# Monroe County Historic Preservation Board of Review



# Monday, February 20, 2023 5:30 p.m.

# **Hybrid Meeting**

<u>In-person</u> Monroe County Government Center Planning Department 501 N. Morton Street, Room 100B Bloomington, IN 47404

# <u>Virtual</u>

Zoom Link: https://monroecounty-in.zoom.us/j/85490430168? pwd=OGIxT0JENUFVN0ovM24vaWdxMnFzUT09 If calling into the Zoom meeting, dial (312) 626 6799 Meeting ID: 854 9043 0168 Password: 214096

#### AGENDA

#### MONROE COUNTY HISTORIC PRESERVATION

#### **BOARD OF REVIEW**

Monday, February 20, 2023

5:30 PM

#### HYBRID MEETING INFO

IN-PERSON: Monroe Government Center 501 N Morton ST Room 100B Bloomington IN 47404 VIRTUAL LINK: <u>https://monroecounty-</u>

in.zoom.us/j/85490430168?pwd=OGIxT0JENUFVN0ovM24vaWdxMnFzUT09

If calling into the Zoom meeting, dial: 312-626-6799. When prompted, enter the Meeting ID #: 854 9043 0168 Password: 214096

1) Call to Order

2)	Approval of Meeting Minutes: January 23, 2023	PAGE 3
3)	<ul> <li>Administrative Business</li> <li>a) Follow-up to MCHP Board of Review membership terms</li> <li>b) Follow-up to Annual Property Owner Notice Letter</li> <li>c) Potential of HP Overlay District in Annexation Area 4</li> <li>d) CDO Discussion: Q&amp;A</li> </ul>	PAGE 7 PAGE 9
4)	Old Business a) Coordination Letter, FHWA Project: INDOT Des. No. 2200020; High Street	PAGE 11
	Multi-Use Path; Monroe County, Indiana	TAGETT
	<ul> <li>b) Dry Stone Conservancy Report – Rumpke Stone Wall Preservation &amp; Maintenance Plan</li> </ul>	PAGE 15
	c) INDOT Early Coordination Letter: Hot Mixed Asphalt (HMA) Overlay, Minor Structural Project along SR 46, from the SR 446 intersection to the W Junction (JCT) of SR 135	
	d) Bloomington Ops Tower (Project) – Historic Properties Review	
5)	New Business	
	a) Certificate of approval application to install parking spaces to a newly acquired property adjacent to Monroe Lake (DHPA #30239)	PAGE 60
	<ul> <li>b) Early Coordination Letter, Des. No. 1902772, Bridge Project on Rockport Road over Branch Clear Creek, 0.04 Mile South of Boline Lane in Monroe County, IN</li> </ul>	
	c) 2023 Work Plan Updates	PAGE 75

6) Adjournment

#### NEXT MEETING: March 20, 2023

Anyone who requires an auxiliary aid or service for effective communication, or a modification of policies or procedures to participate in a program, service, or activity of Monroe County, should contact Monroe County Title VI Coordinator Angie Purdie, (812)-349-2553, apurdie@co.monroe.in.us, as soon as possible but no later than forty-eight (48) hours before the scheduled event.

Individuals requiring special language services should, if possible, contact the Monroe County Government Title VI Coordinator at least seventy-two (72) hours prior to the date on which the services will be needed.

The meeting will be open to the public.

#### **DRAFT MINUTES**

#### MONROE COUNTY HISTORIC PRESERVATION

#### **BOARD OF REVIEW**

Monday January 23, 2023

#### 5:30 PM

#### HYBRID MEETING INFO

IN-PERSON: Monroe Government Center 501 N Morton ST Room 100 B, Bloomington IN 47404 VIRTUAL LINK: https://monroecounty-

#### in.zoom.us/j/82305485858?pwd=c2lrWFp0eGFNQUtqK0NQQIFLazRTQT09

If calling into the Zoom meeting, dial: 312-626-6799. When prompted, enter the Meeting ID #: **823 0548 5858** Password: **214096** 

Attendees:	Debby Reed, Devin Blankenship, Don Maxwell, Donn Hall, Duncan Campbell, Doug
	Wilson, Polly Root Sturgeon, Susan Snider Salmon (virtual)
Absent:	None.
Staff:	Drew Myers, Tech Services to assist with meeting
Public:	None.

#### 1) Call to Order @5:30 PM.

- 2) Approval of Meeting Minutes: November 21, 2022
- Sturgeon: Motion to approve the minutes.
- Maxwell: Seconded.
- Approved: 8-0.

#### 3) Administrative Business:

#### a) Follow-up to MCHP Board of Review membership terms

Myers:	Summarized the changes to existing MCHP Board membership terms. The term lengths needed amending as the required staggering of term lengths was somehow lost over the last few years. Asked if any members whose terms "expired" January 1, 2023 received any letters from the Board of Commissioners' Office regarding term renewal.
Hall:	Stated he received something that said once his membership is renewed, he will receive relevant paperwork to proceed.
Myers:	Mentioned how he spoke with the Commissioners' Office, and they stated Board members can remain active in their duties while they wait for their renewal letters. Asked the Board if any Board members know of anyone else to ask to fill the vacant seat.
Blankenship:	Asked to clarify if the current balance of Board membership allows for someone living within City of Bloomington limits to join the Board.
Myers:	Clarified that the open seat could be a resident within the city or within county.

[Discussion amongst Board members of a few people in mind that may be able to fill the vacancy and why the reappointment of terms is January 1<sup>st</sup> rather than December 31<sup>st</sup>]

Campbell: Asked if this was the meeting where the Board reelects officers.

Myers: Suggested that action get added as an administrative business agenda item.

#### \*Added Agenda Item: Board Appointments

Myers:	Called for officer nominations.
Campbell:	Suggested the Board ask the current chair and vice chair will serve again.
Sturgeon:	Stated she is comfortable continuing to serve as chair for the remainder of her term.
Hall:	Seconded.
Approved:	8-0.
Sturgeon:	Stated that the current vice chair is Doug Wilson.
Blankenship:	Asked if he would want to serve again.
Wilson:	Specified he will continue to serve as vice chair unless someone else wants to do it.
Blankenship:	Motioned to retain Doug Wilson as vice chair.
Reed:	Seconded.
Approved:	8-0.

#### b) Coordination Letter, FHWA Project: INDOT Des. No. 2200020; High Street Multi-Use Path; Monroe County, Indiana

Myers: Summarized the project's scope along High Street from W 3<sup>rd</sup> Street to E Arden DR. Opened the floor to discussion.

Blankenship: Asked what side of the road the multi-use path will be developed.

Maxwell: Believed there to be an Underground Railroad linked house on the east side of High Street.

- Blankenship: Asked that project coordinators watch out for artifacts related to the Underground Railroad and the Covenanter Family, and that he would like to see some sort of educational piece regarding this history included with the trail project.
- Myers: Clarified educational as meaning signage?
- Blankenship: Reiterated the rich history of the Underground Railroad and the Covenanters' role as abolitionists.

[Discussion of existing cemetery on the NE corner of the intersection E Moores PIKE and S High ST.]

- Campbell: Pointed out that according to the early coordination letter that the project coordinators are still shooting elevations and do not have a design yet.
- Blankenship: Asked for the project coordinators to be sensitive to presence of historical artifacts that are in the front yards, dry stone walls, and underground railroad sites.

- Campbell: Mentioned that the preservation consultant has not performed a survey yet. Reiterated that the coordinators at this stage are asking if MCHP would like to remain a consulting party.
- Maxwell: Voiced a concern from property owners on the west side of S High Street who will be concerned about losing front yard space.

#### 4) Old Business

#### a) Dry Stone Conservancy Report – Rumpke Stone Wall Preservation & Maintenance Plan

- Myers: Provided a brief synopsis of the Rumpke development on the westside of town and the planning processes involved thus far, including the conditional use variance, which required the consultation of a preservation professional and an implementation of a preservation plan for the dry stack limestone wall present on the property. Stated that to receive a certificate of occupancy, Rumpke must satisfy this conditional requirement and the Board must approve the preservation plan.
- Blankenship: Asked aside from the stone walls, is there anything the Board should be particularly vigilant about.
- Myers: Stated that he will dedicate more staff time to review the document and provide a summary of important items.
- Campbell: Pointed out that page 37 provides preservation and maintenance recommendations and that the rest of the document is a condition report.
- Sturgeon: Mentioned that on page 59, an estimate is referenced of \$10,000 annually to stabilize the wall over three years for a total of \$30,000.
- Snider Salmon: Asked for clarification on how the County handles the enforcement of this agreement and how its progress is monitored.
- Myers: Stated he would want to talk with the Planning Director and Assistant Director to answer that question thoroughly.
- Snider Salmon: Expanded the question to the Board if anyone knows how many agreements like this are out there and if there is a mechanism to evaluate compliance.
- Blankenship: Clarified that usually the Board's enforcement capabilities come via the Historic Preservation Overlay and the issuance or withholding of a certificate of appropriateness.
- Campbell: Concurred that MCHP would not have much weight on the enforcement side of things without an HP overlay, but the Planning Department retains enforcement capability when it comes to the conditional use variance and the certificate of occupancy. Sometimes this type of agreement is included in a deed as a covenant or a separate recorded written commitment.

[Continued discussion of how agreements like this can be enforced, monitored, and tracked through time]

[Discussion about the supposed location of a drystone wall near E Bethel LN & E Boltinghouse RD]

Campbell: Pointed out that the authors of the preservation plan for Rumpke's drystone wall, the Dry Stone Conservancy, recommend Rumpke enter a public-private partnership with the Dry Stone Conservancy to administer the preservation plan and oversee the long-term maintenance of the wall.

#### b) INDOT Early Coordination Letter: Hot Mixed Asphalt (HMA) Overlay, Minor Structural Project along SR 46, from the SR 446 intersection to the W Junction (JCT) of SR 135

Myers: Stated there are no updates from the project coordinator. Reminded the Board that staff communicated to the coordinator that MCHP requests to remain a consulting party. Asked the Board to assist with providing additional comment regarding the project's scope.

#### c) Bloomington Ops Tower (Project) – Historic Properties Review

Myers: Informed the Board that an initial email conveying the MCHP's general objection to this tower project at its currently location was sent. No updates to report.

#### 5) New Business

a) 2023 Work Plan

Sturgeon:	Asked the Board to provide updates to their respective subcommittee projects.	
Campbell:	Provided an update regarding his and Donn Hall's progress on drafting a demolition delay.	
Sturgeon:	Stated she would like to see the Annual Property Owner Notice letter go out sooner rather than later.	
Myers:	Confirmed one new property, Ben Owners Farmstead, was added to the HP Overlay properties list.	
Maxwell:	Offered to review last year's letter and make edits as necessary.	
[Discussion about organizing the Limestone Month Festival]		

[Discussion about getting progress going again on updating the Limestone Heritage website and how the website is utilized by visitors and educational professionals]

[Discussion about Board members moving from subcommittee]

#### 6) Adjournment @6:51 PM



#### MONROE COUNTY HISTORIC PRESERVATION BOARD OF REVIEW

501 N. Morton Street, Suite 224, Bloomington, IN 47404 Telephone: (812)-349-2560 / Fax: (812)-349-2967 www.co.monroe.in.us/tsd/Government/Infrastructure/PlanningDepartment/HistoricPreservation.aspx

#### February 2023

Dear Historic Property Owner,

# BOARD MEMBERS, 2022–2023

Devin Blankenship, Washington Township

Duncan Campbell, Perry Township

Donn Hall, Salt Creek Township

Don Maxwell, Perry Township

Deborah H. Reed, Bloomington Township

Susan Snider Salmon, Benton Township

Polly Root Sturgeon, Bloomington Township

Doug Wilson, Richland Township

One vacancy

Happy New Year from the Monroe County Historic Preservation Board of Review! You are receiving this letter because your property has been designated as historic due to its association with significant persons or events in the County's past, distinctive characteristics of a type, period, or method of construction, high artistic values, example of master work or a distinguishable entity, and/or capability of yielding information in prehistory or history.

As a historic or architecturally worthy building, structure, or place, your property is protected by a Historic Property (HP) Overlay through the Monroe County Planning Department. The HP Overlay helps to protect designated sites by regulating development, redevelopment, rehabilitation, and preservation activities that may affect a historic property's visual quality. The HP Overlay includes the entire property, not just the built resources that are contributing. (See Chapter 810, section 7 of the Monroe County Zoning Ordinance.) All exterior alterations to a historic property must be proposed via a Certificate of Appropriateness (COA) prior to work. This includes any exterior work requiring a building permit, as well as other items such as:

- Alteration/repair of existing buildings or structures (not routine maintenance)
- New construction or addition to primary and accessory buildings or structures
- Demolition of some or all primary and accessory buildings or structures
- Relocation
- Signs and awnings
- Fences and walls

•

- Window replacement
- Siding (not routine maintenance or replacement in-kind)
- Roofing (not routine maintenance or replacement in-kind)

To request a review of proposed exterior alterations to your property, please contact the Monroe County Planning Department. For contact information see the Planning Department's website (<u>https://www.co.monroe.in.us/department/?structureid=13</u>). We will be happy to walk you through this simple process, and appreciate your assistance in documenting changes to your historic property.

Additionally, if you experience a negative intrusion near or adjacent to your property that impacts its historic nature—such as a road project, proposed development, re-zoning, or cell tower installation—please contact the Board of Review so that we may assist you.

The Historic Preservation Board of Review is authorized by Chapter 823 of the Monroe County Zoning Ordinance to promote the educational, cultural, economic, aesthetic, and general welfare of the public through the preservation and protection of historic or architecturally worthy buildings, structures, sites, monuments, streetscapes, squares, and neighborhoods. We understand the dedication and sacrifice involved in protecting and maintaining these important local sites, and appreciate your cooperation in protecting Monroe County's history.

Sincerely,

Monroe County Historic Preservation Board of Review

Parcel Number (18-digits)	Owner Name	Owner Street	Owner City, ST & ZIP	Property Street	Property City, ST & ZIP	Common Name
53-05-20-300-010.000-004	Deborah Hedrick Reed	2855 Old Meyers Road	Bloomington, IN 47408	3275 N Prow RD	Bloomington, IN 47404-1609	Patton-Hedrick House
53-08-29-200-005.000-008	Geoffrey W & Erika M Morris	5075 S Victor Pike	Bloomington, IN 47403	5075 S Victor PIKE	Bloomington, IN 47403-9747	Stipp-Bender Farm
53-11-23-200-008.000-006	Rieman Properties LLC	8803 S Fairfax Road	Bloomington, IN 47401	8700 S Fairfax RD	Bloomington, IN 47401	Mt. Ebal Church
53-04-32-300-002.001-011	9030 W State Rd 48 LLC	3802 E 3rd Street	Bloomington, IN 47401	9030 W State Road 48	Bloomington, IN 47403	Beaumont House
53-11-06-200-002.000-006	Gregory Travis	2570 W Fluck Mill Rd	Bloomington, IN 47403	2570 W Fluck Mill RD	Bloomington, IN 47403-8900	George P. Ketcham House
53-05-19-100-019.000-004	Louiza C , L / E Kitty Brown Burkhart	3655 N Maple Grove RD	Bloomington, IN 47404-9237	3655 N Maple Grove RD	Bloomington, IN 47404-9237	Daniel Stout House
53-05-24-100-025.000-004	PHILIP B. & LINDA L. STAFFORD	5598 E Ward Lane	BLOOMINGTON, IN 47408-9110	5598 E Ward LN	Bloomington, IN 47408-9110	The Ward House
53-10-03-300-001.000-007	Aaron C & Kimberley A Kercheval	7401 S Mount Zion Rd	Bloomington, IN 47403	7401 S Mt Zion RD	Bloomington, IN 47403-9713	John F. and Malissa Koontz House
53-08-17-200-006.000-008	Joshua D & Laura L Reynolds	3020 S Rockport Rd	Bloomington, IN 47403	3020 & 3022 S Rockport RD	Bloomington, IN 47403-4202	James A. Borland House
53-08-34-304-007.000-008	Rudy D & Laura Kay Fields	220 E Wylie Road	Bloomington, IN 47408	6189 S Fairfax RD	Bloomington, IN 47401	Sanders Store
53-01-22-400-008.000-003	MONROE CO COMMUNITY SCHOOL	315 NORTH DR	BLOOMINGTON, IN 47401-6555	N Low Gap RD	Martinsville, IN 46151	Honey Creek School
53-03-06-300-002.000-001	Board Of Commissioners Monroe County	100 W Kirkwood Ave Rm 322	Bloomington, IN 47404	N Texas Ridge RD	Gosport, IN 47433	Secrest Ferry Bridge
53-07-09-100-007.000-014	USA	1400 INDEPENDENCE AVE	WASHINGTON, DC 20250	S FRIENDSHIP RD	BLOOMINGTON, IN 47401	Friendship Bridge
53-04-03-400-021.000-011	Jessica L Ryan	6445 W Maple Grove Rd	Ellettsville, IN 47429	6445 W Maple Grove Rd	Ellettsville, In 47429	Mathews Mansion
53-00-32-400-003.000-001	Janet L Yedes	8000 W Sand College Rd	Gosport, IN 47433	7613 W Sand College Road	Gosport, In 47433	Breezy Point Farm Historic District
53-05-18-400-068.000-004	David William & Mary Lucinda Ray	4595 N Maple Grove Rd	Bloomington, IN 47404	4595 N Maple Grove Rd	Bloomington, IN 47404	Bauer House/Ben Owens Farmstead
						Perhaps mail-merge this into the letter

8

Always Confirm owners/address -confirmed 2/8/23

From:	Jacqueline N. Jelen
To:	Tammy Behrman; Drew Myers
Subject:	RE: Items for research - HP Overlay
Date:	Wednesday, February 8, 2023 12:23:35 PM

That's a great idea Tammy. Drew, can you add this as a discussion point at the next HP meeting?

#### Jackie N. Jelen, AICP

Director Monroe County Planning Department 501 N. Morton St., Suite 224 Bloomington, IN 47404 jnester@co.monroe.in.us Phone: (812) 349-2560

From: Tammy Behrman <tbehrman@co.monroe.in.us>
Sent: Monday, February 6, 2023 8:54 AM
To: Drew Myers <dmyers@co.monroe.in.us>
Cc: Jacqueline N. Jelen <jnester@co.monroe.in.us>
Subject: RE: Items for research - HP Overlay

Drew-

I was curious and wanted to see what the SHAARD Database had as inventory of the properties in Annexation Area 4. If you have a light agenda for HP you could maybe look into Julie's inquiry below and begin the discussion. I should have sent this out awhile ago. Just cleaning off my desktop...

Has there been any movement on the HP Overlay with regards to any CDO edits / HP Overlay mapping? Jackie, I think we had given the HP Board a loose deadline but I can't remember what it would be.

*Tammy Behrman, AICP* Assistant Director Monroe County Planning Department <u>tbehrman@co.monroe.in.us</u> (812) 349-2560

From: Jacqueline N. Jelen <jnester@co.monroe.in.us>
Sent: Friday, January 20, 2023 4:41 PM
To: Julie Thomas <jthomas@co.monroe.in.us>
Cc: Tammy Behrman <tbehrman@co.monroe.in.us>; Drew Myers <dmyers@co.monroe.in.us>
Subject: RE: Items for research

Hi Julie-

Thanks for these items and we will look into this!

I think the HP Overlay is something that we are hoping can be researched by our HP Board and would be a great addition to the zoning map changes.

We will look further into the organic farming protections and options under the state statute.

Thanks!

Jackie N. Jelen, AICP Director Monroe County Planning Department 501 N. Morton St., Suite 224 Bloomington, IN 47404 jnester@co.monroe.in.us Phone: (812) 349-2560

From: Julie Thomas <jthomas@co.monroe.in.us>
Sent: Friday, January 20, 2023 1:37 PM
To: Jacqueline N. Jelen <jnester@co.monroe.in.us>
Subject: Items for research

Hi Jackie –

Here are the two items I would like someone to conduct some research on in the database

I have heard from a resident of Annexation area 4 (one of the islands) and she made a compelling case for creating some kind of district over the area. One option would be a historic district. The homes are old and include some original quarry worker residences. The resident highlighted the fact that this is an area of hobby farms and most residents have planted vegetation to encourage wildlife and pollinators. There are a large number of old-growth trees in the area. They successfully defeated the annexation effort of the city with remonstrance petitions. FYI, we are looking at providing septic assistance to the residents of the area with ARPA funds. I would be happy to go with Drew to meet the resident and tour the area.

In addition, I wonder if someone in Planning could review ordinances in other states relating to the protection of organic farms. Have other counties developed some language regarding this? A required buffer would be ideal – especially to guard against wind-blown herbicides / pesticides. I recognize that downstream pollutants and cross-pollination are impossible to address.

Thank you!

Julie



# **INDIANA DEPARTMENT OF TRANSPORTATION**

100 North Senate Avenue Room N758-ES Indianapolis, Indiana 46204

PHONE: (855) 463-6848

Eric Holcomb, Governor Michael Smith, Commissioner

January 11, 2023

This letter was sent to the listed parties.

RE: High Street Trail; Des. No. 2200020; Monroe County, Indiana

Dear Consulting Party (see attached list),

The City of Bloomington, with funding from the Federal Highway Administration and administrative oversight from the Indiana Department of Transportation (INDOT), proposes to proceed with a trail project on High Street between Arden Drive and 3<sup>rd</sup> Street. (Des. No. 2200020). Butler, Fairman, & Seufert, Inc. is under contract with the City of Bloomington to advance the environmental documentation for the referenced project.

This letter is part of the early coordination phase of the environmental review process requesting comments associated with this project. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above Des. Number and project description in your reply and your comments will be incorporated into the formal environmental study.

The proposed undertaking is along High Street between Arden Drive and 3<sup>rd</sup> Street in the City of Bloomington, Monroe County, Indiana. It is within Perry Township on the USGS Bloomington, Indiana Quadrangle, in Sections 3 and 18, Township 8 North, Range 1 West. The project area can be viewed online at <u>https://arcg.is/jqueP</u> (the Des. No. is the most efficient search term once in the CRO - Public Web Map App).

The need for the project derived from the lack of pedestrian facilities on High Street between Arden Drive and 3<sup>rd</sup> Street. The purpose of the project is to provide pedestrian connectivity on the south side of Bloomington. The High Street Corridor is a recommended location for a multi-use trail in the 2019 Transportation Plan adopted by the City of Bloomington.

The preferred alternative is the construction of an approximately 10-foot wide asphalt-paved multi-use trail along High Street between Arden Drive and 3<sup>rd</sup> Street. The project is approximately 1.18 miles long. A scoping study is currently underway to determine the best alignment for the trail as well as to consider any necessary intersection improvements. The project is likely to include new pedestrian crossings and signals, the replacement of existing traffic signs, and drainage work. There may be short spurs included at either end of the High Street Segment: along 3<sup>rd</sup> Street west to Union Street and along Arden Drive east to Southeast Park, where an existing multi-use trail currently ends. Right-of-way acquisition will be required from adjacent properties; the amount is being investigated as part of the scoping study.

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. In accordance with 36 CFR 800.2 (c), you are hereby requested to be a consulting party to participate in the Section 106 process. Entities that have been invited to participate in the Section 106 consultation process for this project are identified in the attached list. Per 36 CFR 800.3(f), we hereby request that the Indiana State Historic Preservation Officer (SHPO) notify this office if the SHPO staff is aware of any other parties that may be entitled to be consulting parties or should be contacted as potential consulting parties for the project.

www.in.gov/dot/ An Equal Opportunity Employer



The Section 106 process involves efforts to identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize or mitigate any adverse effects on historic properties. For more information regarding the protection of historic resources, please see the Advisory Council on Historic Preservation's guide: *Protecting Historic Properties: A Citizen's Guide to Section 106 Review* available online at <a href="https://www.achp.gov/sites/default/files/documents/2017-01/CitizenGuide.pdf">https://www.achp.gov/sites/default/files/documents/2017-01/CitizenGuide.pdf</a>.

The Area of Potential Effects (APE) is the area in which the proposed project may cause alterations in the character or use of historic resources. At this time, no cultural resource investigations have occurred; however, the results of cultural resource identification and evaluation efforts, both above-ground and archaeological, will be forthcoming. Consulting parties will receive notification when these reports are completed.

Please review the information and comment within thirty (30) calendar days of receipt. If you indicate that you do not desire to be a consulting party, or if you do not respond, you will not be included on the list of consulting parties for this project. If we do not receive your response in the time allotted, the project will proceed consistent with the proposed design, and you will not receive further information about the project unless the design changes.

All future responses regarding the proposed project should be forwarded to Butler, Fairman, & Seufert, Inc.at the following address:

Elizabet Biggio Architectural Historian II Butler, Fairman, & Seufert, Inc. 8450 Westfield Boulevard, Suite 300 Indianapolis, IN 46240 317-713-4615 <u>ebiggio@bfsengr.com</u>

Tribal Contacts, please respond to INDOT's Acting Tribal Liaison, Matt Coon at mcoon@indot.in.gov (317-233-2083) with any responses pertaining to this project including to provide INDOT/Indiana FHWA additional information about Tribal resources/concerns and questions/comments regarding cultural resources. The FHWA point of contact is Kari Carmany-George at K.CarmanyGeorge@dot.gov (317-226-5629).

Sincerely,

Matt Coon, Acting Manager Cultural Resources Office Environmental Services

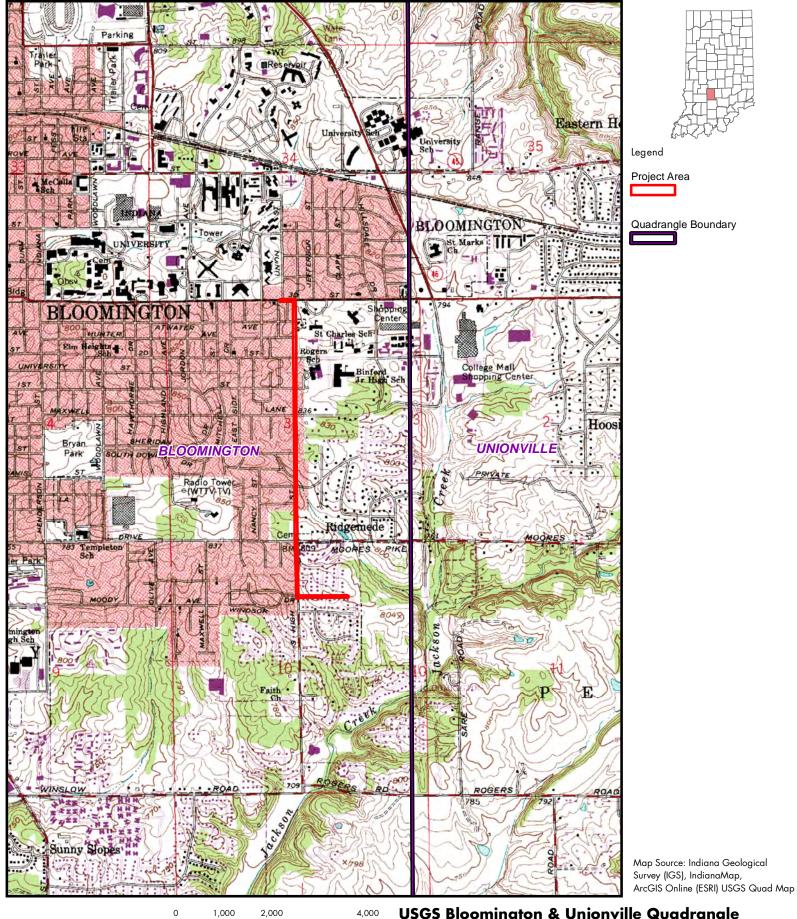
Enclosures: Topographic Map



Distribution List:

Indiana State Historic Preservation Officer Indiana Landmarks Central Regional Office Monroe County Historian Monroe County History Center Monroe County Historic Preservation Board of Review Bloomington Restorations, Inc. **Bloomington Historic Preservation Commission Downtown Bloomington Bloomington Street Division** Monroe County Highway Department Bloomington/Monroe County Metropolitan Planning Organization David B. Mackay Revocable Living Trust (owner of the Ralph and Ruth Rogers House) Trustees of the Reformed Presbyterian Church (owners of the Covenanter Cemetery) Delaware Tribe of Indians, Oklahoma Eastern Shawnee Tribe of Oklahoma Miami Tribe of Oklahoma Peoria Tribe of Indians of Oklahoma Pokagon Band of Potawatomi Indians Shawnee Tribe





BES



# **USGS Bloomington & Unionville Quadrangle** High Street Trail between Arden Drive and 3rd Street

gh Street Trail between Arden Drive and 3rd Stree City of Bloomington, Monroe County, IN Section 34, Township 9N, Range 1W, and Sections 3 & 10, Township 8N, Range 1W Des. No. 2200020

Feet

# RUMPKE STONE WALL PRESERVATION & MAINTENANCE PLAN 5220 Production Drive, Bloomington, Indiana

Submitted to: Rumpke Waste and Recycling, Inc. 3990 Generation Drive Cincinnati, OH 45251



Site Visit, January 19, 2022

Submitted by: Dry Stone Conservancy, Inc. Russell Waddell, MHP, Acting Executive Director 1065 Dove Run Road, Suite 5 Lexington, Kentucky 40502

The mission of the nonprofit Dry Stone Conservancy is to preserve historic drystone structures and to promote the ancient craft of dry-laid stone masonry



Preserving and promoting

dry stone masonry

1065 Dove Run Road Suite 5 Lexington Kentucky

40502

859-266-4807

Phone

859-266-4840 Fax

www.drystone.org

Web

# russell@drystone.org

E-mail

John Butler | Site Engineer Rumpke Waste and Recycling 3990 Generation Drive

Cincinnati OH 45251

October 26, 2022

Re: Stone Wall Preservation & Maintenance Plan Monroe County IN Resource Recovery Facility 5220 Production Drive Bloomington, IN 47403

To Whom It May Concern:

Thank you for inviting the Dry Stone Conservancy, Inc. (DSC, the Conservancy) to provide the following *Stone Wall Preservation & Maintenance Plan* (the Plan) for the historic dry-laid stone wall located along the southern boundary of your Resource Recovery Facility in Bloomington, IN. We are grateful for Rumpke's commitment to preserve this locally important historic resource.

Our understanding is that the Plan include:

- 1. Photo documentation and assessment of the current site and wall conditions;
- 2. Recommendations for vegetation removal and maintenance as it relates to the stone wall preservation;
- 3. Evaluation of current site drainage and the proposed grading plans and make recommendations as they relate to the wall preservation goals;
- 4. Identification of priority wall repairs;
- 5. Cost estimates for owner-selected priority wall repairs;
- 6. Development of a stone wall specification to guide future wall repairs; and
- 7. Recommendations for facilitating continued maintenance and restoration activities through public-private partnerships.

Historic documentation of the stone wall was not requested for inclusion in this Plan; nor was the development of a formal Preservation Easement.

The mission of the nonprofit Dry Stone Conservancy is to preserve historic drystone structures and to promote the ancient craft of dry-laid stone masonry. The organization provides drystone masonry consultation, training, and restoration services to further its 501(c)(3) mission objectives and partners with various owners, agencies and organizations as a means by which drystone training opportunities can be provided and our nation's incredible drystone heritage preserved.

Thank you again for inviting the Conservancy to work with you on this Plan. We are honored to have been offered the opportunity. Please feel free to contact me with any questions.

Respectfully submitted,

The DSC is a 501(c)(3) publicly-supported nonprofit organization

Russell Waddell, MHP, Acting Executive Director

# TABLE OF CONTENTS:

HISTORICAL CONTEXT OF THE RUMPKE STONE WALL 4 KENTUCKY ROCK FENCES 5 GENERAL COMMENTS ABOUT DRYSTONE MASONRY 6 PRE-SURVEY SITE VISIT, SITE CONDITIONS & GUIDANCE ON VEGETATION REMOVAL 7 PRESERVATION/RESTORATION DEFINED & PLAN OBJECTIVES 11 WALL SURVEY METHODOLOGY 12 RUMPKE STONE WALL FIELD SURVEY PHOTOS LONG DISTANCE VIEWS 13 RUMPKE STONE WALL ASSESSMENT 18 PRE-CONSTRUCTION SITE DRAINAGE ASSESSMENT 19 PRESERVATION RECOMMENDATIONS 22 MAINTENANCE RECOMMENDATIONS 22 DETAILED CHART / FIELD NOTES @ 10-FT INTERVALS STA 0+00 to 10+95 (and beyond) 23 PRIORITY REPAIRS ITEMIZED 25 RUMPKE STONE WALL FIELD SURVEY PHOTOS (March 9-10, 2022) **DETAILED VIEWS** 27 RUMPKE STONE WALL PRESERVATION / RESTORATION SPECIFICATION 40 **RECOMMENDATIONS FOR PUBLIC-PRIVATE PARTNERSHIPS** 44 CLOSING STATEMENTS 44

# HISTORICAL CONTEXT OF THE RUMPKE STONE WALL:

Although in-depth research into the history of the Rumpke stone wall was not requested for this Preservation & Maintenance Plan, it is interesting to know more about when it was built, who built it, and why. The historical context also illuminates why local entities are interested in preserving this rare surviving resource from Indiana's settlement and early development periods. Finally, including the historical context of the Rumpke stone wall with this Preservation & Maintenance Plan is an opportunity to present previous research in a new venue and to suggest avenues for additional research.

Extensive research was undertaken for the recent nomination of the Stipp-Bender Farm (which originally included the Rumpke property) to the National Register of Historic Places. Relevant "quotes" from that nomination and additional input from the author are included here to provide historical context for the Rumpke stone wall.

Danielle Bachant-Bell's *Stipp-Bender Farm National Register of Historic Places Registration Form* (submitted March 2021) is focused on the remaining 5.47 acres of the original 300-acre Stipp-Bender farm in Monroe County. The period of significance for the nomination is limited to the time the Stipp's built their Greek Revival House in 1876 through 1910 when other related farm structures were completed. The nomination includes several stone walls documented by previous research as having been built in 1882 (although she notes *"derivation for this date is unknown"*). These walls were associated with additional dry-laid stone walls on the original 300-acre farm. The southernmost E-W oriented stone wall followed the southern boundary of the Farm and was originally connected to the Rumpke stone wall before it was bisected by a railroad in the early 1900's and further divided in 1979 when State Road 37 was built. Additional drystone walls in the region include several located in the *Maple Grove Rural Historic District* (NR listed, May 1998) north of Bloomington, two of which are also documented as having been built in the late 1800's, specifically 1878 and 1885.

The late-1800's dates attributed to these historic stone walls surprised us. Based on our evaluation of its condition, appearance, quality, and construction and our knowledge of the evolution of rock fence building in Kentucky as discussed in the following section, we expected the Rumpke stone wall to have been built decades earlier.

In the Stipp-Bender Farm NRHP Nomination, Bachant-Bell also provides historical context of the region, its early European-American settlement, and agricultural development. She says: "*Early settlers to Monroe County arrived around 1815 and soon began growing corn and raising swine*", and "*The 1850s farmers in the state were reaping unprecedented prosperity*", and "*By 1860, Indiana was first in the nation in hog production and second in wheat harvests. Sheep also dominated the livestock markets*". These comments suggest the need existed for durable livestock-proof fencing long before 1882.

She goes on to note the land on which the Rumpke stone wall was built was originally "settled as a farm by Hugh Campbell [whose] family settled in Monroe County in the 1830's and established a sizeable farm" which "was well established by the time of the Poll Tax of 1841 as he was one of the third highest payers . . .", and "By the 1856 plat map [which also showed Stipp's farm], Hugh Campbell had the roughly 300 acres that were eventually sold to George Stipp in 1873 [for \$20,000]". Perhaps the prosperity of the Campbell farm can be attributed to hog and sheep production, for which strong livestock-proof fencing was essential.

Bachant-Bell's research reveals another connection that existed between the Campbells and Stipps long before 1856 when they were Monroe County neighbors. *"Hugh Campbell (elder) was born in Virginia and was between 50-60 years old by the 1840 census"*, thus, he was born between 1780 and 1790 when Kentucky was still part of Virginia. *"All his children but his youngest son were born in Kentucky"*, thus after June 1792 when Kentucky achieved statehood. Although George Stipp was born in Indiana in 1824, his father *"John Oscar"* 

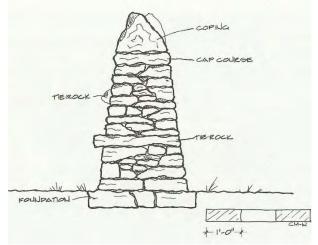
*Stipp, Sr. (1792-1857) [was] born in Bourbon County, Kentucky*". Bourbon County was founded in 1785 and was originally one of the nine "western counties" of Virginia formed since its expansion westward to the Mississippi River in 1772 and its subsequent establishment of *Kentucky County, Virginia* in 1776. Both families lived "in Kentucky" in the late 1700's and early 1800's when the Scots-Irish tradition of building rock fences was well known and permeated the Kentucky landscape.

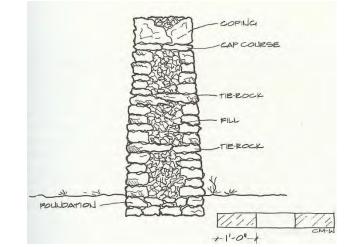
Since the 1882 attribution of the Stipp-Bender / Rumpke stone walls is not definite, and the need for strong fencing existed much earlier, and there was a connection of the property's first farmers to Kentucky, we think it is possible they were built before 1882. Did the Campbell and Stipp families know each other before they moved to Indiana? Did they own property in Kentucky? Were they already familiar with the Scots-Irish rock fence building tradition before they emigrated and settled in Indiana? Did Indiana have a Trespass Law similar to Kentucky's that motivated farmers to maintain a "legal" livestock-proof fence in order to claim damages to their crops from roaming livestock? Did Indiana experience a mid to late-1800's period of turnpike building similar to Kentucky's, and if so what was different so that Indiana's turnpike walls were better built than Kentucky's?

More research into the early to mid-1800's Campbell Farm era and Indiana's mid to late-1800's turnpike era might provide some answers to these questions.

# **KENTUCKY ROCK FENCES:**

The construction of the Rumpke Stone Wall closely matches the high quality of Scots-Irish built "plantation-era" rock fences (stone walls) built throughout Central Kentucky in the early- to mid-1800's. These earliest Kentucky rock fences were colloquially described as being "horse-high, pig-tight and bull-strong". They were built by skilled drystone craftsmen who contracted directly to farm and plantation owners, primarily for the purposes of containing livestock, maintaining a "legal" fence as required by Kentucky's Trespass Law (in order to recover damages from owners of roaming livestock), and to preserve their diminishing wood lots. Rock fences were built to last generations and quickly became status symbols that announced their owners' forward-thinking and progressive farming practices.





"Plantation-era" Kentucky Rock Fence, early to mid-1800's.

"Turnpike-era" Kentucky Rock Fence, mid to late 1800's.

From the mid- to late-1800's, many of Kentucky's roadside fences were constructed by turnpike construction companies that employed enormous crews of (mostly) Irish "turnpikers". Charters were issued by groups of investors to build or improve a local roadway, then dissolved once the construction costs were recovered.

Roadside fences were needed not only by farmers along the road to comply with Kentucky trespass laws, but also by the charter investors to prevent travelers from bypassing the toll gates. Motivated by speed and economy, the turnpike construction companies changed how the fences were built, sacrificing structural elements in order to conserve on stone and build faster. As seen in the diagrams above, turnpike-era fences have a distinct line of weakness down the center that makes them more vulnerable to seasonal frost-heave cycles. Although built more recently, these fences have not performed as well over time as the earlier built plantation-era fences.

# GENERAL COMMENTS ABOUT DRYSTONE MASONRY:

Dry-laid stone masonry is an ancient construction technology that produces a self-supporting stone structure (freestanding fence, retaining wall, building, bridge) without the use of any mortar. Historically, it was in widespread use and well understood during America's settlement period. Flexibility and free-draining are two key properties that distinguish drystone from rigid masonry systems. Unyielding foundation systems down to frost depth and weep holes are not typically needed.

Drystone masonry relies on several factors for its success: the morphology, strength, size, shape and frictional properties of the stone itself; the choices made by the builder on how each stone is placed in the structure; the footing and bearing characteristics and their ability to hold the wall in place; the characteristics of the slope material behind and the packing material within the structure; its anticipated interaction with external forces such as water, weather, wind and vibration; and the wall's design profile based on its intended use.

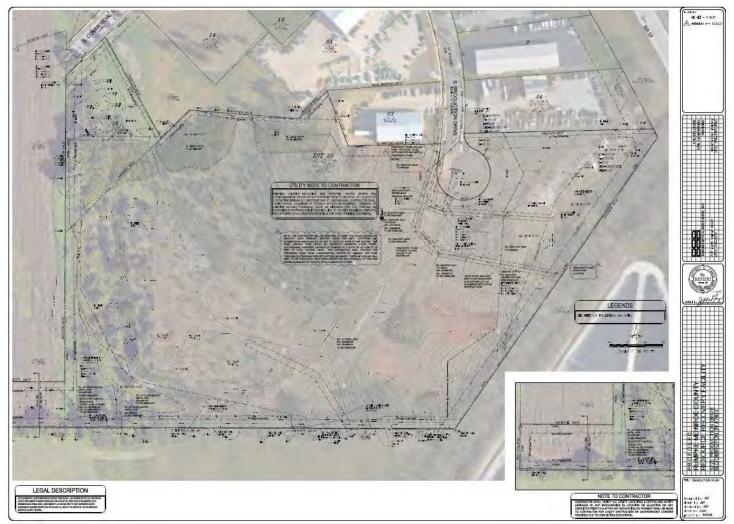
Drystone masonry is considered *structural* when it is load-bearing and used to carry an additional load (a roof or building) and/or counteract a natural force (a sloped embankment above, a spring or perched water table). A drystone retaining wall is considered *surcharged* when the load exceeds a well-drained level grade behind it.

The integrity of dry-stone masonry relies on fundamental principles of its design including its batter and inclusion of stone elements that bind the structure together: ties, dovetailed corners, adequately sized and placed face stones, multiple points of contact between adjacent stones, laid up with joints well covered, etc.

Centuries of exposure to rain, snow loads, ice, melt water, and frost-heave (the seasonal shrink and swell of associated soils), unchecked growth of woody vegetation on and near the wall, and deferred maintenance have resulted in some damage. A saving grace of drystone masonry, however, is that it is recyclable. Drystone structures can be sensitively and strategically dismantled and rebuilt to their original form using their own original building materials. Structural improvements missing from the original wall design (in this case, a projecting foundation course and more frequent tie-stones) can be discreetly added for increased longevity without interfering with the wall's historic appearance.

# PRE-SURVEY SITE VISIT, SITE CONDITIONS & GUIDANCE ON VEGETATION REMOVAL:

A recognizance site visit was conducted on January 19, 2022 for the purpose of Rumpke and DSC to develop a plan-of-action to accomplish the site and wall survey work. Attending were Kevin Meyers representing Rumpke, Jane Wooley representing DSC, and Danielle Bachant-Bell and Cheryl Munson representing Monroe County's Historic Preservation Board of Review and Planning Department.



Rumpke's Site Demolition Plan as of January 19, 2022, showing existing grades and stone wall along southern property line. The plan shows the existing grades that the presence of the berm installed below the fill slope in the low area that impacts the stone wall.

During the recognizance visit it quickly became apparent it would not be possible to proceed with the assessment and pre-construction survey the dense vegetation growing along both sides of the wall that precluded access and visibility. That notwithstanding, the group then proceeded to walk along the line of the wall (as close to it as was possible) to get a sense of the overall site, its drainage issues, and the condition of the wall.

The Conservancy provided guidance to Rumpke on the extent of vegetation removal needed to allow the survey to proceed. Guidance for the initial phase of vegetation removal was limited to that needed to expose the wall to full view from 10' away from the wall for photography and to allow up close investigation, assessment and measurements. Since Rumpke does not own the property to the south, it was not within their authority to remove any of the vegetation along the south side of the wall beyond that which overhung the wall. Mature and established trees (over 3" in diameter measured at breast height) were left in place for future determination of their disposition, as discussed later in the stone wall maintenance recommendations.

PRE-SURVEY GENERAL SITE VIEWS PRIOR TO VEGETATION REMOVAL (1/19/2022 Site Visit):



PRE-SURVEY 360-VIEW OF UPPER SITE – clockwise, approx. STA 1+90 (1/19/2022 Site Visit):



PRE-SURVEY 360-VIEW OF SITE BELOW FILL SLOPE, showing berm/soil heaped up on the stone wall – approx. STA 5+60 (1/19/2022 Site Visit):



PRE-SURVEY 360-VIEW OF LOW AREA DRAINAGE ISSUES – approx. STA 7+80 (1/19/2022 Site Visit):



PRE-SURVEY 360-VIEW OF THREATENED FENCE – approx. STA 7+40 to 8+00 (1/19/2022 Site Visit):



PRE-SURVEY VIEWS OF FAR END OF SITE, approx. STA 10+60 to 11+40 (1/19/2022 Site Visit):



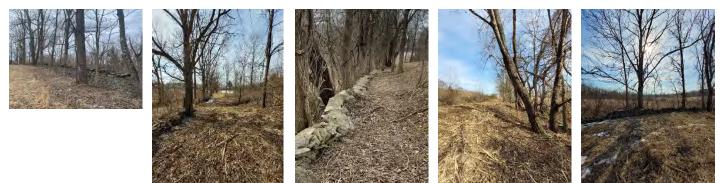
DSC Report: Rock Fence Preservation & Maintenance Plan23

Following the initial site visit, Rumpke coordinate with Eco Logic, a landscaping firm recommended by Bachant-Bell, to perform the initial vegetation removal. Their website states:

Eco Logic LLC is an ecological restoration and green infrastructure firm founded in Bloomington Indiana in 1999. We work with clients focused on restoring natural areas and improving the sustainability of our urban environment. We bring over 20 years of experience to every project from assessment and planning through to implementation and long-term management.

By late February, the woody vegetation was removed – including shrubs, vines, saplings and deadwood – within a 10-foot wide zone along the north side of the wall as well as the herbaceous vegetation was knocked down sufficiently to allow the survey to proceed.

PRE-SURVEY, AFTER VEGETATION REMOVAL, early February 2022 (photos provided by Rumpke):



# PRESERVATION/RESTORATION DEFINED & PLAN OBJECTIVES:

Rumpke has agreed to work with an historic preservation professional to produce a preservation plan for the drystack limestone wall on the property. It is agreed that the preservation plan must include a field and condition survey as well as a long-term maintenance commitment.

The National Park Service administers the Secretary of the Interior's Standards for the Treatment of Historic Properties which explicitly lay out what is and is not acceptable within a particular type of treatment. There are 4 different types of Treatments of Historic Properties: Preservation, Rehabilitation, Restoration, and Reconstruction. These standards are what drive the decision-making process when preserving historic properties. The Secretary of the Interior's Standards for the Treatment of Historic Properties says that "Preservation focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time." Preservation is the appropriate treatment for this property and Rumpke has agreed to follow the standards for preserving this wall. What follows is lifted directly from the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

"Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

The Standards for Preservation are as follows:

- 1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
- 2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
- 3. Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.
- 4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- 5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- 6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color and texture.

- 7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- 8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

Preservation as a Treatment:

When the property's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular period of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations, Preservation may be considered as a treatment."

# WALL SURVEY METHODOLOGY:

The purpose of a detailed field survey of the stone wall for this Preservation & Maintenance Plan is to establish the condition of the wall and damages it had sustained prior to Rumpke's ownership of the property and their planned site development activities.

Once the vegetation was removed, it was possible to get up close to the wall to assess, measure, and photograph it. The length of the wall was measured using a 100-foot fiberglass-bladed open reel tape measure, and staked using standard highway stationing methodology, namely 36" tall wooden stakes at 100-foot intervals and 18" tall stakes at 10-foot intervals. Retractable tape measures were used to measure wall heights and widths. Pocket rods, unrolled with the end at surface grade, were attached to rebar and placed at each end of the 10-foot section to provide scale in each photograph. The wooden stake was labeled with 100-foot and 10-foot station numbers, beginning with STA 0+00 at the far eastern end of the wall to the western end of the Rumpke property at STA 10+95 (i.e., one thousand and ninety-five feet, indicated by pink ribbon on the woven wire fence on the south side of the stone wall). Although not on Rumpke property, the stakes were continued further west to the curved 90-degree corner at STA 11+22.5, turning north to the end of the wall at a gate opening at STA 11+45.

Photographs of every 10' section were taken from 10 feet back, and other angles as needed to see behind any trees left standing that obstructed straight-on views.

Field measurements were taken of the wall dimensions at every 10-foot increment, including height of the double build, width at the top of build, and height of the coping. Base width was not possible to determine.

Given the inexact nature of using tape measures, our field measurements will likely not coincide perfectly with Rumpke's survey that employed more precise survey instruments.

# **RUMPKE STONE WALL FIELD SURVEY PHOTOS (March 9-10, 2022)** LONG DISTANCE VIEWS (photos taken from 100-Foot Stations)

(Detailed photos of each 10' Station are included in a later section.)

POINT-OF-BEGINNING, STA 0+00 (southwest corner of site):



*STA* 0+00 south side, view northwest.



STA 0+00 north side, view southwest.

## STA 1+00



STA 1+00, north side, view southeast.



STA 1+00 north side, view southwest.

# STA 3+00



STA 3+00, north side, view southeast.



*STA* 3+00, north side, view southwest.

#### STA 4+00



STA 4+00, north side, view southeast.



*STA* 4+00, north side, view southwest.

## STA 5+00



*STA* 5+00, north side, view southeast.



*STA* 5+00, north side, view southwest.

### STA 6+00



*STA* 6+00, north side, view southeast.



STA 6+00, north side, view southwest.



STA 7+00, north side, view southeast.



STA 7+00, north side, view southwest.

#### STA 8+00



STA 8+00, north side, view southeast.



STA 8+00, north side, view southwest.

# STA 9+00



STA 9+00, north side, view southeast.



STA 9+00, north side, view southwest.



STA 10+00, north side, view southeast.



STA 10+00, north side, view southwest.



STA 10+95 end point (pink ribbon), view southwest.



STA 10+90 to 11+00, north side, view south (10+95 at pink ribbon in middle of photograph).

STA 10+95 SURVEY END POINT to end of fence @ 11+45 (off Rumpke property)



STA 11+00 to 11+10, north side, view southeast.



STA 11+22.5 inside of curved corner to 11+30, view west.



STA 11+30 to 11+45, end of fence, west side, view east.



STA 11+20 to curve corner @ 11+22.5, north side, view southwest.



STA 11+22.5 to 11+30 outside of curved corner, view east.



STA 11+45, end of fence, north end, view south.

# **RUMPKE STONE WALL ASSESSMENT:**

Generally, the wall is in good condition for its age, apart from locations where large trees have grown and pushed it out of alignment, and in areas where concentrated drainage patterns and flooding have resulted in collapses and undermining issues. We attribute the wall's longevity to its high quality original construction, and the use of covers and single copes to tie the two sides together.

It is a double-faced dry-laid stone wall with random build uncoursed stonework that varies along its length from fine-grained (thin stone, 10-11 stones high) to course-grained (thick stone, 7-8 stones high), presumable resulting from the composition of the loads of stone delivered to the wall builders. Its construction exhibits the hallmark features of high-quality construction, namely: battered sides, a cover course with single copes, occasional ties, and tight-knit stonework with minimal running joints, carefully packed core, and no face pinning.

The Rumpke stone wall was originally intended and built as a self-supporting, non-structural, non-surcharged agricultural field wall. It was intended to contain livestock, protect crops from wandering livestock, mark a boundary between adjacent properties, and/or delineate a public roadway. It was not intended to support any additional loads; however, recent alterations to the landscape including installation of a massive fill slope and berm along the north side of the wall, and storm water drainage collected and directed toward the wall and along its base have added surcharge to some sections not originally designed nor built to handle these additional pressures. At this point, though, most of the wall seems to be in a stable condition. The walls condition should be monitored.

Please note: DSC's assessment of the stone wall condition and the site drainage issues are limited to visual inspection. No additional testing or investigations are included.

# **PRE-CONSTRUCTION SITE DRAINAGE ASSESSMENT:**

The purpose of evaluating the pre-construction site drainage issues for this Preservation & Maintenance Plan is to establish the site conditions that existed and the damage that had occurred to the stone wall prior to Rumpke's ownership of the property and their planned site development activities. Additionally, the pre-construction site drainage evaluation provides guidance for Rumpke to consider as they improve the site and enhance protection measures for the stone wall.



1986 aerial photograph (Bachant-Bell) and 2022 Google-earth image of Rumpke property (blue ovals added).

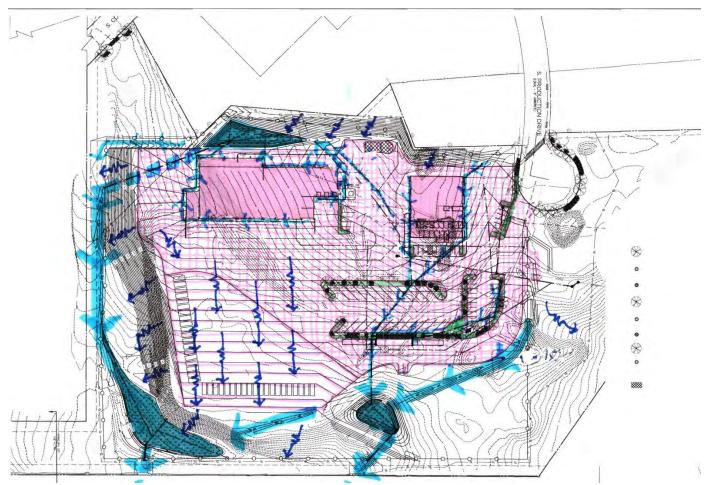
Bachant-Bell's 1939 through 1989 aerial photographs show the property's open pasture (cultivated?) landscape with gently sloped grades and surface drainage patterns that did not impede mowing and/or plowing activities. Today, very little of that agrarian landscape remains.

A massive 20+ foot high fill slope occupies a significant percentage of the site, presumably created when Production Drive was developed and after as construction spoils were dumped to create a level building site. The fill slope greatly altered the original site surface drainage pattern and negatively impacted long stretches of the stone wall.

Retention ponds, dams, berms, swales, pipes, and other drainage structures were added along the southern edge and southwest corner of the fill slope to direct water flow ultimately to the low area of the site along the southern property line. This low area still floods frequently; water ponds on both sides of the fence and slowly drains and/or soaks in. We do not know if and to where the floodwaters drain, but mud and silt on both properties indicate it ponds for extended periods of time. Silt fencing was also installed in an attempt to contain adverse effects of the fill slope on the site; an inadequate effort given the current state of the fence in total collapse and now buried under accumulated silt. The western edge of the fill slope forces previous overland surface drainage into a concentrated drainage channel along the western property line that leads south to the low area and increases its flooding and ponding issues. The site drainage changes resulting from the addition of the fill slope, retention basins, berm, and drainage channels had damaging consequences on the stone wall, itemized as follows:

- 1. Between STA 310 to STA 380 the stone wall meanders to and fro, possibly due to surface drainage from swales on each side of the gravel "road" below Production Drive and an outlet pipe directed to the low area just east of the fill slope; the wall is totally collapsed (washed out?) from STA 320 to STA 350;
- 2. An earth berm/dam was installed below the fill slope from STA 525 to STA 790 with its toe within a few feet and at times directly on the stone wall; this berm has resulted in the grade along the north side of the wall being considerably higher than it was originally; the base of the stone wall is now essentially buried, leaving less than half of the original wall height visible above grade;
- 3. The wall from STA 525 to STA 565 is completely collapsed (washed out?), possibly due to overland sheet drainage from the southwest facing slopes on eastern side of the site encountering the fill slope, then concentrating as it makes it way downhill;
- 4. Another section of wall between STA 755 and STA 785, at the lowest area on the site and directly opposite the detention pond storm pipe, is also completely gone or washed out (was wall stone intentionally dismantled and used for the outlet pipe rock chute?); and
- 5. Although the stone wall is still standing from STA 785 to STA 800, it is being actively undermined from slowing draining floodwaters and concentrated flow immediately along the base of the wall.

With all the site drainage directed to these retention ponds and ultimately the flood prone low area along the southern property line, floodwaters encroached upon the property to the south and compromise the stone wall footing.



Rumpke's construction documents include the proposed grading and drainage plan shown above. Most of the redeveloped site will be under impervious hardscape (building rooves and concrete vehicular and pedestrian paving) and additional compacted gravel areas that will increase the volume of storm water directed to the low area.

### SITE DRAINAGE RECOMMENDATIONS:

The detention and ultimate release of storm waters through the low area along the southern property line should include measures to protect the stone wall from further damage. Of particular concern are: the volume and velocity of storm waters released from the new detention ponds and directed toward openings in the stone wall that were originally created by previous storm water measures; the possibility of continued ponding and inundation of the stone wall in the low area given the apparent lack of positive drainage on the adjacent property; and the effect slowing draining floodwaters that channelize along the base of the wall.

A recommendation for the mitigation of these watershed issues is to create diversion swales on the uphill side of the wall to help direct the flow of water through the existing low spot instead of along it. This will allow the water to flow more evenly through the wall and will prevent further deterioration and inundation from the watershed issues.

### **PRESERVATION RECOMMENDATIONS:**

- 1. Maintain the wall in at least the same condition as it was when the property was purchased.
- 2. Rebuild collapsed sections to match the historic (see accompanying specifications).
- 3. Recondition threatened bulging, leaning, undermined sections.
- 4. Reset loose coping stones.
- 5. Establish (or reestablish) a period-compatible structural wallhead at the eastern end of the fence, and in locations were permanent passageways (drainage, wildlife, pedestrian) through the wall are to be inserted.
- 6. Do not insert features or elements that are not period specific.

# MAINTENANCE RECOMMENDATIONS:

- 1. Maintain a 10'-wide zone on both sides of the wall (north side at least) that is cleared of all woody vegetation. Diligently remove all shrubs, saplings and vines growing near the wall.
- 2. Collect collapsed stones from both sides of the wall and set it next to the wall section from which it fell. This can assist with future repairs
- 3. Keep clear of vermin burrows and fill where appropriate
- 4. Reset and lock copes each spring, after winter freeze-thaw cycles
- 5. Establish drainage swales (and berms as needed) back from line of the wall to capture overland flow and redirect it away from the base of the wall.
- 6. Dissuade people and deer from crossing over the wall by establishing designated crossing points and/or step stiles.
- 7. Fill holes with stone where groundhogs persistently undermine the wall; consider rebuilding the wall with intentional linteled openings (creep holes) in locations where filling holes is unsuccessful.
- 8. Clear woody vegetation and maintain a clear zone on the south side of the wall up the Rumpke property line.
- 9. Remove all tree branches hanging over the wall.
- 10. Rebuild wall sections where trees have grown into the alignment and pushed the wall over.
- 11. Salvage stone from collapsed wall sections and store along the historic wall alignment as close to where each stone was originally located as possible. Identify, sort, and store historic copes, covers, and ties separately; historic face stones as identified by weathered faces can be stored with weathered side up.

#### DETAILED CHART / FIELD NOTES @ 10-FT INTERVALS STA 0+00 to 10+95 (and beyond):

#### Dry Stone Conservancy Rumpke Stone Wall Field Survey

March 9-10, 2022

(Detailed Measurements Field Notes @ 10' Intervals)

	A	В	С	D	E	F	G	н	1
	-	Front	Front		1.00				
	STATION #	Build	Total	Back	Тор				
1	Stakes	Height	Height	Height	Width	Courses	Copes	Covers	Notes
	1								start of section, base width 26", clearly just torn down at property line
2	0+00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	with no consideration for a wallhead
3	0+10	31	42	38	16	Med Grain	uphill/projecting north side	yes	no visible batter (north side)
4	0+20		29	31	18	mix	n/a	n/a	
5	0+30	34	44	44	16	fine grain	uphill/projecting north side	yes	
5	0+40	34	44	44	16	fine grain	uphill/projecting north side	yes	big stones at bottom, smaller as you go up
7	0+50	34	44	42	18	mix	down/projecting north side	yes	big stones at bottom, smaller as you go up
8	0+60	32	38	38	18	Med Grain	down/projecting north side	yes	, , , , , , ,
9	0+70	34	44	42	16	mix	uphill/projecting north side	yes	
0	0+80	32	40	44	16	Med Grain	uphill/projecting north side	yes	
1	0+90	34	44	44	16	mix	uphill/projecting north side	yes	
2	1+00	32	44	44	16	Med Grain	uphill/projecting north side	yes	
3	1+10	24	36	42	16	course grain	uphill/projecting north side	yes	
4	1+20	30	36	40	16	fine grain	uphill/projecting north side	yes	
5	1+30	28	44	46	16	fine grain	uphill/projecting north side	yes	26" wide cope
6	1+40	25	40	44	16	fine grain	uphill/projecting north side	yes	20 wide cope
7	1+50	n/a	n/a	n/a	n/a				collapsed by tree also TOP OF HILL
8	1+50	26	36	36	16	n/a mix	n/a down/projecting porth side	n/a	collapsed by tree, also TOP OF HILL
9	1+70	30	40	38			down/projecting north side	yes	start of downhill copes
9	1+70	25	33	38	16	Course to Fine	down/projecting north side	yes	
-					16	course grain	n/a	n/a	
1	1+90	26	33	32	16	course grain	down/projecting north side	yes	
2	2+00	30	38	38	16	course grain	down/projecting north side	yes	
23	2+10	31	39	40	16	course grain	down/projecting north side	yes	
24	2+20	32	42	42	16	mix	down/projecting north side		
25	2+30	28	38	42	18	mix	cope collapse	yes	tree push
6	2+40	33	n/a	36	16	course grain	cope issues	n/a	
7	2+50	32	42	42	17	mix	cope issues	yes	
8	2+60	28		30	16	mix	n/a	yes	tree push
9	2+70	36	42	36	16	Med Grain	down/projecting north side	yes	tree push to the south
0	2+80	36	48	42	16	course grain	down/projecting north side	yes	
1	2+90	34		32	16	mix	down/projecting north side	yes	
12	3+00	29	40	36	16	fine grain	down/projecting north side	yes	starts to collapse
33	3+10	22		20	20	course grain	n/a	n/a	half of wall stands
34	3+20	16		20	18	mix	n/a	n/a	half of wall stands
35	3+30	n/a	n/a	n/a	24	n/a	n/a	n/a	no wall/just one course
6	3+40	n/a	n/a	n/a	n/a	n/a	n/a	n/a	big tree
37	3+50	26		20	20	mix	n/a	n/a	issues from tree
88	3+60	30		32	17	course grain	n/a	n/a	issues from tree/and a curve is in there
9	3+70	n/a	n/a	n/a	n/a	n/a	n/a	n/a	collapsed 43" wide pile of rocks and fallen on south side
0	3+80	27		21	18	course grain	n/a	n/a	
1	3+90	22	32	28	16	course grain	down/projecting north side	yes	From here, wall starts to be buried by berm against the north side.
2	4+00	18	26	24	16	course grain	down/projecting north side	no	from here, wan starts to be barred by bern against the north side.
3	4+10	14	20	10	16	fine grain	n/a	yes	
4	4+20	14		14	18	fine grain	n/a		
5	4+20	14		14	18	Med Grain	n/a	yes	
6	4+30	16		8	16	Med Grain	n/a	yes	
7	4+40	18	30	26				yes	
8			30		16	fine grain	down/projecting north side	yes	near primal hole
_	4+60	19		16	16	course grain	down/projecting north side	yes	near animal hole
9	4+70	10	20	9	16	Med Grain	n/a		
0	4+80	14	22	24	20	Med Grain	down/projecting north side	yes	buried
1	4+90	17	24	22	16	Med Grain	down/projecting north side	yes	buried
2	5+00	22	28	30	16	Med Grain	down/projecting north side	yes	buried
3	5+10	18	30	38	16	course grain	vert	yes	buried
4	5+20	24	32	40	16	course grain	n/a	yes	buried
5	5+30	8		16	22	n/a	n/a	no	collapsed
б	5+40	n/a	n/a	n/a	n/a	n/a	n/a	n/a	collapsed 36" wide pile of stone fallen to northside
7	5+50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	collapsed 24" wide pile of stone fallen to northside
8	5+60	n/a	n/a	n/a	n/a	n/a	n/a	n/a	collapsed 48" wide pile of stone fallen to northside
9	5+70	10	22	30	18	Med Grain	down/projecting north side	yes	buried from northside
0	5+80	14	24	30	16	Med Grain	down/projecting north side	yes	buried from northside
1	5+90	16	24	30	16	Med Grain	down/projecting north side	yes	buried from northside
2	6+00	12	22	36	18	Med Grain	down/projecting north side	yes	buried from northside
-	6+10	8	18	24	18	Med Grain	just copes/Not projecting	yes	buried from northside
-	6+20	8	20	30	16	Med Grain	down/projecting north side		buried from northside
_	6+30	8	19	24	16	Med Grain		yes	buried from northside
_	6+40	0	8	16			down/projecting north side	yes	
56		0	0	10	16	Med Grain	down/projecting north side	yes	buried from northside

#### Dry Stone Conservancy Rumpke Stone Wall Field Survey March 9-10, 2022 (Detailed Measurements Field Notes @ 10' Intervals)

-	А	В	С	D	E	F	G	н	I
67 6+50		5	12	16	16	Med Grain	down/projecting north side	yes	buried from northside
68 6+60	D	n/a	n/a	n/a	n/a	n/a	n/a	n/a	collapsed due to tree, 60" wide pile of stone
6+70	C	5		12	19	Med Grain	n/a	n/a	
70 6+80	D	13		20	20	n/a	n/a		
1 6+90	0	10			28	n/a	n/a	n/a	mostly collapsed
2 7+00	0	n/a	n/a	n/a	n/a	n/a	n/a		36" wide pile of stone collapsed on both sides
3 7+10	)	8		20	20	Med Grain	n/a	yes	so mae pre or stone compaca on both sides
74 7+20		11		24	20	Med Grain	n/a		
5 7+30		9	20	28	18			yes	
6 7+40		14				Med Grain	down/projecting north side	yes	
-			23	30	18	Med Grain	down/projecting north side	yes	
7 7+50		18	24	28	18	Med Grain	down/projecting north side	yes	
8 7+60		n/a	n/a	n/a	n/a	n/a	n/a	n/a	tapers to nothing across drainage
9 7+70		n/a	n/a	n/a	n/a	n/a	n/a	n/a	same
0 7+80	)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	same
1 7+90	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	BOTTOM OF HILL!!!
2 8+00	)	29		29	16	mix	n/a	n/a	starts to push over the northside
3 8+10	)	22	31	30	16	mix	uphill/projecting north side	yes	big copes
4 8+20	)	14		17	17	mix	n/a	n/a	
5 8+30	)	16		18	17	mix	n/a	would have	
6 8+40		20	28	28	16	course grain	down/projecting north side	yes	
7 8+50		16	26	30	16	course grain	down/projecting north side	по	
8 8+60		20	32	30	18	mix	down/projecting north side		his conor
9 8+70		16	24	24	16			yes	big copes
0 8+80		10				mix	down/projecting north side	yes	big copes
			26	20	16	mix	down/projecting north side	yes	big copes
1 8+90		12		10	16	mix	n/a	yes	big copes
2 9+00		16	24	20	16	course grain	down/projecting north side	yes	big copes
3 9+10		14	24	20	18	course grain	down/projecting north side	yes	big copes
4 9+20		23	28	16	18	mix	down/projecting north side	yes	
5 9+30		15		10	22	course grain	n/a	yes	missing copes
6 9+40		20		18	18	mix	n/a	n/a	missing copes
7 9+50	)	26		24	18	course grain	n/a	n/a	
8 9+60	)	27		22	20	course grain	n/a	n/a	
9 9+70	)	20	30	24	16	course grain	down but not projecting	no	
08+6 0	)	18	26	26	18	mix	down but not projecting	no	
1 9+90	1	17	26	22	18	course grain	down but not projecting	no	collapsing
02 10+0	00	12		8	18	course grain	n/a	no	collapsing
03 10+1		18		12	18	Med Grain	n/a	n/a	collapsing
04 10+2		18		12	19	Med Grain	n/a	n/a	collapsing
05 10+3		16	30	12	18	course grain	n/a		
06 10+4		24	34	34	18	Med Grain		n/a	active collapse to the north side
07 10+5		23					down/projecting north side	yes	
08 10+6			35	32	16	Med Grain	down/projecting north side	yes	
-		22		20	17	Med Grain	n/a	would have	
		30		24	18	Med Grain	n/a	would have	
10+80		n/a	n/a	n/a	n/a	n/a	n/a	n/a	36" wide by 24" tall pile of collapsed stone
1 10+90		24		15	22	Med Grain	n/a	n/a	where it stops being collapsed
2 10+96									PROPERTY LINE, END OF RUMPKE-OWNED WALL
3 11+00		24	30	29	18	mix	down/projecting north side	yes	
4 11+10		32		26	18	mix	n/a	n/a	
5 11+20		27	36	30	16	mix	down/projecting north side	yes	
6 11+22	2.5	24	32	20	20	Med Grain	down/projecting north side	yes	curve!
7 11+30	0	28		28	18	mix	down/projecting north side	yes	
8 11+40	0	14		18	18	mix	n/a	n/a	collapsed
9 11+44	4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	54" wide by 16" tall pile of stone END OF WALL!
0						1.5			
-	TION #	Notes							
2 1+08			sing failure	e to south s	ide				
		Tree cau	soing failure	re to south s	side				
4 1+85									
-			the second s	re to south					
5 2+65		Tree causeing failure to south side Tree causeing failure to south side							
6 2+75				re to south	side				
-		"hot mes		10 A C A					
3 4+15		Active co							
9 4+75		Animal p	ath causin	g issues					
14113		Tree caus	sing failure	to north s	ide				
-				to north s					
0 5+85									
) 5+85 1 6+05					and				
) 5+85 1 6+05 2 5+20	to 7+50		kun/low r						
) 5+85 6+05 2 5+20 3 7+85	to 7+50	Picks bac			eau				
) 5+85 6+05 2 5+20 3 7+85 8+05	to 7+50	Picks bac Tree/wat	er causing	collapse		brida			
0       5+85         1       6+05         2       5+20         3       7+85         4       8+05         5       8+85	to 7+50	Picks bac Tree/wat	er causing es causing			hside			

#### **PRIORITY REPAIRS ITEMIZED:**

Section	Condition	Treatment	Priority
End - 0+03	Deteriorated	Set foundations and build a wallhead where the wall has been cut away	High
0+03 - 0+10	Missing top 2 courses	Reset top 2 courses, covers, and copes	Medium
0+10 - 0+25	Missing copes	Find and reset copes	Low
0+25 - 0+45	Spot cope damage	Spot cope repairs	Low
0+45 - 0+65	Copes missing	Replace copes with like material, find stone nearby if possible	Low
0+65 - 0+85	Spot cope damage, overall good condition	Spot cope repairs	Low
0+85 - 0+90	Copes missing	Replace copes with like material, find stone nearby if possible	Low
0+90 - 1+20	Spot cope damage, overall good condition	Spot cope repairs	Low
1+20 - 1+30	Copes missing	Replace copes with like material, find stone nearby if possible	Low
1+30 - 1+40	Spot cope damage, overall good condition	Spot cope repairs	Low
1+40 - 1+60	Large collapsed portion due to tree	Reset foundations, rebuild with like material, compensate for tree location by building around roots. Could also locate wildlife crossing point here	High
1+60 - 1+70	Spot cope damage, overall good condition	Spot cope repairs	Low
1+70 - 1+80	Missing a couple courses	Reset top 2 courses, covers, and copes	Medium
1+85	Tree on wall	Remove tree, reset copes under	Low
1+80 - 1+90	Section collapsing	Repair with like material	Medium
1+90 - 2+30	Spot cope damage, overall good condition	Spot cope repairs	Low
2+30 - 2+55	Missing a couple courses	Reset top 2 courses, covers, and copes	Medium
2+55 - 2+80	Large trees caused failure of wall	Rebuild with like material, leave room for trees, perhaps gentle curve around	High
2+80 - 3+00	Miss a couple courses	Reset top 2 courses, covers, and copes	Low
3+00 - 3+80	Extensive damage throughout due to poor drainage and added surcharge	Rebuild with like material (Medium urgency due to the sheer volume of missing stone)	Medium
3+80 - 4+10	Good condition but is shorter due to added retention	Spot cope repairs	Low
4+10 - 4+20	Tree damage, loose, bowed, missing	Rebuild where needed, replace missing stones	High
4+20 - 4+60	Good, but missing copes and covers	Replace copes with like material, find stone nearby if possible	Low
4+60	Groundhog hole	Fill holes	High
4+60 - 4+75	Missing stones, loose, and bowed	Rebuild where needed, replace missing stones	High

4+75 - 5+25	Good, but missing copes and covers	Replace copes with like material, find stone nearby if possible	Low
5+25 - 5+65	The wall has become a retaining wall here but is in good condition	Replace copes with like material, find stone nearby if possible. Adding some sort of drainage to this section might help (over the top, or lintel drain) (This section is medium priority due to the volume of missing stone)	Medium
5+77	Good condition	Good location for potential step stile for crossings	Medium
5+65 - 5+80	Good condition	Replace copes where needed	Low
5+80 - 6+20	Tree damage, loose, bowed, missing	Replace stones, copes, and covers where needed	High
6+20 - 6+50	Good condition but missing copes	Replace copes and covers where needed	Low
6+50 - 7+20	Wall mostly disappears. Only a couple courses high	Establish height and rebuild covers and copes in line with adjacent sections	Medium
7+20 - 7+35	Good condition but missing copes and covers in spots	Replace copes and covers where needed	Medium
7+35 - 7+55	Wall begins to deteriorate	Replace stones as needed.	Low
7+55		Build a wallhead	High
7+55 - 7+75	There is no wall, has become a drainage point		
7+85		Build a wallhead	High
7+85 - 8+10	Good condition	Spot repairs	Low
8+10 - 8+35	Slightly deteriorated	Replace top 2 courses, reset copes and covers	Medium
8+35 - 8+85	Overall good condition	Spot repairs, reset covers and copes	Low
8+85 - 8+95	Collapsed	Strip down rebuild section	High
8+95 - 9+40	Missing covers and copes in spots	Replace where needed	Medium
9+45 - 9+60	Good condition	Spot cope repairs, reset covers where needed	Low
9+60 - 9+70	Tree has caused collapse	Strip down and rebuild section	High
9+70 - 9+90	Good condition, few missing copes	Replace copes where needed	Low
9+90 - 10+25	Damaged sections	Strip down and rebuild section	Medium
10+25 - 10+55	Good condition	Reset copes as needed	Low
10+55 - 10+90	Damaged sections	Strip down and rebuild sections as needed	Medium
10+90 - END	Missing covers and copes in spots	Replace where needed - Build wallhead	Medium

#### **RUMPKE STONE WALL FIELD SURVEY PHOTOS (March 9-10, 2022) DETAILED VIEWS (photos taken straight on of each 100-Foot Station**

### POINT-OF-BEGINNING, STA 0+00 to 0+10



STA 0+00 to 0+10, view south.



STA 0+00 to 0+10, view southeast.

End view, view west.

#### STA 0+10 to 0+20



STA 0+10 to 0+20, view south.

STA 0+1- to 0+20, view southeast.



*STA* 0+20, *close up collapsed stone*.

# STA 0+20 to 0+50:

STA 0+20 to 0+30, view south.



STA 0+30 to 0+40, view south.



STA 0+40 to 0+50, view south.

#### STA 0+50 to 0+70:



STA 0+50 to 0+60, view south.

STA 0+70 to 0+90:



*STA* 0+70 to 0+80, view south.



STA 0+60 to 0+70, view south.



STA 0+70, view southeast behind trees.



STA 0+80 to 0+90, view southwest.



STA 0+80 to 0+90, view southwest.



STA 0+90 to 1+00, view south.



STA 0+90 to 1+00, view southwest.



STA 1+00, view east behind tree stump.



STA 1+00 to 1+10, view south.



STA 1+00 to 1+10, view west behind tree.



STA 1+10, view east behind tree.

STA 1+10 to 1+30:



STA 1+10 to 1+20, view south.

STA 1+30 to 1+50:



STA 1+20 to 1+30, view south.



STA 1+20 to 1+30, collapsed stone.



STA 1+30, long view southwest to gap.



STA 1+30 to 1+40, view south.



STA 1+40 to 1+50, view south.



1+40 to 1+50 collapse, view south.



STA 1+50 collapse, view west.



STA 1+50 collapse, view west.



STA 1+50 to 1+60, view south.





STA 1+70 to 1+80, view south.



STA 1+70 to 1+80, collapsed stone.

# STA 1+60 to 1+80:



STA 1+60 to 1+70, view south.

#### STA 1+80 to 1+90:



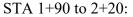
STA 1+80 to 1+90, view southwest



STA 1+80 to 1+90, view south.



STA 1+80 to 1+90, view southeast.





STA 1+90 to 2+00, view south.



STA 2+00 to 2+10, view south.



STA 2+10 to 2+20, view south.



STA 2+20 to 2+30, view south.



STA 2+30 to 2+40, view south.



STA 2+40 to 2+50, view south.

#### STA 2+50 to 2+80 TREE DAMAGE:



STA 2+50 to 2+60, view southwest.



STA 2+70 to 2+80, view west behind trees.



STA 2+60 to 2+70, view west behind tree.



*STA* 2+70 to 2+80, view south.



STA 2+60 to 2+70, view south.



STA 2+70 to 2+80, view east behind trees.

#### STA 2+80 to 3+10:



STA 2+80 to 2+90, view south.



*STA* 2+90 to 3+00, view south.



*STA* 3+00 to 3+10, view south.

#### STA 3+00 to 3+80 OVERVIEW UPCOMING TREE/DRAINAGE DAMAGE:



STA 3+00 to 3+80, view west.



*STA* 3+50 to 3+70, view west.



STA 3+10 to 3+30, view west.



*STA* 3+30 to 3+50, view east.



STA 3+50 to 3+80, view west.



*STA* 3+30 to 3+50, view east.



*STA* 3+70 to 3+80, view south.

#### STA 3+10 to 3+20:



STA 3+10 to 3+20, view west, behind tree.



STA 3+10 to 3+20, view south.



STA 3+10 to 3+20, view east, behind tree.

#### STA 3+20 to 3+30:



STA 3+20 to 3+30, view west, behind tree.



*STA* 3+20 to 3+30, view south.



STA 3+20 to 3+30, far left, behind tree.

#### STA 3+30 to 3+40:



STA 3+30 to 3+40, view southeast.



STA 3+30 to 3+40, view south.

# STA 3+40 to 3+50:



STA 3+40 to 3+50, view west, behind tree.



*STA* 3+40 to 3+50, view south.



STA 3+40 to 3+50, view east, behind tree.



STA 3+50 to 3+70, view west.



*STA* 3+50 to 3+70, view east.



*STA* 3+50 to 3+70, view east.

#### STA 3+50 to 3+80:



*STA* 3+50 to 3+60, view south.



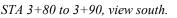
*STA* 3+60 to 3+70, view south.



*STA* 3+70 to 3+80, view south.

STA 3+80 to 4+10:







*STA* 3+90 to 4+00, view south.



*STA* 4+00 to 4+10, view south.



*STA* 4+10 to 4+20, view south.



STA 4+20 to 4+30, view south.



*STA* 4+30 to 4+40, view south.

# STA 4+40 to 4+60:



STA 4+40 to 4+50, view south.



*STA* 4+50 to 4+60, view south.



STA 4+50 to 4+60, burrow 12" deep.

STA 4+60 to 4+90:



STA 4+60 to 4+70, view south.



*STA* 4+70 to 4+80, view south.



*STA* 4+80 to 4+90, view south.

#### STA 4+90 to 5+20:



STA 4+90 to 5+00, view south.



*STA* 5+00 to 5+10, view south.

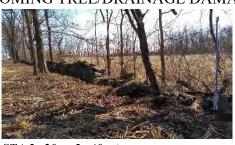


STA 5+10 to 5+20, view south.

#### STA 5+25 to 5+65 OVERVIEW UPCOMING TREE/DRAINAGE DAMAGE:



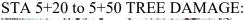
*STA* 5+20 to 5+70, view west.



*STA* 5+20 to 5+40, view east.



*STA* 5+40 to 5+70, view west.





STA 5+20 to 5+30, view south.



STA 5+30 to 5+40, view south.



STA 5+40 to 5+50, view south.

#### STA 5+50 to 5+70 DRAINAGE DAMAGE?:



*STA* 5+50 to 5+60, view south.



*STA* 5+60 to 5+70, view south.

*STA* 5+50 to 5+70, view east.



*STA* 5+50 to 5+80, view east.

#### STA 5+70 to 5+80 STEP STILE:



*STA* 5+70 to 5+80, view south.



STA 5+75, view south, step stile!



STA 5+75, step stile, top view.

STA 5+80 to 6+10 TREE DAMAGE:



*STA* 5+80 to 5+90, view south.

STA 6+10 to 6+40:



*STA* 5+90 to 6+00, view south.



*STA* 6+00 to 6+10, view south.



*STA* 6+10 to 6+20, view south.



*STA* 6+20 to 6+30, view south.



*STA* 6+30 to 6+40, view south.



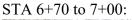
*STA* 6+40 to 6+50, view south.



*STA* 6+50 to 6+60, view south.



*STA* 6+60 to 6+70, view east.





*STA* 6+70 to 6+80, view south.



*STA* 6+80 to 6+90, view south.



*STA* 6+90 to 7+00, view south.

#### STA 7+00 to 7+20:



STA 7+00 to 7+10, view south.



STA 7+10 to 7+20, view south.



STA 7+10 to 7+20, view east.

#### STA 7+20 to 7+50:



*STA* 7+20 to 7+30, view south.



*STA* 7+30 to 7+40, view south.



*STA* 7+40 to 7+50, view south.

#### STA 7+50 to 8+00 ONGOING PONDING & DRAINAGE DAMAGE:



STA 7+40 to 7+50, view east behind tree.

STA 7+50 to 7+60, view south.



*STA* 7+80 to 7+90, view south.



STA 7+60 to 7+70, adj. property ponding.



STA 7+60 to 7+70, view south.



STA 7+80 to 7+90, end view west.



STA 7+70 to 7+80, adj. property ponding.



STA 7+70 to 7+80, view south.



*STA* 7+90 to 8+00, view south.



STA 7+90 to 8+00, view west.



STA 8+00, view over fence to adj. property.



STA 7+50 to 8+00, view east.

#### STA 8+00 to 8+30:



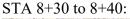
STA 8+00 to 8+10, view south.



STA 8+10 to 8+20, view south.



STA 8+20 to 8+30, view south.





STA 8+30 to 8+40, view west behind tree.



STA 8+30 to 8+40, view south.



STA 8+30 to 8+40, view east behind tree.

# STA 8+40 to 8+70:



*STA* 8+40 to 8+50, view south.



STA 8+50 to 8+60, view south.



*STA* 8+60 to 8+70, view south.



STA 8+70 to 8+80, view south.



*STA* 8+80 to 8+90, view south.

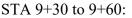


STA 8+90 to 9+00, view south.

#### STA 9+00 to 9+30:



*STA* 9+00 to 9+10, view south.





*STA* 9+10 to 9+20, view south.



*STA* 9+20 to 9+30, view south.



*STA* 9+30 to 9+40, view south.



*STA* 9+40 to 9+50, view south.



STA 9+50 to 9+60, view south.



*STA* 9+60 to 9+70, view south.



*STA* 9+70 to 9+80, view south.



*STA* 9+80 to 9+90, view south.

# STA 9+90 to 10+20:



*STA* 9+90 to 10+00, view south.

STA 10+20 to 10+50:



*STA* 10+20 to 10+30, view south.



STA 10+00 to 10+10, view south.



*STA* 10+10 to 10+20, view south.



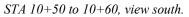
*STA* 10+30 to 10+40, view south.



*STA* 10+40 to 10+50, view south.

#### STA 10+50 to 10+80:







*STA* 10+60 to 10+70, view south.



*STA* 10+70 to 10+80, view south.

#### STA 10+80 to 10+95 (END OF RUMPKE PROPERTY):



*STA* 10+80 to 10+90, view south.



STA 10+90 to 11+00, view south (pink ribbon @ 10+95, center beyond).



STA 10+95, view south (END RUMPKE).

#### **RUMPKE STONE WALL PRESERVATION / RESTORATION SPECIFICATION:**

#### PART 1 - GENERAL

#### **1.1 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

A. Section Includes:

1. Monroe County IN Historic Rock Fence

**B.** Related Sections:

1. Division 31 Section "Earthwork" for excavation, filling, and rough grading

#### **1.3 QUALITY ASSURANCE**

A. Workmanship shall be of high quality, as recognized by the Dry Stone Conservancy, Inc. (DSC) and international dry stone industry standards. Refer to <u>www.drystone.org</u> for Dry Stone Conservancy's contact information and a list of DSC-Certified Professional Drystone Masons.

#### 1.4 MASON QUALIFICATIONS

A. All dry stone masonry work shall be accomplished under the direct supervision of a Drystone Mason qualified under any of the following levels of certifications administered by DSC or equivalent certifying organization: Level 1 Qualified, Level 2 Journeyman, Level 3 Master Craftsman.

#### **1.5 SAMPLE SUBMITTALS**

A. Provide samples for each of the following types of rock. The rock samples need to show the range of morphology and colors expected to match the existing historic rock fence on site. Approved samples may be installed in the work.

- 1. Foundation Rocks
- 2. Coping Rocks
- 3. Tie-rocks and covers
- 4. Face Rocks
- 5. Packing

#### 1.6 MOCK UPS

A. After approval of the rock samples, produce a full scale fence mock-up of at least 10 linear feet to demonstrate the full range of rock samples submitted, the range of colors, rock face finish, projections, batters, coping and execution specifications below. Obtain approval of the mock-up from the Owner's representative prior to commencing the contracted work. Maintain mock-up during construction in an undisturbed condition as a standard for judging the completed work. The approved mock-up may be incorporated into the final work.

#### PART 2 - PRODUCTS

#### 2.1 SOURCE LIMITATIONS FOR STONE

A. Obtain limestone from a quarry located in Central Indiana with resources to provide material

of consistent quality in appearance and physical properties as described in this specification.

#### 2.2 MATERIALS, STONE

A. Supply limestone building stone that is sound (not fractured due to blasting techniques), and is similar in color and composition of the original historic stone.

#### PART 3 - EXECUTION

#### **3.1 PREPARATION OF SITE**

A. Prepare a 32"-wide, 5"-6" deep level trench in soil at 95% compaction to receive a drystone foundation course.

#### **3.2 FENCE CONSTRUCTION**

A. Match the historic double-faced fence construction with covers and copes. Add tie rocks and a projecting foundation course for increased longevity. Use guide strings and build to a tolerance of one-half inch  $(\frac{1}{2})$ .

#### 3.3 FENCE HEIGHT & WIDTH

A. Fence height varies. Match adjacent intact sections where rebuilding a gap or missing section. If building new, the height of fence shall be 42" H from top of foundation course to top of copes, including 30" H double-faced build and 12" H for combined covers and copes. The double-faced build shall be 26" wide at the base (on top of foundation course), and taper to 16" wide just below the cover course.

#### **3.4 COURSING**

A. The pattern of build is random, i.e., it is not strictly coursed. The fence varies from "fine-grained" (many layers of thinner stones) to "course-grained" (fewer layers of thicker stones) along its length, presumably dependent upon the stone delivered to the masons as it was being built. The finished fence should have clearly defined horizontal lines only at the top of the foundation level, just below the tie level, and just below the cover course. In general, lay the fence with the majority of the larger/thicker stones in the lower portion of the wall and smaller/thinner stones in the upper portion of the wall. Strive for the rule that no more than two stones shall equal the height of one adjacent stone.

#### 3.5 LINE AND STRAIGHTNESS

A. Construct walling frame templates as per the dimensions of the fence segment to be built. The completed fence should have smooth and consistently battered face planes. Use string lines to guide the work. Build to a tolerance of  $\frac{1}{2}$ " from the string line; except the coping top line can vary up to 3"

#### 3.6 BATTER

A. Maintain a consistent 1" to 6" face batter (1H:6V). Slope faces inward 1" for each 6" of wall height, excluding covers, coping, and foundation. Wallhead ends should be built vertically.

#### 3.7 CORE

A. Use largest available packing stones to fill gaps between and around the face stones and continue with smaller stones until gaps are filled. Interlock stones as much as possible in all directions. Do not use gravel.

#### **3.8 FACE STONES**

A. Face stones should be at least 1/3 the width of the fence at all levels and abut each other with at least 2" of contact along the outer faces. Lay the flattest side of the face stones down, pinned and supported from behind with little or no face chinking (i.e., no non-structural stones inserted from the front after the face stones are laid that serve only to fill visual holes on the face). Leveling plates (at least ½" thick and 2" deep) inserted as the face stones are placed are permitted, provided they are fully wedged in place with full contact top and bottom. Level up the top surfaces of adjacent face stones with additional plates and wedges to support subsequent layers of stones. Cover all joints; striving for at least 2 inches of overlap.

#### 3.9 PINNING

A. Pin only when needed to support or level a stone, not for appearance. Avoid using multiple pins.

#### 3.10 FOUNDATION COURSE

A. Lay a 5" to 6" deep foundation course with its top level with finish grade; incorporate a 3" wide projection on both sides beyond the base width of the double-faced fence build above. Use rocks that are 5" to 6" thick and at least 1/3 the total width of the foundation course; place each rock so that more than 50% of its depth is under the main body of the fence build above. Foundation face stones should abut each other at least 3" along the outer edges of the trench (i.e., full contact the entire width of the 3" projection). Place foundation stones with their flattest sides down, fully supported by the subgrade or by large plates and underpinning. Use full thickness stones along the outer edges of the trench; do not use underpinned thinner stones. Fill and level the top / inner surface of the foundation course with large core packing and pinning stones. Do not use gravel to fill.

#### 3.11 LOWER LIFT COURSES

A. Use the larger available stones on the lower lift courses. Present weathered faces of stones to the exterior whenever possible, with each placed to cover the joints below. Ensure good contact between all stones. Face stones should be of sufficient size to project into the fence interior at least 1/3 the fence width. Build one layer at a time; pack and level the core simultaneously. Level the lower lift courses at 18" above the foundation course for the tie-rock layer.

#### 3.12 TIE-ROCKS

A. Incorporate tie-rocks at 18" vertical intervals within the wall (i.e., ½ the height of a 36" H doublefaced fence build, as measured from the top of the foundation course to the bottom of the cover course) and at 36" (3-foot) horizontal intervals along the line of the fence. Overlap the lower course joints. Use single stones that span the full width of the wall. Fully support all ties with wedges and pins. Match the historic fence for tie-rock projections on both sides (for the Monroe Co fence: flush on the north side, and flush or project up to 2" on the south side).

#### 3.13 UPPER LIFT COURSES

A. Continue to place face stones around and over the tie-rocks as on the lower lift courses. Present weathered faces of stones to the exterior where possible, maintaining a minimum projection into the fence interior of at least 6". Place so joints overlap. Ensure good contact between all stones. Level the top of the upper lift courses at the cover course level.

#### 3.14 COVER COURSES

A. Lay a continuous cover course to cap the full top width of the double-faced build. Individual cover course stones can range somewhat in thickness, allowing the coping stones to adjust to the various cover heights. Project cover course no more than 2" on both sides of the fence. Fully support all cover stones.

#### 3.15 COPING

A. Lay 9"-10" tall single copes to within a 3" tolerance of guide strings. Individual copes shall be irregular, roughly-triangular shaped stones, fully supported with leveling pins, and placed on 45- degree downhill slope. Drive in wedges to level and lock in the copes. Allow variation in heights and thicknesses to match the historic fence. Do not project copes beyond the face of the cover course.

#### 3.16 WALLHEADS

A. Provide a structural end to the fence using large stones, squared and vertical on the end with face batters to match the fence. Use larger stones than those used within the body of the fence, with no more than three stones spanning the wallhead end width per course. Lay alternate courses with long stones spanning the end width, alternating with courses where stone lengths run well back along the faces. Strive for two-over-one and one-over-two if possible. Provide a stable stone "cube" (or stack of two or three large slabs) on top to support the coping, equal to the full height of the coping and spanning the full width of the fence top.

END OF SECTION.

#### **RECOMMENDATIONS FOR PUBLIC-PRIVATE PARTNERSHIPS:**

A Public-Private Partnership could be a useful mechanism for the long-term preservation of this wall. It would be mutually beneficial for Rumpke to enter into agreement with the Dry Stone Conservancy for assistance in the administration of this preservation plan.

The wall is a suitable specimen for the Dry Stone Conservancy's central educational programming. Each year the DSC holds several workshops for the general public to learn basic dry stone techniques and for advanced mason training. Participants learn international standards in dry stone masonry and then participate in building projects to upgrade their skill. The Conservancy regularly offers workshops and training courses taught by highly qualified instructors teaching internationally-accepted standards for the craft. Introductory two-day workshops are geared to three groups: those interested in careers as professional dry stone masons; those interested in building or restoring their own drystone fences and garden walls; and professional designers, engineers, inspectors and project owners who design and oversee drystone masonry restoration projects. We also have more advanced offerings.

The Dry Stone Conservancy could use the wall for programming to actively maintain the wall. Each spring and fall the Dry Stone Conservancy could conduct a workday to reset copes and clear vegetation followed by a 2-day workshop to address the priority repairs. This combination over the course of multiple years would achieve Rumpke's commitment to preserve the wall and also assist in supporting the Dry Stone Conservancy's central programming.

Costs for an agreement of this nature would be based upon the identification of owner selected priority sections, costs for extra stone, instructor costs, and miscellaneous expenses associated with conducting a workshop. It would be relatively safe to say, however, that an annual agreement would allow for 2 workshops, and 2 workdays a year. Each workshop could repair several linear feet over the course of two days. Each workday would be sufficient to keep the vegetation clear. This, over the course of a couple of years, would bring the fence into a good state of repair. A rough estimate for the Conservancy to conduct such exercises would be \$10,000 annually until the wall is stabilized. We feel that we could address the high priority repairs (listed above) within 3 years using the workday/workshop model.

It would also be possible for the Conservancy to utilize the wall as a training project where the wall would be repaired in the high priority locations and stabilized elsewhere in one large phase. To cost the project in this way would require further examination, site visits, stone location, and other considerations. The Conservancy asks Rumpke to reach out for more information in exploring this avenue.

Ultimately, a partnership of this nature could be a catalyst for further interest in the craft and Rumpke could be the lead steward. Should Rumpke decide to pursue an agreement please contact the Dry Stone Conservancy.

#### **CLOSING STATEMENTS:**

In closing, the NPS defines preservation as "the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction." This is important to keep in mind when considering an appropriate preservation plan for a wall of this nature. Preserving the historic qualities of this rock fence would not entail its complete rebuilding. It would simply require maintaining the wall in its current

state and preventing further deterioration. This may require rebuilding entire sections with like material, resetting copes every spring, or simply keeping the honeysuckle from taking over.

The wall, for its age, is in a relatively good state of repair aside from the sections where vegetation and other environmental issues have inundated it. The wall was built with structural features consistent with historically well-built fences. This has contributed to it withstanding many of these environmental factors. That said, there are many sections of the wall that have succumbed to or are actively succumbing to these factors, this goes for most walls of this age. The issues that currently threaten the wall, as previously described, are site drainage, vegetation, and deferred maintenance. The drainage issues could be resolved by helping to direct storm waters to one central crossing rather than along the wall as it currently is. Vegetation can be most detrimental to a wall's structural integrity, therefore it is most important to keep both sides clear of vegetation. It is also important to consider, when rebuilding a section, to allow for room for growth when dealing with trees and other large vegetation that isn't practical to remove. Finally, each year after the freeze thaw cycles re-secure copes and other loose stones, identify sections that need repaired, repair, and repeat. Diligence in taking these measures will ensure the preservation of this wall.

END.



Division of Historic Preservation & Archaeology 402 W. Washington Street, W274 Indianapolis, IN 46204-2739 Phone 317-232-1646 Fax 317-232-0693 dhpa@dnr.IN.gov



February 2, 2023

Benjamin Clark Cultural Resources Manager Indiana State Parks 402 West Washington Street, W298 Indianapolis, Indiana 46204

State Agency: Indiana Department of Natural Resource, Division of State Parks

Re: Certificate of approval application to install parking spaces to a newly acquired property adjacent to Monroe Lake (DHPA #30239)

Dear Mr. Clark:

Pursuant to Indiana Code 14-21-1-18 and 312 IAC 20-4, the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology ("DHPA") has conducted a review of the materials dated and received by the DHPA on January 18, 2023, for the above indicated project in Monroe Lake, Bloomington, Monroe County, Indiana.

Thank you for your submission for the above indicated project. Based on what we currently know, there are no known state-owned historic sites or historic structures that are eligible for inclusion or listed on the National Register or Indiana Register within the project area. Therefore, under Subsection 11(a) of 312 IAC 20-4, a certificate of approval will not be necessary from the Indiana Historic Preservation Review Board for this project.

Pursuant to 312 IAC 20-4-11(g), within fifteen (15) days after this determination, an interested person may request a member of the review board to provide public hearing and review under 312 IAC 2-3. The designated member shall issue a determination whether an application for a certificate of approval must be filed. If the designated member determines an application must be filed, the division shall place the completed application on the agenda of the review board's next meeting. If the designated member determines that an application for a certificate is not required, the division director's letter of clearance is affirmed. A determination under this subsection is not effective until the later of the following:

- (1) fifteen (15) days after issuance of the determination; or
- (2) the day resulting from a notice given under 312 IAC 2-3-7(d).

If any archaeological artifacts, features, or human remains are uncovered during construction, state law (Indiana Code 14-21-1-27 & 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646.

If you have any further questions regarding this determination, please contact the DHPA. Questions about

Clark February 2, 2023 Page 2

archaeological issues should be directed to Melody Pope at (317) 234-5254 or melpope@dnr.IN.gov. Questions about historic buildings or structures pertaining to this project should be directed to Caitlin Lehman at (317) 232-0461 or clehman1@dnr.IN.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA #30239.

Very truly yours,

W. Shin

Beth K. McCord Director, Division of Historic Preservation & Archaeology

BKM:CML:MKP:mkp

emc: Ben Clark, Indiana DNR, Division of State Parks Glenda Murray, Monroe County Historian Daniel Schlegel, Jr., Monroe County History Center Drew Myers, Monroe County Historic Preservation Board of Review Mark Dollase, Regional Office, Indiana Landmarks Central Regional Office J. Scott Keller, Indiana Historic Preservation Review Board Daniel Kloc, AIA, Indiana Historic Preservation Review Board April Sievert, Ph.D., Indiana Historic Preservation Review Board Jason Larrison, AIA, Indiana Historic Preservation Review Board Anne Shaw, Indiana Historic Preservation Review Board Chandler Lighty, Indiana Historic Preservation Review Board Ryan Mueller, Deputy Director, Indiana Department of Natural Resources Beth McCord, Director, Division of Historic Preservation and Archaeology January 30, 2023

Early Coordination Agency

Re: Early Coordination Letter, Des. No. 1902772, Bridge Project on Rockport Road over Branch Clear Creek, 0.04 Mile South of Bolin Lane in Monroe County, Indiana

Dear Early Coordination Agency:

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), is developing plans for the aforementioned bridge project in Monroe County. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with the project. **Please use the above designation number and description in your reply.** We will incorporate your comments into a study of the project's environmental impacts.

The project is on South Rockport Road over Branch Clear Creek, 0.04 mile south of West Bolin Lane, within the City of Bloomington in Monroe County, Indiana. The existing bridge (#53-00308. NBI #5300163) consists of three steel multiplate underfill pipe arches constructed in 1980. Each pipe arch has a span of 10.3 feet and a rise of 7.2 feet that are approximately 40 feet long, with a total structure length of 39.4 feet. According to the April 19, 2022, bridge inspection by Beam, Longest and Neff, the pipe arches are rated in poor condition, or a four out of nine. Deficiencies in the bridge include settled and failing stone headwalls at the structure's outlet, surface and expansion rust at the flowline of each pipe arch, and small holes in the bottom of the south pipe arch at the inlet.

The existing roadway, South Rockport Road, is a two-lane, north to south roadway with two 10-foot lanes and 1-foot shoulders. South Rockport Road will be realigned to improve the roadway geometry through the bridge and the Bolin Lane intersection. Bolin Lane is a two-way, east-to-west roadway with two 10-footwide travel lanes, one in each direction. The purpose of the project is to meet current American Association of State Highway and Transportation Officials (AASHTO) and INDOT standards by improving the overall safety and condition rating of the bridge. This will be achieved through a full replacement while also improving the roadway geometry of South Rockport Road and the intersection with Bolin Lane.

The proposed project consists of a full replacement with a three-span, curved, continuous reinforced concrete slab bridge with an overall length of 80 feet. Concrete end bents on piles and concrete wall piers on spread footings are the anticipated substructure types. The new bridge will be built at a 35-degree skew to match the proposed channel, which is being shifted to the southeast due to its current poor alignment. This will also improve roadway safety. The bridge center will also be constructed to match the center of the proposed channel. Class 1 riprap will be installed on each spillslope around End Bents 1 and 4 and Piers 2 and 3 for scour countermeasures. The proposed South Rockport Road roadway width will be two 12-foot lanes, one in each direction, with 3-foot paved shoulders. Bolin Lane will have two 10-foot-wide lanes, one in each direction, with 2-foot paved shoulders. The intersection of the two roads will be widened to improve turning movement of vehicles. The project will require a full road closure with signed detour for the Maintenance of Traffic (MOT), and it is anticipated to be in place for 10 months.

Approximately 2.1 acres of permanent right-of-way (ROW) and 0.1 acre of temporary ROW is required. An estimated 0.95 acre of tree clearing is required. Temporary lighting is not anticipated for construction purposes. Land use in the vicinity is primarily early to mid- 20<sup>th</sup> century rural residential properties, fields, and woodlands. The posted speed limit is 30 miles per hour (mph).

Waters and wetlands determinations will be performed by BLN to identify water resources that may be present. The project is anticipated to qualify for the Rangewide Programmatic Agreement for the Indiana Bat and the Northern long-eared Bat by completing the Information for Planning and Consultation (IPaC).

Qualified Professionals will evaluate the project area for archaeological and historic resources for Section 106 compliance. The results of this investigation will be forwarded to the INDOT Cultural Resources Office (CRO) and the State Historic Preservation Officer (SHPO) for review and concurrence. Monroe County is within the Indiana karst region, and three karst features were identified within 0.5-mile of the project area, but none within or adjacent to the project area.

Please provide your response within thirty (30) calendar days from the date of this letter. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request. If you have any questions, or if we can be of any further assistance, please contact Matt Walker, INDOT Project Manager, at <u>matwalker@indot.in.gov</u> or Kristin Wing at <u>kwing@b-l-n.com</u> or telephone 317-849-5832. Thank you in advance for your input.

Sincerely,

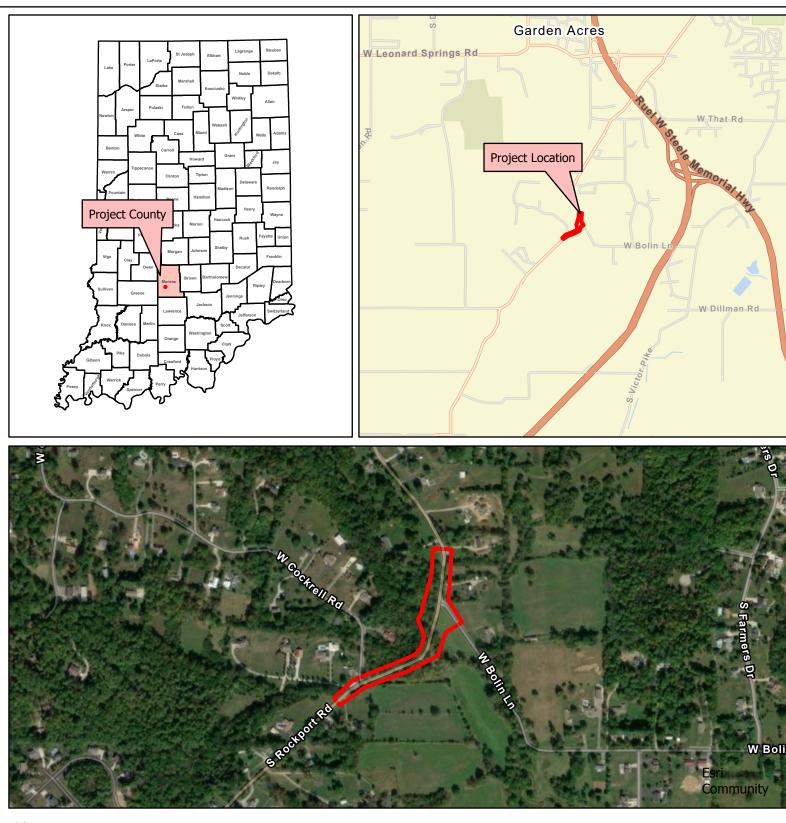
KWhy

Kristin Wing Senior Environmental Analyst Beam, Longest and Neff, LLC

Attachments: Mailing List Maps (Location, Topographic, Aerial, Karst, and NWI) Ground-Level Photographs

#### EARLY COORDINATION MAILING LIST

Federal Highway Administration	Tyler Lewandowski, INDOT Aviation
Electronic Coordination – <u>patrick.carpenter@dot.gov</u>	Electronic Coordination - <u>tlewandowski@indot.in.gov</u>
Regional Environmental Coordinator	Justus McGill
Midwest Regional Office - National Park Service	INDOT Ecology and Waterway Permitting
Electronic Coordination – <u>mwro_compliance@nps.gov</u>	Electronic Coordination – <u>imgill@indot.in.gov</u>
Field Environmental Officer, Chicago Regional Officer U.S. Department of Housing and Urban Development Electronic Coordination – <u>erik.r.sandsted@hud.gov</u>	Chief, Groundwater Section Indiana Department of Environmental Management Electronic Coordination – IDEM's Wellhead Proximity Determinator www.in.gov/idem/cleanwater/pages/wellhead/
Field Supervisor U.S. Fish and Wildlife Service Bloomington, Indiana Field Office Electronic Coordination – <u>robin_mcwilliams@fws.gov</u>	Environmental Coordinator Indiana Department of Natural Resources Division of Fish and Wildlife Electronic Coordination – <u>environmentalreview@dnr.in.gov</u>
Ms. Deborah Snyder, U.S. Army Corps of Engineers Louisville District, Indianapolis Regulatory Office Electronic Coordination – regulatoryapplicationsLRL@usace.army.mil	Bloomington/Monroe County Metropolitan Planning Organization (MPO) Electronic Coordination – <u>martipa@bloomington.in.gov</u>
Forest Supervisor – Hoosier National Forest	Jamie Neibel, Director of Emergency Management
US Forest Service	Monroe County
Electronic Coordination – <u>kevin.amick@usda.gov</u>	Electronic Coordination – <u>justinbaker@co.monroe.in.us</u>
Commander, Eighth Coast Guard District Electronic Coordination – <u>eric.washburn@uscg.mil</u>	Monroe County Commissioners Electronic Coordination – commissionersoffice@co.monroe.in.us
State Conservationist	Lisa Ridge, Highway Director
Natural Resources Conservation Service	Monroe County Highway Department
Electronic Coordination – john.allen@in.usda.gov	Electronic Coordination – <u>Iridge@co.monroe.in.us</u>
David Dye	Trohn Enright-Randolph, Monroe County Surveyor
Environmental Section Manager, INDOT Seymour District	Electronic Coordination –
Electronic Coordination – <u>ddye@indot.in.gov</u>	<u>Surveyorsoffice@co.monroe.in.us</u>
Matt Walker, PMP	Monroe County Planning Department
Project Manager, INDOT Seymour District	Electronic Coordination -
Electronic Coordination – <u>matwalker@indot.in.gov</u>	planningoffice@co.monroe.in.us
Indiana Geological and Water Survey	Tammy Behrman, Floodplain Administrator
Electronic Coordination	Monroe County
https://igws.indiana.edu/eAssessment/	Electronic Coordination – <u>tbehrman@co.monroe.in.us</u>



 N
 Source: gis.in.gov/arcgis/rest/services

 0
 250
 500
 1,000
 Feet

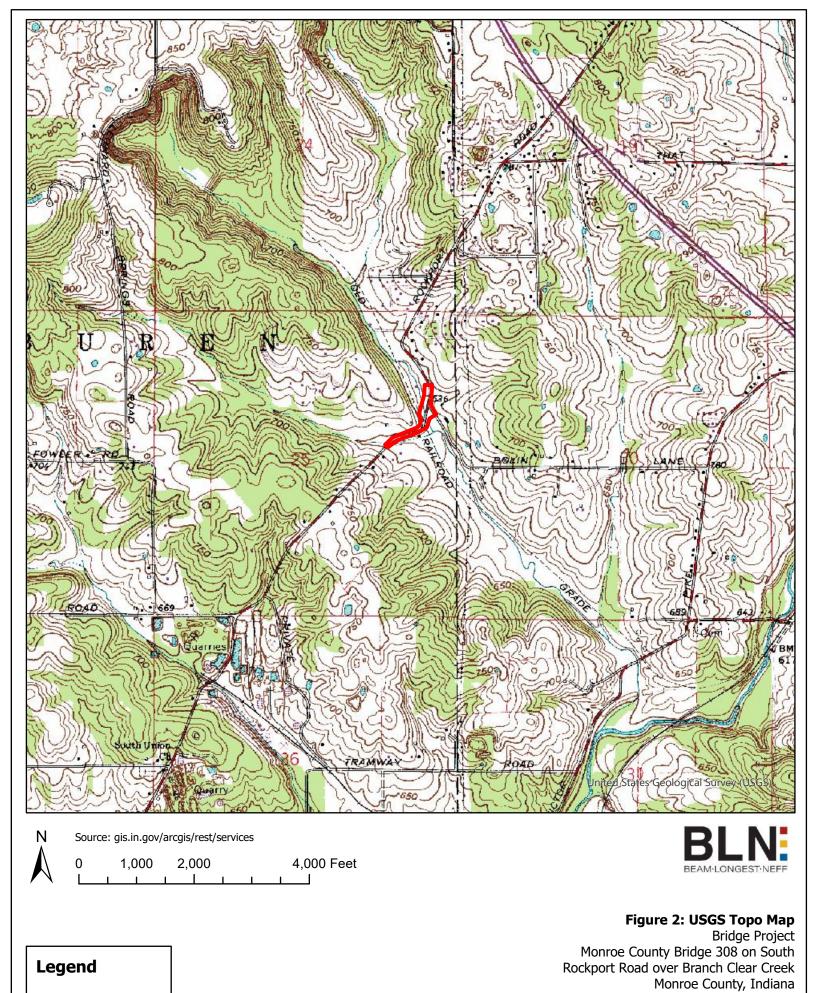
# Legend

- Project AreaCounty Outlines
  - County Selection



#### Figure 1: Project Location Map

Bridge Project Monroe County Bridge 308 on South Rockport Road over Branch Clear Creek Monroe County, Indiana Des 1902772 Author: Kristin Wing



Project Area

Des 1902772 Author: Kristin Wing Date Exported: 1/30/2023 8:42 AM

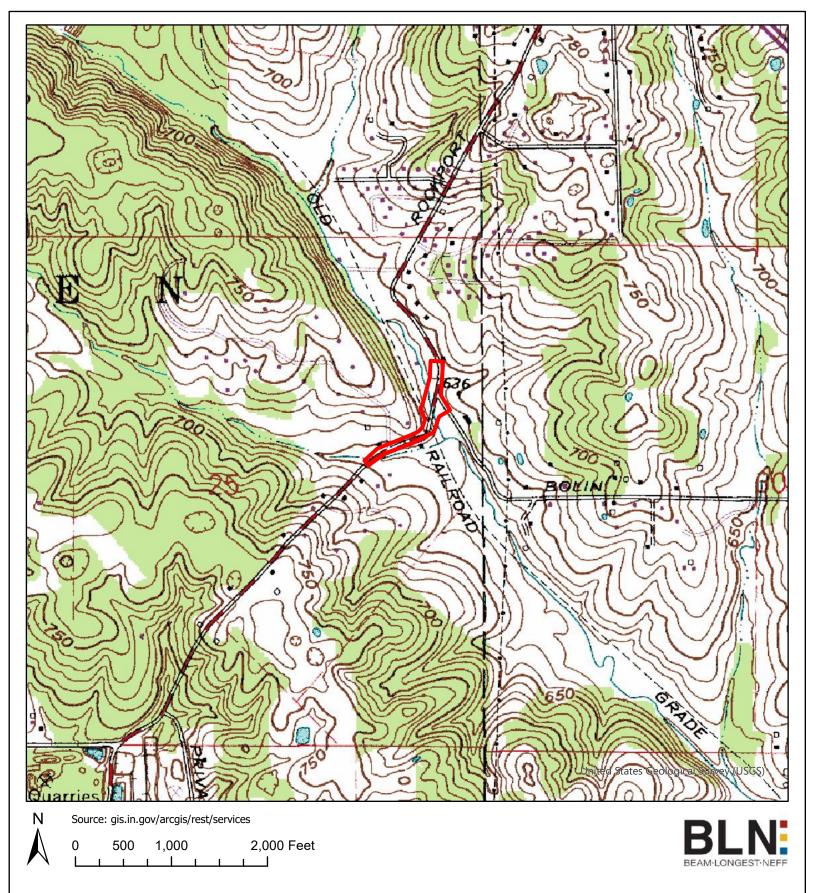
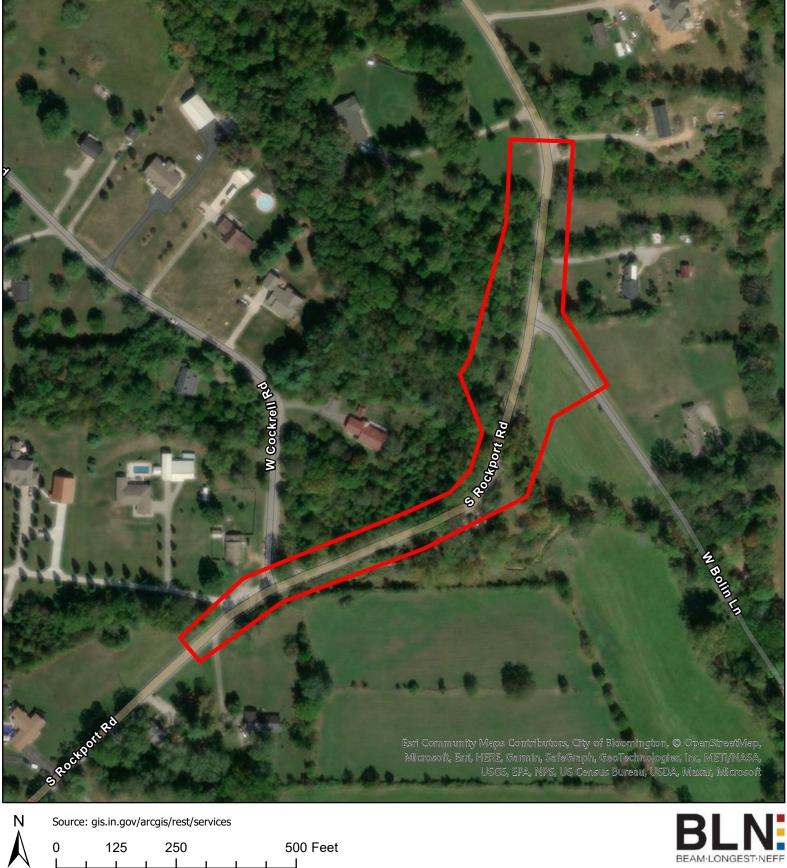


Figure 3: USGS Topo Map - Detail Bridge Project Monroe County Bridge 308 on South Rockport Road over Branch Clear Creek Monroe County, Indiana Des 1902772 Author: Kristin Wing

Date Exported: 1/4/2023 9:32 AM

Legend

Project Area



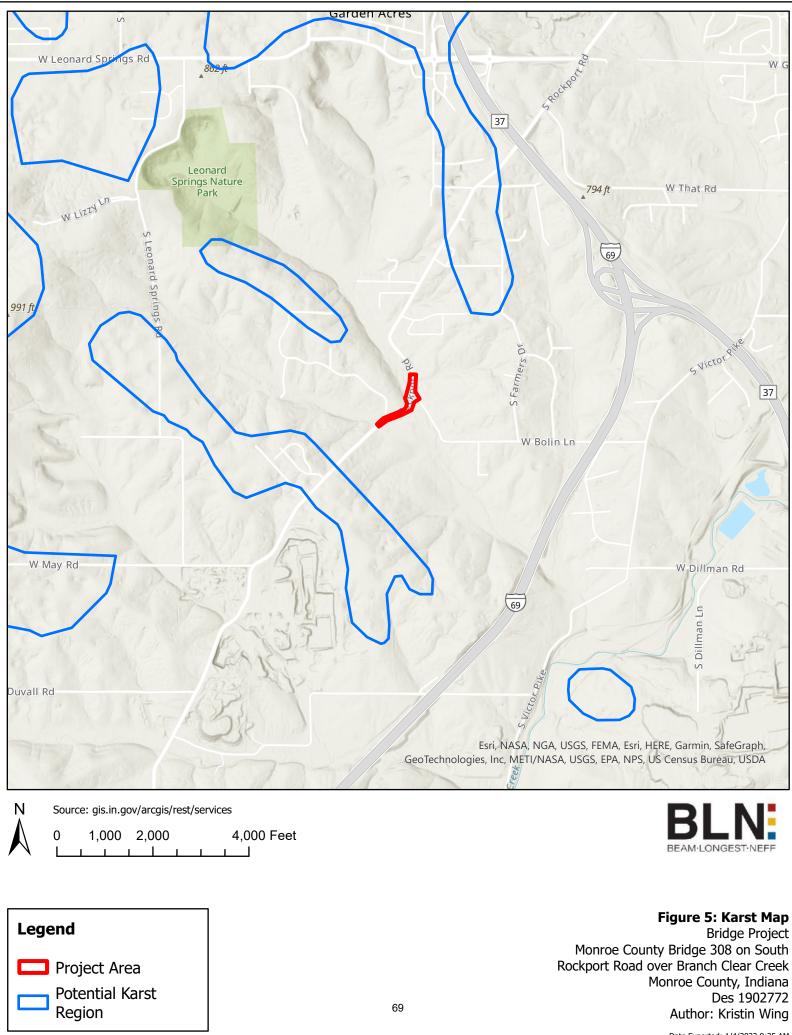
0		125		250				500 Fe	et	

**BEAM·LONGEST·NEFF** 

**Figure 4: Aerial Imagery Map** Bridge Project Monroe County Bridge 308 on South Rockport Road over Branch Clear Creek Monroe County, Indiana Des 1902772 Author: Kristin Wing Date Exported: 1/4/2023 9:33 AM

## Legend

🔲 Project Area



///////////////////////////////////////		
	Esti Community Maps Contributors, City of Bloomingtor	i, © OpenStreetMap,
	Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnolog	jies, Inc, METI/NASA,
	USGS 5PA MPS US Consus Bureau / USDA Maxan MP	crosoft, USGS TNM -
	Neitonal Hydrography Deterration Date Ref	eshed January 2023
NI c · ·		
	ov/arcgis/rest/services	BLN
0 125	5 250 500 Feet	
		BEAM·LONGEST·NEFF
		SEAM EGINGEOF NET
	Figure 6: National Wet	lands Inventory &
		anhy Dataset Mar
Legend	national Hydrogr	aphy Dataset Map
_		Bridge Project
Project Area	Monroe County	Bridge 308 on South
<b>Riverine</b>	Rocknort Road over	r Branch Clear Creek
Perennial	Moi	nroe County, Indiana

70

···- Intermittent

Author: Kristin Wing Date Exported: 1/4/2023 1:21 PM

Des 1902772



Photo 1: North end of the project area on the east side of South Rockport Road facing south with Bolin Road on the left side of the photo.



Photo 2: North end of the project area on the east side of South Rockport Road facing north.





Photo 3: North end of the project area at the intersection of South Rockport Road and West Bolin Lane looking east.



Photo 4: Northeastern end of the project area looking west on West Bolin Lane.





Photo 5: Southwestern end of the project area on the north side of South Rockport Road looking northeast.



Photo 6: Middle of the project area looking northwest at the bridge (upstream). Branch Clear Creek can be seen.





Photo 7: Northern end of the project area area looking south downstream at Branch Clear Creek.



Photo 8: Looking southeast at the interior of the bridge.



#### **Project Priorities: Outreach and Preservation, Ongoing Board Initiatives**

#### 1) Limestone Heritage Project

- a. Update website with new information as it is available
- b. Connect with Partners on information to link to

Sub-committee members: Debby, Susan, Polly

#### 2) Drystone Walls

- a. Create list of action steps needed to prep for launch of survey
- b. Launch and conduct survey
- c. Discuss/pursue local designations and/or in-depth documentation of some walls
- d. Explore possibility for a hands-on workshop

Sub-committee members: Duncan, Don, Donn, Susan

#### 3) Community and Site Signage

- a. Pursue community signage as long as funding is provided
- b. Pursue interpretive signate for new historic covered bridge

Sub-committee members: Devin, Don, Donn

#### 4) Public Historic Preservation Education

- a. Develop a social media scavenger hunt of architectural types, styles, etc.
- b. Update current driving tour brochures as needed, consider completion of partially completed brochures, and examine new options for distribution of information to the public
- c. Participate in the Limestone Month Festival June 10, 2023

Sub-committee members: Devin, Polly, Susan, Doug

#### 5) Annual Property Owner Notice

- a. Send previous year's letter to full board for review (January-February) and update if needed
- b. Confer with staff on sending letter to property owners (February-March)

Sub-committee members: Don, Debby, Polly

#### 6) Demolition Delay and Staffing Committee

- a. Review demolition delay examples and develop a draft document for Monroe County
- b. Review County Development Ordinance for proposed revisions per the proposed timeline
- c. Engage in discussions with the Plan Commission Executive Committee in creating plans and procedures for demolition delay, public notification, staffing needs, etc.

Sub-committee members: Duncan, Donn, Susan

#### Project Priorities: Procedure, Time Sensitive Initiatives—All Board

1) Actively engage in County Development Ordinance revisions

#### **Board Education Priorities, Ongoing Options—All Board and staff**

- 1) Attend the Preserving Historic Places Conference (September)
- 2) Attend CAMP held just prior to the preservation conference (September)
- 3) Attend, either in-person or online, lectures on topics of historical and preservation interest locally or elsewhere
- 4) Read books and other literature approved by DHPA's CLG coordinator and refer to the lit of other options provided by DHPA
- 5) 5) Hold our own educational sessions/workshops presented by a board member or other qualified individual