, not longitudinally compressing the arches so much as laterally spreading them under the soil pressures applied under the roadway. This has resulted in a series of

longitudinal circumferential "cracks" forming within the arches, which are basically linked lines of severely widened joints between arch stones.

The most immediate effect of these widened joints is the fact they act as funnels through which the retained fill can sift, creating hidden sink holes that grow from below until they eventually reach the retained fill surface. A way of transversely tying the bridge and retaining the soil mass must be devised, but it must allow the bridge to continue acting as a dry-laid masonry structure that allows the soil mass to freely drain.

The secondary effect is fact that the parapet walls and edges of arches lean, and will continue to do so until they reach a point of instability. This has already started to occur at the south face of the bridge, where stones are buckling outward from parapet and edges of the arches. All portions of the bridge that are approaching instability must be dismantled and reconstructed.

At the far end of the bridge there is a totally different type of construction, and a totally different behavior. There the stones are becoming unbonded from the concrete mass that was placed against their back surfaces and need to be reapplied.

Recommendations

Considering the existing construction and its present condition, we recommend that repairs be done in a way that is sympathetic to the original construction while providing the needed improvements in longevity and repair while allowing the bridge to structurally function in the same manner that it traditionally has.

This can be done in the following manner:

Throughout-

Remove vegetation and soil fill.

- Remove all vegetation biological matter from the sides and top of the bridge, especially at the south, upstream face. This will inevitably result in the partial collapse of some of the facing stones in the parapet walls and end pier.
- 2. Remove the existing soil mass down to the top of the stone and concrete bridge and pier structures.

At the Dry-Laid Arch Sections-

Restore dry-laid masonry arches and lower walls.

- 3. Fully document and dismantle the bulged and leaning parapet walls and ends of arches.
- 4. Wet-chink and partially underpin the ends of the piers to restore solid bearing.
- 5. Re-chink the remaining piers from the outside, the remaining walls from both sides, and the arches from above, and replace stones that are missing.
- 6. Reconstruct the dismantled masonry elements to match their original configurations, up to the top of the lower top course of the parapet walls.
- 7. Cover the structure with filter fabric that turns up against the side parapet walls to create containment for fill.

At the West Pier Section-

Restore west-end pier.

- 8. Document and remove all loose and shifted stones.
- 9. Inspect and repair exposed portions of the concrete core, cleaning and coating or removing rusted reinforcing and grout injecting cracks.
- 10. Reinstall all removed and missing stones, wet bonding and pinning them back into place.
- 11. Additionally pin any other potentially loose stones and grout any voided collar joints encountered.
- 12. Create a surface bonded mortar topping layer over the concrete to positively pitch the top of the pier into unmortared westernmost arch construction, and cover the parging with a pre-formed drainage composite.

Throughout-

Reinforce the soil mass to counter the spreading effects on the bridge, provide proper drainage, and restore parapet walls, top grade and railings.

13. Place 6" to 12" of compacted structural drainage fill over the entire structure with the top to roughly align with the bottom parapet course and

lay a biaxial geogrid over the top of the fill and allow extra grid length to fold up over the top of the lower parapet course.

- 14. Place additional compacted structural fill up to the top of the lower parapet course and flop the biaxial geogrids up over the top of the fill and add a transversely oriented uniaxial geogrid atop the flopped uniaxial grid ends, extending out to onto the lower parapet course.
- 15. Wet-lay the top parapet course over the lower course and the uniaxial geogrid with grids and mortar recessed by 4".
- 16. Compact 6" of structural fill over uniaxial geogrid and then add up to 6" loam.
- 17. Replace removed wooden guard rails with aesthetically appropriate but properly structured wooden guards designed that meet code.

Please see the attached elevation and section drawings that graphically layout the scope of work.

Associated Costs

We estimate that the above repairs would cost in the range of \$750,000 to \$950,000.

Thank you for the opportunity to provide this evaluation of this very interesting structure and important historical resource. Please contact me if you have any questions or would like further clarification.

Respectfully Yours,

John M. Wathne, PE, President

Structures North Consulting Engineers, Inc.

OLD STONE'S BRIDGE REHABILITATION					OLD STONE'S BRIDGE REHABILITATION						
	additional funds required	additional funds recommended by PMBC									
	Appropriated S	Spent/Encumbered		Remaining		A	Appropriated	Spen	t/Encumbered		Remaining
ATM 2015	\$ 480,000.00 \$	95,241.71	\$	384,758.29	ATM 2015	\$	480,000.00	\$	95,241.71	\$	384,758.29
ATM 2019	\$ 300,000.00 \$	-	\$	300,000.00	ATM 2019	\$	300,000.00	\$	-	\$	300,000.00
Funds Available			\$	684,758.29	Funds Available					\$	684,758.29
IFB 23-2037	8.31.23 Low Bid		\$	766,200.00	IFB 23-2037	8.31	.23 Low Bid			\$	766,200.00
Additional Soft Costs			\$	25,000.00			Additi	onal S	Soft Costs	\$	25,000.00
	7% Es	scalation	\$	55,384.00			24.93%	Escal	ation	\$	197,216.69
	10% Co	ontingency	\$	82,158.40			10%	Cont	ingency	\$	96,341.67
	Estimate to	o complete	\$	928,742.40			Estimate	to co	mplete	\$	1,084,758.36

Additional funds recommened \$

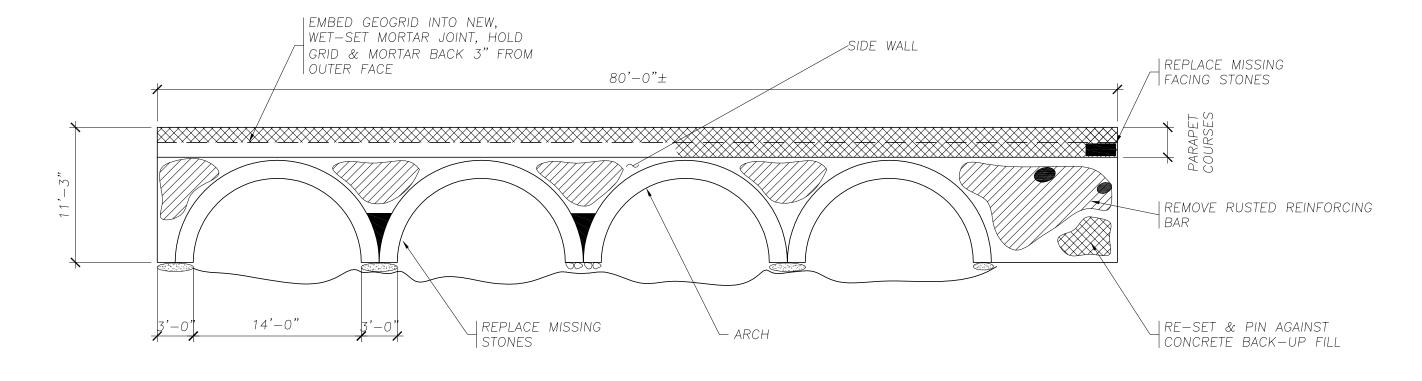
400,000.00

Additional funds minimum required \$ 243,984.11

OLD STONE'S BRIDGE REHABILITATION

BID HISTORY

		Appropriated		Spent/Encumbered			Remaining		
ATM 2015	\$	48	0,000.00	\$	95,241.71	\$	384,758.29		
ATM 2019	\$	300,000.00		\$	-	\$	300,000.00		
Funds Available						\$	684,758.29		
IFB 23-2037	8.3	1.23	Low Bid			\$	766,200.00		
IFB 22-1036	5.1	6.22	Low Bid			\$	472,200.00		
IFB 21-1032	7.2	9.21	Low Bid			\$	497,155.00		
IFB 19-1017	7.2	4.19	Low Bid			\$ \$	428,860.00 29,110.00	base alt 1	



<u>KEY:</u>

RE-CHINK, REPLACE STONES
WHERE MISSING

DISMANTLE & RE-SET SHIFTED STONES

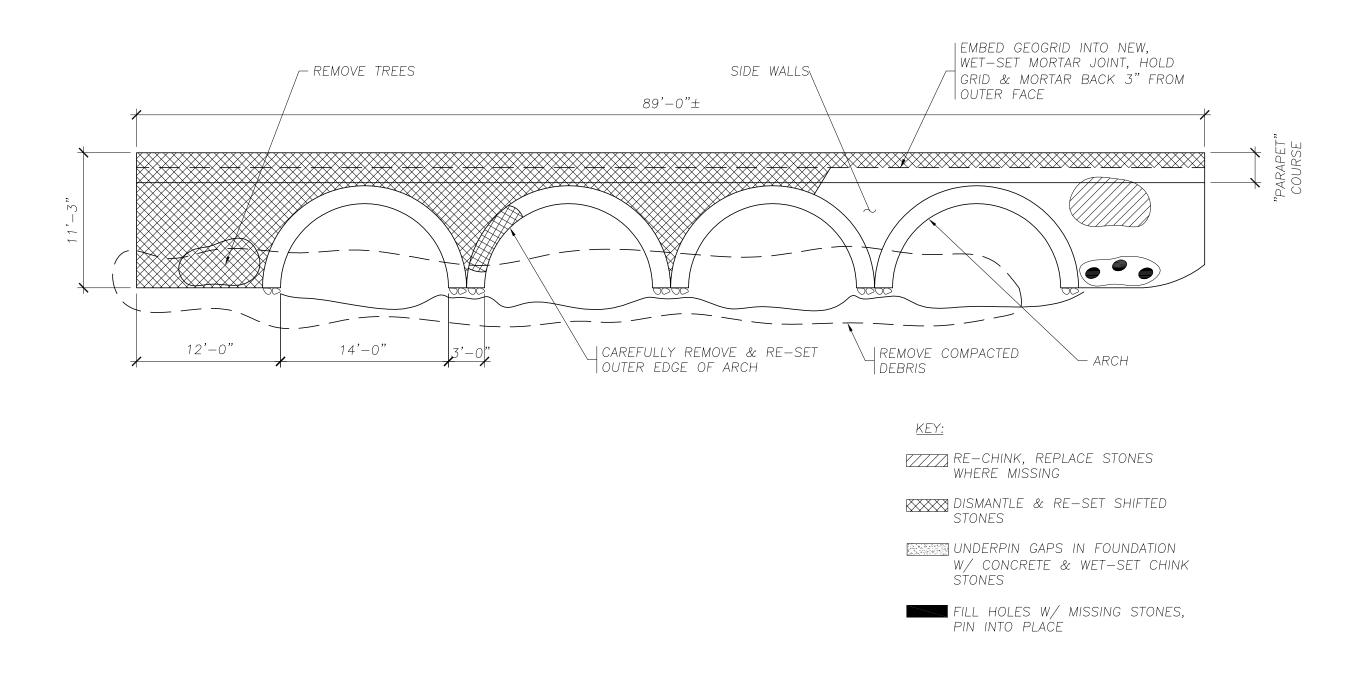
UNDERPIN GAPS IN FOUNDATION

W/ CONCRETE & WET-SET CHINK

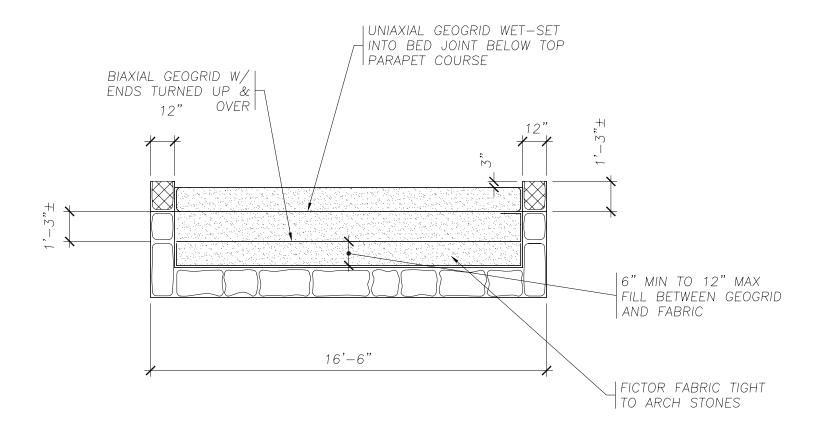
STONES

FILL HOLES W/ MISSING STONES,
PIN INTO PLACE

OLD STONE BRIDGE / NORTH ELEVATION $\frac{\sqrt{8} = 1.00}{1.00}$



OLD STONE BRIDGE / SOUTH ELEVATION $\frac{0LD \text{ STONE BRIDGE / SOUTH ELEVATION}}{\sqrt[3]{8"} = 1'-0"}$



OLD STONE BRIDGE / SECTION AT CROWN OF ARCH

 $\frac{1}{1/4}$ " = 1'-0"