



Public Works Commission

Application for Financial Assistance

IMPORTANT: Please consult "Instructions for Financial Assistance for Capital Infrastructure Projects" for guidance in completion of this form.

Applicant

Applicant: _____ Subdivision Code: _____

District Number: _____ County: _____ Date: _____

Contact: _____ Phone: _____
(The individual who will be available during business hours and who can best answer or coordinate the response to questions)

Email: _____ FAX: _____

Project

Project Name: _____ Zip Code: _____

| Subdivision Type | Project Type | Funding Request Summary |
|------------------|---|--|
| _____ | (Select single largest component by \$) | (Automatically populates from page 2) |
| SFN | 1. Road | Total Project Cost: _____ .00 |
| _____ | 2. Bridge/Culvert | 1. Grant: _____ .00 |
| _____ | 3. Water Supply | 2. Loan: _____ .00 |
| _____ | 4. Wastewater | 3. Loan Assistance/ Credit Enhancement: _____ .00 |
| _____ | 5. Solid Waste | Funding Requested: _____ .00 |
| _____ | 6. Stormwater | |

District Recommendation (To be completed by the District Committee)

| Funding Type Requested | SCIP Loan - Rate: _____ % Term: _____ Yrs | Amount: _____ .00 |
|--|---|-------------------|
| (Select one) | | |
| State Capital Improvement Program | RLP Loan - Rate: _____ % Term: _____ Yrs | Amount: _____ .00 |
| Local Transportation Improvement Program | Grant: | Amount: _____ .00 |
| Revolving Loan Program | LTIP: | Amount: _____ .00 |
| Small Government Program | Loan Assistance / Credit Enhancement: | Amount: _____ .00 |
| District SG Priority: _____ | | |

For OPWC Use Only

| | | |
|-----------------------|------------------------------|---|
| STATUS | Grant Amount: _____ .00 | Loan Type: <input type="checkbox"/> SCIP <input type="checkbox"/> RLP |
| Project Number: _____ | Loan Amount: _____ .00 | Date Construction End: _____ |
| _____ | Total Funding: _____ .00 | Date Maturity: _____ |
| Release Date: _____ | Local Participation: _____ % | Rate: _____ % |
| OPWC Approval: _____ | OPWC Participation: _____ % | Term: _____ Yrs |

1.0 Project Financial Information (All Costs Rounded to Nearest Dollar)

1.1 Project Estimated Costs

Engineering Services

Preliminary / Final Design: _____ .00

Construction Administration: _____ .00

Total Engineering Services: a.) _____ .00 _____ %

Right of Way: b.) _____ .00

Construction: c.) _____ .00

Permits, Advertising, Legal: e.) _____ .00

Construction Contingencies: f.) _____ .00

Total Estimated Costs: g.) _____ .00

1.2 Project Financial Resources

Local Resources

Local In-Kind or Force Account: a.) _____ .00

Local Revenues: b.) _____ .00

Other Public Revenues:

Local / ODOT - Let: _____ d.) _____ .00

ODOT PID: _____

OEPA / OWDA: e.) _____ .00

CDBG: f.) _____ .00

Other: _____ g.) _____ .00

Subtotal Local Resources: i.) _____ .00 _____ %

OPWC Funds (Check all requested and enter Amount)

Grant: _____ % of OPWC Funds j.) _____ .00

Loan: _____ % of OPWC Funds k.) _____ .00 _____ yrs

Loan Assistance / Credit Enhancement: l.) _____ .00

Subtotal OPWC Funds: m.) _____ .00 _____ %

Total Financial Resources: n.) _____ .00 _____ %

4.3 Project Description

A: SPECIFIC LOCATION (Supply a written location description that includes the project termini; a map does not replace this requirement.) 2000 character limit.

B: IDENTIFY THE PROBLEM (Describe the issue to be addressed) 2000 character limit.

C: PROJECT SCOPE (Describe the work to be completed) 2000 character limit.

D. How do you intend to promote this project? 1000 character limit.

E: Additional Notes From Applicant - 1000 character limit.

5.0 Project Officials

Changes in Project Officials must be submitted in writing from an officer of record.

5.1 Chief Executive Officer (Person authorized in legislation to sign project agreements)

Name: _____

Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

FAX: _____

E-Mail: _____

5.2 Chief Financial Officer (Can not also serve as CEO)

Name: _____

Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

FAX: _____

E-Mail: _____

5.3 Project Manager

Name: _____

Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

FAX: _____

E-Mail: _____

6.0 Attachments / Completeness review

Confirm in the boxes below that each item listed is attached (Check each box)

A certified copy of the legislation by the governing body of the applicant authorizing a designated official to sign and submit this application and execute contracts. This individual should sign under 7.0, Applicant Certification, below.

A certification signed by the applicant's chief financial officer stating the amount of all local share funds required for the project will be available on or before the dates listed in the Project Schedule section. If the application involves a request for loan (RLP or SCIP), a certification signed by the CFO which identifies a specific revenue source for repaying the loan also must be attached. Both certifications can be accomplished in the same letter.

A registered professional engineer's detailed cost estimate and useful life statement, as required in 164-1-13, 164-1-14, and 164-1-16 of the Ohio Administrative Code. Estimates shall contain an engineer's seal or stamp and signature.

A cooperative agreement (if the project involves more than one subdivision or district) which identifies the fiscal and administrative responsibilities of each participant.

Farmland Preservation Review - The Governor's Executive Order 98-IIV, "Ohio Farmland Protection Policy" requires the Commission to establish guidelines on how it will take protection of productive agricultural and grazing land into account in its funding decision making process. Please include a Farm Land Preservation statement for projects that have an impact on farmland.

Capital Improvements Report. CIR Required by O.R.C. Chapter 164.06 on standard form.

Supporting Documentation: Materials such as additional project description, photographs, economic impact (temporary and/or full time jobs likely to be created as a result of the project), accident reports, impact on school zones, and other information to assist your district committee in ranking your project. Be sure to include supplements which may be required by your local District Public Works Integrating Committee.

7.0 Applicant Certification

The undersigned certifies: (1) he/she is legally authorized to request and accept financial assistance from the Ohio Public Works Commission as identified in the attached legislation; (2) to the best of his/her knowledge and belief, all representations that are part of this application are true and correct; (3) all official documents and commitments of the applicant that are part of this application have been duly authorized by the governing body of the applicant; and, (4) should the requested financial assistance be provided, that in the execution of this project, the applicant will comply with all assurances required by Ohio Law, including those involving Buy Ohio and prevailing wages.

Applicant certifies that physical construction on the project as defined in the application has NOT begun, and will not begin until a Project Agreement for this project has been executed with the Ohio Public Works Commission. Action to the contrary will result in termination of the agreement and withdrawal of Ohio Public Works Commission funding from the project.

Certifying Representative (Printed form, Type or Print Name and Title)

Original Signature / Date Signed

No.

RESOLUTION NO. 23-23

Passed

August 15

Yr. 2023

A RESOLUTION AUTHORIZING THE CITY OF BROOKVILLE TO PREPARE AND SUBMIT AN APPLICATION TO PARTICIPATE IN THE OHIO PUBLIC WORKS COMMISSION STATE CAPITAL IMPROVEMENT AND/OR LOCAL TRANSPORTATION IMPROVEMENT PROGRAM(S) AND TO EXECUTE CONTRACTS AS REQUIRED.

WHEREAS, the State Capital Improvement Program and the Local Transportation Improvement Program both provide financial assistance to political subdivisions for capital improvements to public infrastructure; and

WHEREAS, the City of Brookville is planning to make capital improvements to the Hay Avenue Roadway Improvements, Phase III Project; and

WHEREAS, the infrastructure improvement herein above described is considered to be a priority need for the community and is a qualified project under the Ohio Public Works Commission (OPWC) programs.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF BROOKVILLE, OHIO, THAT:

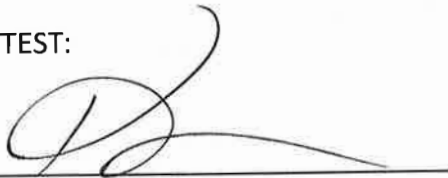
SECTION I: The City Manager is hereby authorized to apply to the OPWC for funds as described above.

SECTION II: The City Manager is further authorized to enter into any agreements as may be necessary and appropriate for obtaining this financial assistance.

SECTION III: This Resolution shall take effect and be in force thirty (30) days after passage as provided by the Charter of the City of Brookville.

PASSED this 15th day of August 2023.

ATTEST:




Kimberly Duncan, Clerk



Charles Letner, Mayor

CERTIFICATE

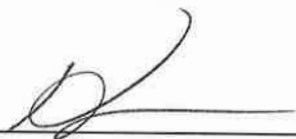
The undersigned, Clerk of the City of Brookville, Ohio does hereby certify that the foregoing is a true and correct copy of Resolution No. 23-23, passed by the Council of said City on the 15th day of August 2023.



Kimberly Duncan, Clerk

CERTIFICATE OF POSTING

The undersigned, Clerk of the City of Brookville, Ohio hereby certifies that the foregoing Resolution No. 23-23 was posted at the City Building, U.S. Post Office, and the Brookville Branch of the Montgomery County Library, Brookville, Ohio on the 16th day of August 2023 to the 14th day of September 2023, both days inclusive.



Kimberly Duncan, Clerk

**CHIEF FINANCIAL OFFICER'S CERTIFICATION OF LOCAL FUNDS /
LOAN REPAYMENT LETTER**

August 14, 2023

I, Michelle Brandt, Director of Finance of the City of Brookville, hereby certifies that the City of Brookville will collect the amount of \$984,850 in the Street, Storm, Sewer and Water Funds and that this amount will be used to repay the Ohio Public Works Commission SCIP or RLP loan requested for the Hay Avenue Roadway Improvement, Phase III over a 30-year term.


Michelle Brandt
Director of Finance

**HAY AVENUE RECONSTRUCTION - PHASE 3
CITY OF BROOKVILLE
PRELIMINARY CONSTRUCTION ESTIMATE**

Reconstruction of Hay Avenue from Cusick to Joanna approx. 500 feet

July 13, 2023

| ITEM NO. | DESCRIPTION | UNIT OF MEASURE | APPROX. QTY. | UNIT PRICE | TOTAL |
|----------|--|-----------------|--------------|-------------|---------------------|
| 201 | CLEARING AND GRUBBING | LUMP | 1 | \$5,000.00 | \$5,000.00 |
| 202 | REMOVED | LUMP | 1 | \$10,000.00 | \$10,000.00 |
| 202 | CURB AND GUTTER REMOVED | FT. | 1010 | \$10.00 | \$10,100.00 |
| 202 | CATCH BASIN REMOVED | EACH | 6 | \$500.00 | \$3,000.00 |
| 202 | PIPE REMOVED, 24" AND UNDER | FT. | 1500 | \$15.00 | \$22,500.00 |
| 202 | MANHOLE REMOVED | EACH | 5 | \$1,000.00 | \$5,000.00 |
| 202 | WALK REMOVED | S.F. | 3950 | \$4.00 | \$15,800.00 |
| 203 | EXCAVATION, INCLUDING EMBANKMENT CONSTRUCTION | C.Y. | 950 | \$35.00 | \$33,250.00 |
| 204 | GEOGRID FOR SUBGRADE STABILIZATION | S.Y. | 980 | \$6.00 | \$5,880.00 |
| 204 | SUBGRADE COMPACTION | S.Y. | 2500 | \$2.00 | \$5,000.00 |
| 204 | EXCAVATION OF SUBGRADE AND STRUCTURAL EMBANKMENT | C.Y. | 390 | \$55.00 | \$21,450.00 |
| 254 | PAVEMENT PLANING, ASPHALT CONCRETE, 1.25" | S.Y. | 275 | \$20.00 | \$5,500.00 |
| 304 | AGGREGATE BASE | C.Y. | 635 | \$80.00 | \$50,800.00 |
| 407 | NON-TRACKING TACK COAT | GAL. | 150 | \$8.00 | \$1,200.00 |
| 411 | STABILIZED CRUSHED AGGREGATE | C.Y. | 60 | \$140.00 | \$8,400.00 |
| 441 | 2-3/4" - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449) | C.Y. | 160 | \$285.00 | \$45,600.00 |
| 441 | 1-1/4" - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 | C.Y. | 85 | \$350.00 | \$29,750.00 |
| 452 | 6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC-1P | S.Y. | 100 | \$100.00 | \$10,000.00 |
| 608 | 4" CONCRETE WALK | S.F. | 3935 | \$12.00 | \$47,220.00 |
| 608 | CURB RAMP | S.F. | 240 | \$26.00 | \$6,240.00 |
| 608 | CONCRETE STEPS | FT. | 30 | \$200.00 | \$6,000.00 |
| 609 | COMBINATION CURB AND GUTTER, TYPE 2 | FT. | 1010 | \$32.00 | \$32,320.00 |
| 611 | 4" CONDUIT, TYPE B, 707.45 | FT. | 100 | \$30.00 | \$3,000.00 |
| 611 | 6" CONDUIT, TYPE B, 707.45 | FT. | 100 | \$35.00 | \$3,500.00 |
| 611 | 8" CONDUIT, TYPE B, 707.45 | FT. | 100 | \$40.00 | \$4,000.00 |
| 611 | 6" CONDUIT, TYPE B, 707.45, STORM LATERAL | FT. | 175 | \$60.00 | \$10,500.00 |
| 611 | 12" CONDUIT, TYPE B | FT. | 120 | \$95.00 | \$11,400.00 |
| 611 | 18" CONDUIT, TYPE B | FT. | 75 | \$120.00 | \$9,000.00 |
| 611 | 36" CONDUIT, TYPE B | FT. | 640 | \$230.00 | \$147,200.00 |
| 611 | CATCH BASIN, TYPE 1 | EACH | 8 | \$3,000.00 | \$24,000.00 |
| 611 | STORM SEWER MANHOLE, NO. 3 | EACH | 6 | \$5,000.00 | \$30,000.00 |
| 611 | 6" SANITARY SEWER LATERAL | FT. | 175 | \$80.00 | \$14,000.00 |
| 611 | 8" PVC SDR-26 SANITARY SEWER | FT. | 570 | \$125.00 | \$71,250.00 |
| 611 | SANITARY SEWER MANHOLE, NO. 3 | EACH | 3 | \$6,500.00 | \$19,500.00 |
| 616 | WATER | MGAL | 5 | \$200.00 | \$1,000.00 |
| 614 | MAINTAINING TRAFFIC | LUMP | 1 | \$10,000.00 | \$10,000.00 |
| 623 | CONSTRUCTION LAYOUT STAKES AND SURVEYING | LUMP | 1 | \$8,000.00 | \$8,000.00 |
| 630 | SIGNAGE | LUMP | 1 | \$2,500.00 | \$2,500.00 |
| 638 | 1" WATER SERVICE BRANCH | FT. | 175 | \$100.00 | \$17,500.00 |
| 638 | 6" FIRE HYDRANT ASSEMBLY | EACH | 1 | \$9,500.00 | \$9,500.00 |
| 638 | 4" DIP CL-51 WATER MAIN | FT. | 50 | \$210.00 | \$10,500.00 |
| 638 | 6" DIP CL-51 WATER MAIN | FT. | 50 | \$180.00 | \$9,000.00 |
| 638 | 8" DIP CL-51 WATER MAIN | FT. | 500 | \$160.00 | \$80,000.00 |
| 638 | 8" GATE VALVE | EACH | 3 | \$3,000.00 | \$9,000.00 |
| 638 | FIRE HYDRANT REMOVED | EACH | 1 | \$1,000.00 | \$1,000.00 |
| 644 | STOP LINE, TYPE 1 | FT. | 13 | \$30.00 | \$390.00 |
| 659 | SEEDING AND MULCHING, CLASS 1 | S.Y. | 500 | \$9.00 | \$4,500.00 |
| 832 | EROSION CONTROL | EACH | 5000 | \$1.00 | \$5,000.00 |
| | TOTAL | | | | \$895,250.00 |
| | CONTINGENCY (10%) | | | | \$89,600.00 |
| | TOTAL CONSTRUCTION COST | | | | \$984,850.00 |
| | SEPARATED WATER COST | | | | \$136,500.00 |
| | SEPARATED STORM SEWER COST | | | | \$242,600.00 |
| | SEPARATED SANITARY SEWER COST | | | | \$104,750.00 |
| | SEPARATED ROADWAY COST | | | | \$411,400.00 |



We make no warranty, express or implied, that the actual construction cost of the work associated with these estimated quantities and costs will not vary. The cost reflects our opinion of current probable construction cost.

CERTIFICATE OF ESTIMATE:

I HEREBY CERTIFY THAT THE PROJECT ESTIMATED COSTS LISTED ABOVE ARE REALISTIC BASED ON THE LEVEL OF DETAIL CURRENTLY AVAILABLE FOR THIS PROJECT AND ANTICIPATED FOR A 2024 CONSTRUCTION TIME FRAME.

I ALSO CERTIFY THAT THIS PROJECT HAS AN EXPECTED USEFUL LIFE OF 33 YEARS BASED UPON NORMAL USAGE AND REGULAR MAINTENANCE, AND CONSTRUCTED AS PER CURRENT STANDARDS

| Component | Useful Life | Estimated Cost | Weighted Useful Life |
|----------------|-------------|---------------------|----------------------|
| Reconstruction | 25 years | \$339,410.00 | \$8,485,250 |
| Resurfacing | 15 years | \$82,950.00 | \$1,244,250 |
| Sewer | 40 years | \$412,340.00 | \$16,493,600 |
| Water | 40 years | \$150,150.00 | \$6,006,000 |
| | | \$984,850.00 | \$32,229,100 |

Average weighted useful life of total project =

**33
YEARS**

Allan J. Heitbrink
Allan J. Heitbrink

8/7/2023
Date

A weighted useful life statement stamped/sealed and signed by a licensed professional engineer must be included with the project application.

This spreadsheet has formulas to make a weighted useful life calculation and is populated with an example for illustrative purposes. Items can be added to column a.

Hay Avenue Reconstruction - Phase 3

Weighted Useful Life & Design Service Capacity Calculations

| Major Component | Cost (\$1,000) | Portion Repair / Replacement (%) | Repair / Replace Product | Useful Life (Years) | Useful Life Product |
|--|----------------|----------------------------------|--------------------------|---------------------|---------------------|
| Full-depth road construction w/ drainage | 339.41 | 100 | 33941 | 25 | 8485.25 |
| Full-depth road construction w/o drainage | | | | 25 | |
| Partial-depth road construction w/ drainage | 82.95 | 100 | 8295 | 15 | 1244.25 |
| Partial-depth road construction w/o drainage | | | | 15 | |
| Storm Sewers | 206.17 | 100 | 20617 | 40 | 8246.8 |
| Sanitary Sewers | 206.17 | 100 | 20617 | 40 | 8246.8 |
| Water Lines | 150.15 | 100 | 15015 | 40 | 6006 |
| Bridge | | | | 75 | |
| Pumps, Lift Stations | | | | 15 | |
| Sidewalks | | | | 25 | |
| Bike Facility | | | | 7 | |
| Totals | 984.85 | | 98485 | | 32229.1 |

Weighted Useful Life: 33 Years

Design Service Capacity (Project Application, Section 2.0):

Portion Repair / Replace 100 %
 Portion New / Expansion %


 Allan J. Heitbrink, PE

8/7/2023
 Date



OHIO PUBLIC WORKS COMMISSION

DISTRICT 4

FY25 Supplemental Questionnaire

Applicant: City of Brookville

Project Title: Hay Avenue Roadway Improvements, Phase III

Application Summary:

Briefly describe the project:

Hay Avenue dates back to the early 1900's. This project involves the full depth reconstruction of Hay Avenue from Cusick Avenue to JoAnna Street. This project is Phase III of a multi-phase project to improve Hay Avenue between Wolf Creek Street and Albert Road. Hay Avenue is a heavily traveled roadway through Brookville. It allows people to travel to our major industrial park, our Brookhaven Nursing Complex and to access Interstate 70, via Brookville-Salem Road.

This section of Hay Avenue was last resurfaced in 2002. It gets pot hole repairs as needed. Roadway improvements include the replacement of existing deteriorating roadway, curb and gutter, sidewalk and driveway approaches, sanitary sewer and inadequate storm sewer. Also, included in this project is the replacement of approximately 500 feet of aging and deteriorated 4" cast iron water main with an 8" ductile iron water main, which will include the replacement of water service laterals and a fire hydrant. The initial water main was installed in 1903 and was last replaced in 1956.

The existing storm lines are in poor condition, with cracked lines washing away aggregate and undermining the asphalt pavement. Improvement of the storm lines will provide access for homeowners as we continue to combat inflow and infiltration into the sanitary system.

This third phase of reconstruction consists of six residential homes and four commercial businesses. Future phases of Hay Avenue reconstruction has a mixture of residential homes and commercial businesses which have experienced water main breaks and low water pressure.

Attached is a map showing the project location.

Priority:

| | |
|--|--------------------------|
| Is this application your priority project? (Circle One) | |
| Yes <input checked="" type="radio"/> | No <input type="radio"/> |

Generation of Revenue:

| | |
|--|--------------------------|
| Will new user fees or assessments be assessed as part of this project? (Circle One) | |
| Yes <input checked="" type="radio"/> | No <input type="radio"/> |
| What will the new user fees or assessments be used for? | |
| Our City Ordinance states replacement curb and sidewalk are assessed to property owners. | |

Additional Funding:

| | |
|---|-------------------------------------|
| Will OPWC match, in part, a committed grant or loan? (Circle One) | |
| Yes <input type="radio"/> | No <input checked="" type="radio"/> |
| If no, was the project submitted to an appropriate agency for funding, but denied due to lack of funding? (Circle One) | |
| Yes – Appropriate Documentation Attached <input type="radio"/> | No <input checked="" type="radio"/> |

Readiness of Project:

| | |
|---|--------------------------|
| Will this project be <u>substantially</u> underway on or before June 1, 2025? (Circle One) | |
| Yes <input checked="" type="radio"/> | No <input type="radio"/> |

Health & Safety:

| |
|--|
| Describe the specific health or safety issue being addressed by this project. What deficiency or condition is causing the health or safety issue? |
| <p>The original existing road dates back to the early 1900's. The existing pavement width is approximately 31 feet. The road was last overlaid with 1-1/4" of asphalt in our 2002 Street Resurfacing Program. The pavement conditions on Hay Ave. have suffered extreme deterioration. Restoration patches exist in multiple locations and alligator cracking is throughout this section of roadway.</p> <p>There is a significant problem with surface storm water running off the street into the existing storm drainage, which is inadequate and contributes toward pavement failure. The limited storm water drainage that currently exists lacks adequate capacity to handle storm water runoff from the road. Hay Avenue is experiencing surface and base failures and has exceeded its useful life.</p> <p>There is existing curb and sidewalk on both sides of the street. The existing sidewalk and curb is in fair condition.</p> <p>Also, included in this project is the replacement of approximately 500 feet of aging and deteriorated 4" cast iron water main with an 8" ductile iron water main, which includes the replacement of water service laterals and a fire hydrant. The initial water main was installed in 1903 and was last replaced in 1956. This section of Hay Avenue was once the "business center" and it still contains old, large buildings that require a great deal of water when on fire. In the area of Hay Avenue and Jefferson Street, the water available from the hydrant is inadequate. Unfortunately, this hydrant is the primary source for more than 31,500 square feet of commercial businesses and several residential structures. The fire hydrant here offers less than 300 gallons of water per minute.</p> |

Addresses District Infrastructure Needs:

| | | |
|--|---|-------------------------------------|
| Is this project located in more than one community? (Circle One) | | |
| Yes <input type="radio"/> | | No <input checked="" type="radio"/> |
| What percentage of the community will be served by this project? (Circle One) | | |
| Less than 25% <input type="radio"/> | 25% to 40% <input checked="" type="radio"/> | More than 40% <input type="radio"/> |

Economic Development

| | |
|---|---|
| How many jobs are being created as a result of this project? | 0 |
| How many jobs will be retained as a result of this project? | 0 |
| Why is it necessary to fund this improvement to secure this development? | |
| N/A | |
| What type of industry is proposed in this development? | |
| | |

Relieve Existing Traffic Congestion:

| | |
|--------------------------------------|-------|
| What is the level of service? | LOS B |
|--------------------------------------|-------|

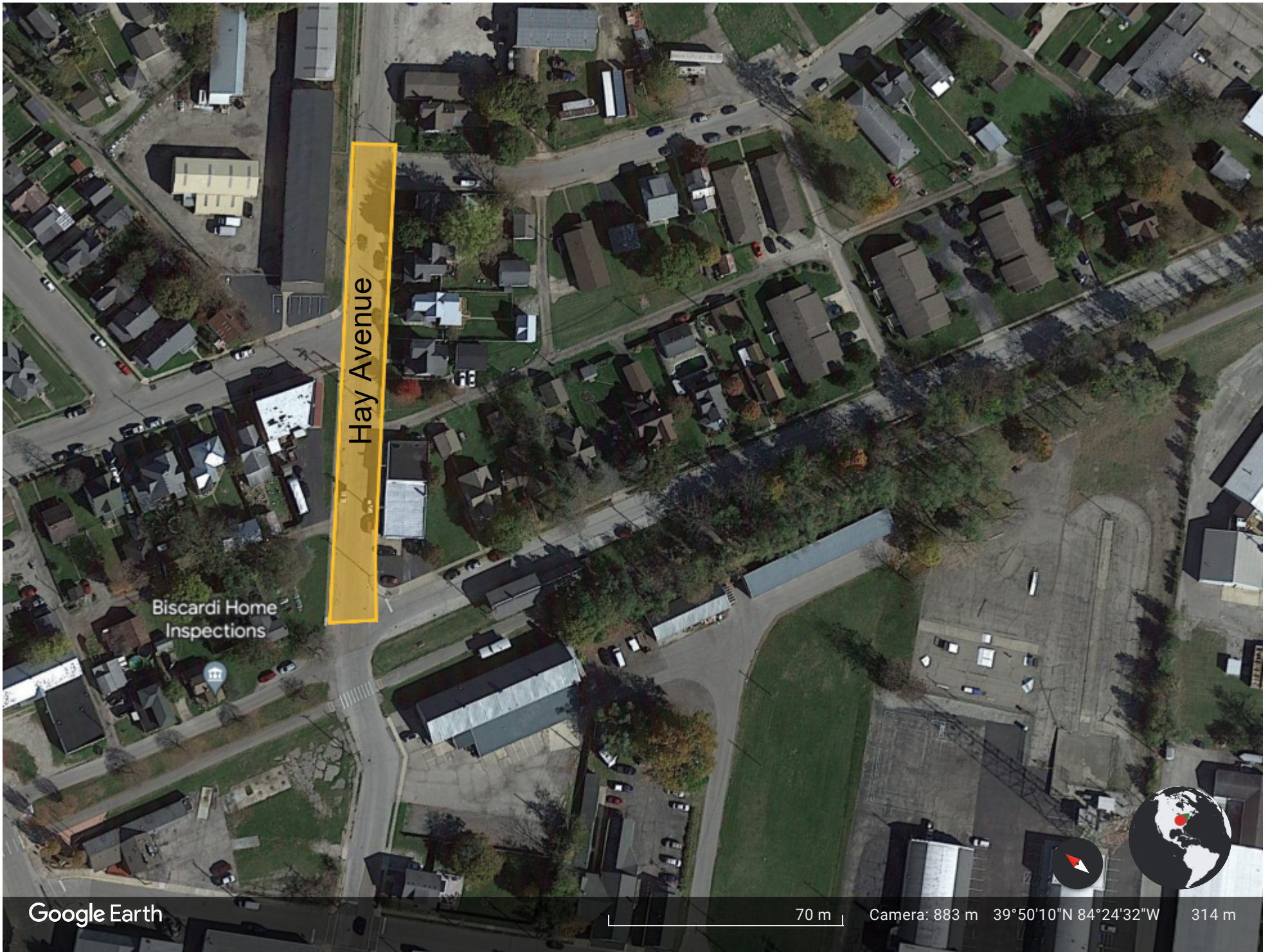
Other Factors

What other factors exist that make this project more important than other like projects?

The original road dates back to the early 1900's and the pavement was last resurfaced in 2002. The pavement conditions on Hay Avenue have suffered extreme deterioration. The existing storm lines are in poor condition, with cracked lines washing away aggregate and undermining the asphalt pavement.

A traffic count and pavement condition rating was done by Choice One Engineering on August 9, 2019. The ADT was 1,298 and the Hay Avenue PCR was 71. The current population of Brookville according to the 2020 U.S. Census is 5,999. The traffic count represents 22% of the population of Brookville. Many residents and people from the surrounding township use this roadway to access our Industrial Park, Brookhaven Nursing Home, and Interstate 70.

Hay Avenue needs to be reconstructed including pavement, curb and sidewalk, installation of adequate storm sewer, sanitary sewer, and replacement of the existing 4" cast iron water main, that was installed in 1956, with an 8" ductile iron water main. In 2015, our Fire Chief and Service Department Superintendent identified water line priorities. Hay Avenue is a very high priority as it pertains to fire protection and water line quality. Please see attached spreadsheet. In 2016, the City of Brookville contracted with Poggemeyer Design Group to conduct a Water Study. Included is a copy of Table 9 from that Study that shows Hay Avenue has a Priority Ranking of 2 out of 5 for water line replacement.



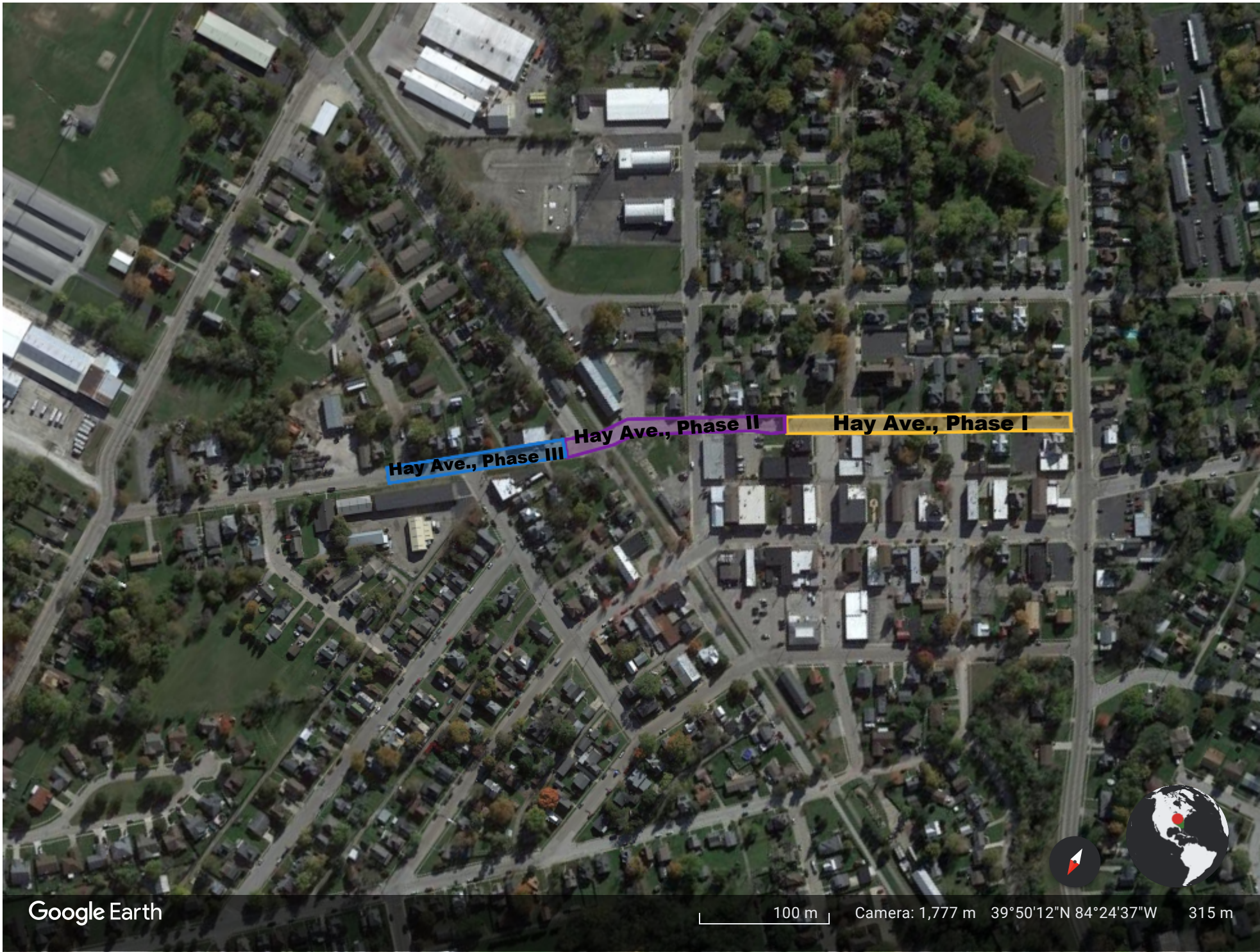
Google Earth

70 m

Camera: 883 m 39°50'10"N 84°24'32"W

314 m

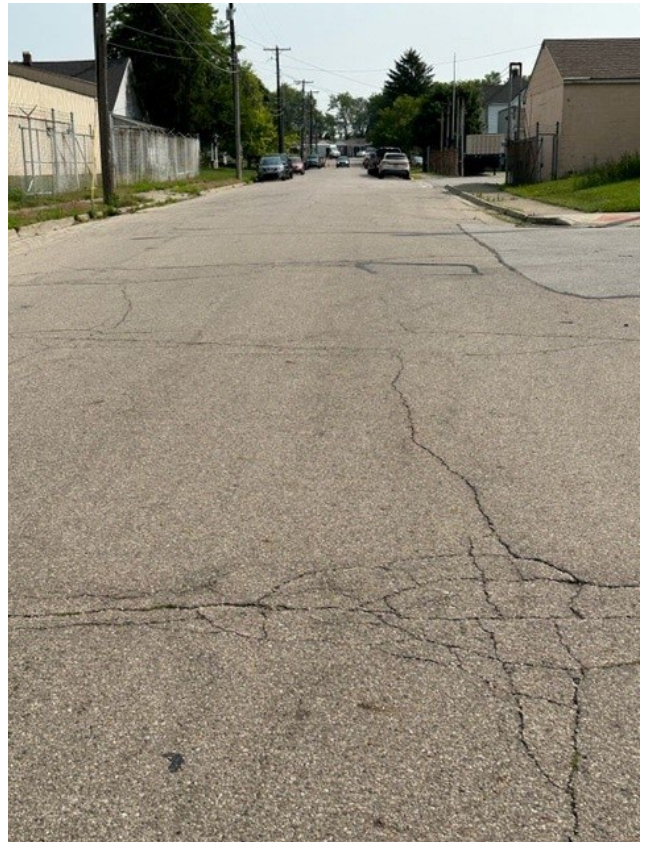
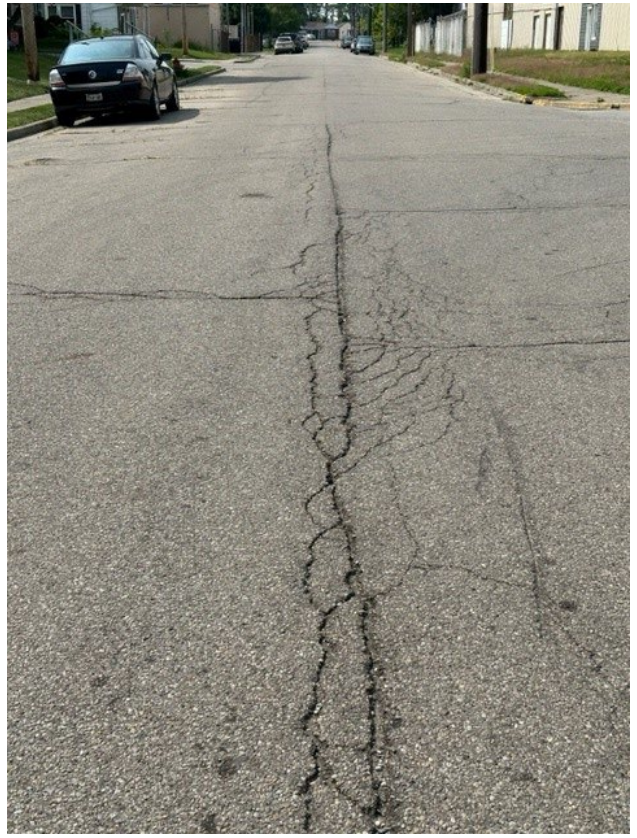
Vicinity Map



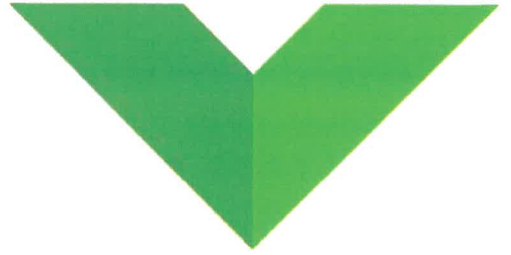
Google Earth

100 m Camera: 1,777 m 39°50'12"N 84°24'37"W 315 m

Hay Avenue Phased Improvements



HAY AVENUE – CUSICK AVENUE TO JOANNA STREET



Date
August 8, 2019

Subject
Hay Avenue ADT Certification
City of Brookville, Montgomery County, Ohio

Based on traffic counts completed by Choice One Engineering on Thursday August 1, 2019 (attached), I certify the following ADT is accurate:

- Hay Avenue ADT – 1,298

 8/8/19

SEAL:

Michael K. Goettemoeller, P.E., PTOE Date
Project Manager



West Central Ohio
440 E. Hoewisher Rd.
Sidney, OH 45365
937.497.0200 Phone

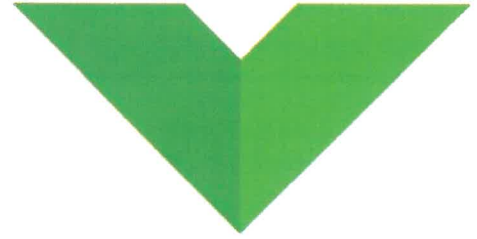
S Ohio/N. Kentucky
203 W. Loveland Ave.
Loveland, OH 45140
513.239.8554 Phone

Eastern Indiana
607 N. Meridian St.
Portland, IN 47371
260.766.2500 Phone



Study Name Hay Avenue ADT
 Start Date 08/01/2019
 Start Time 12:00 AM
 Site Code

| Channel Direction | Direction | Direction |
|----------------------|-------------|-----------|
| | Westbound | Eastbound |
| 12:00 AM | 1 | 3 |
| 12:15 AM | 0 | 0 |
| 12:30 AM | 2 | 0 |
| 12:45 AM | 1 | 0 |
| 1:00 AM | 0 | 0 |
| 1:15 AM | 0 | 0 |
| 1:30 AM | 0 | 0 |
| 1:45 AM | 0 | 0 |
| 2:00 AM | 2 | 1 |
| 2:15 AM | 0 | 0 |
| 2:30 AM | 0 | 2 |
| 2:45 AM | 0 | 1 |
| 3:00 AM | 0 | 0 |
| 3:15 AM | 1 | 1 |
| 3:30 AM | 0 | 0 |
| 3:45 AM | 0 | 0 |
| 4:00 AM | 0 | 0 |
| 4:15 AM | 1 | 1 |
| 4:30 AM | 0 | 0 |
| 4:45 AM | 1 | 2 |
| 5:00 AM | 0 | 0 |
| 5:15 AM | 3 | 3 |
| 5:30 AM | 1 | 1 |
| 5:45 AM | 1 | 3 |
| 6:00 AM | 5 | 2 |
| 6:15 AM | 6 | 8 |
| 6:30 AM | 3 | 15 |
| 6:45 AM | 5 | 14 |
| 7:00 AM | 4 | 10 |
| 7:15 AM | 10 | 4 |
| 7:30 AM | 4 | 8 |
| 7:45 AM | 6 | 14 |
| 8:00 AM | 5 | 10 |
| 8:15 AM | 10 | 9 |
| 8:30 AM | 6 | 5 |
| 8:45 AM | 5 | 13 |
| 9:00 AM | 4 | 10 |
| 9:15 AM | 7 | 14 |
| 9:30 AM | 11 | 5 |
| 9:45 AM | 9 | 5 |
| 10:00 AM | 7 | 10 |
| 10:15 AM | 14 | 6 |
| 10:30 AM | 9 | 13 |
| 10:45 AM | 6 | 11 |
| 11:00 AM | 14 | 12 |
| 11:15 AM | 8 | 4 |
| 11:30 AM | 20 | 7 |
| 11:45 AM | 9 | 11 |
| 12:00 PM | 13 | 15 |
| 12:15 PM | 12 | 14 |
| 12:30 PM | 10 | 17 |
| 12:45 PM | 13 | 12 |
| 1:00 PM | 22 | 7 |
| 1:15 PM | 8 | 14 |
| 1:30 PM | 9 | 15 |
| 1:45 PM | 6 | 11 |
| 2:00 PM | 11 | 10 |
| 2:15 PM | 13 | 8 |
| 2:30 PM | 7 | 11 |
| 2:45 PM | 8 | 16 |
| 3:00 PM | 14 | 11 |
| 3:15 PM | 15 | 6 |
| 3:30 PM | 15 | 11 |
| 3:45 PM | 12 | 9 |
| 4:00 PM | 8 | 17 |
| 4:15 PM | 19 | 7 |
| 4:30 PM | 11 | 11 |
| 4:45 PM | 10 | 15 |
| 5:00 PM | 17 | 17 |
| 5:15 PM | 14 | 8 |
| 5:30 PM | 10 | 19 |
| 5:45 PM | 12 | 10 |
| 6:00 PM | 13 | 16 |
| 6:15 PM | 11 | 13 |
| 6:30 PM | 9 | 11 |
| 6:45 PM | 7 | 7 |
| 7:00 PM | 10 | 6 |
| 7:15 PM | 10 | 7 |
| 7:30 PM | 6 | 2 |
| 7:45 PM | 11 | 5 |
| 8:00 PM | 11 | 13 |
| 8:15 PM | 11 | 10 |
| 8:30 PM | 6 | 4 |
| 8:45 PM | 6 | 8 |
| 9:00 PM | 6 | 4 |
| 9:15 PM | 3 | 5 |
| 9:30 PM | 3 | 0 |
| 9:45 PM | 5 | 6 |
| 10:00 PM | 5 | 5 |
| 10:15 PM | 4 | 3 |
| 10:30 PM | 0 | 1 |
| 10:45 PM | 0 | 2 |
| 11:00 PM | 2 | 3 |
| 11:15 PM | 5 | 1 |
| 11:30 PM | 1 | 2 |
| 11:45 PM | 0 | 0 |
| Directional Total | 635 | 663 |
| ADT | 1298 | |



Date

August 9, 2019

Subject

Hay Avenue Pavement Ratings
City of Brookville, Montgomery County, Ohio

Based on the pavement rating completed by Choice One Engineering on Thursday August 9, 2019 (attached), I certify the following pavement rating is accurate:

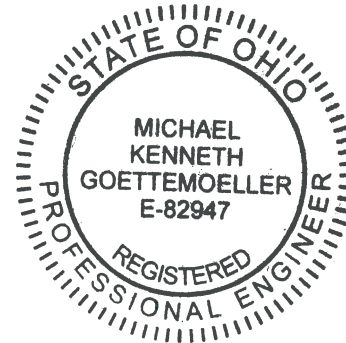
- Hay Avenue PCR - 71

 8/9/19

Michael K. Goettemoeller, P.E.
Project Manager

Date

SEAL:



W Central Ohio/E. Indiana
440 E. Hoewisher Rd.
Sidney, OH 45365
937.497.0200 Phone

S Ohio/N Kentucky
8956 Glendale Milford Rd., Suite 1
Loveland, OH 45140
513.239.8554 Phone



Section: **Hay Avenue**

Date: August 9, 2019

Log Mile: _____ to. _____

LOCAL ASPHALT PAVEMENT CONDITION RATING

Rated by: MKG

Sta: _____ to. _____

of Utility Cuts _____

| DISTRESS | Distress Weight | SEVERITY WT.* | | | EXTENT WT.** | | | STR | DEDUCT POINTS*** |
|--------------------------|-----------------|----------------|-----|---|--------------|-----|---|--------------------------------|------------------|
| | | L | M | H | O | F | E | | |
| RAVELING | 10 | 0.3 | 0.6 | 1 | 0.5 | 0.8 | 1 | | 3 |
| BLEEDING | 5 | 0.8 | 0.8 | 1 | 0.6 | 0.9 | 1 | | 0 |
| PATCHING | 5 | 0.3 | 0.6 | 1 | 0.6 | 0.8 | 1 | | 1.8 |
| DEBONDING/POTHOLES | 5 | 0.3 | 0.6 | 1 | 0.6 | 0.8 | 1 | | 0.9 |
| RUTTING | 10 | 0.3 | 0.7 | 1 | 0.6 | 0.8 | 1 | √ | 2.4 |
| MAP CRACKING | 5 | 0.2 | 0.6 | 1 | 0.4 | 0.8 | 1 | | 4 |
| BASE FAILURE | 10 | 0.6 | 0.8 | 1 | 0.7 | 0.9 | 1 | √ | 4.2 |
| SETTLEMENTS | 5 | 0.4 | 0.7 | 1 | 0.6 | 0.8 | 1 | | 1.2 |
| TRANSVERSE CRACKING | 10 | 0.4 | 0.7 | 1 | 0.5 | 0.7 | 1 | √ | 2.8 |
| WHEEL TRACK CRACKING | 15 | 0.4 | 0.7 | 1 | 0.5 | 0.7 | 1 | √ | 3 |
| LONGITUDINAL CRACKING | 5 | 0.2 | 0.6 | 1 | 0.4 | 0.8 | 1 | √ | 0.8 |
| EDGE CRACKING | 5 | 0.4 | 0.7 | 1 | 0.5 | 0.7 | 1 | √ | 0 |
| PRESSURE DAMAGE/UPHEAVAL | 5 | 0.4 | 0.6 | 1 | 0.5 | 0.8 | 1 | | 1 |
| CRACK SEALING DEFICIENCY | 5 | NOT CONSIDERED | | | 0.5 | 0.8 | 1 | | 4 |
| | | | | | | | | TOTAL DEDUCT = | 29.1 |
| | | | | | | | | SUM OF STRUCTURAL DEDUCT (√) = | 13.2 |
| | | | | | | | | 100 - TOTAL DEDUCT = PCR = | 70.9 |

Notes:

WATER LINE REPLACEMENT PRIORITIES JULY 2015

| FIRE PROTECTION BENEFIT | WATER LINE QUALITY | STREET/SEWER QUALITY | TOTAL SCORE | STREET NAME | | STREET 1 | STREET 2 |
|--------------------------------|---------------------------|-----------------------------|--------------------|-----------------------------------|---------|-----------------|-----------------|
| 1 | 1 | 1 | 1 | 200 block of Maple Street | Between | E. McKinley | Oak |
| 1 | 1 | 1 | 1 | 300 block of Maple Street | Between | Oak | Gaines |
| 1 | 1 | 1 | 1 | 400 block of Maple Street | Between | Gaines | Westbrook |
| 1 | 1 | 1 | 1 | 10 & 100 block of Hay Avenue | Between | Wolf Creek | Maple |
| 1 | 1 | 1 | 1 | 200 block of Hay Avenue | Between | Maple | Sycamore |
| 1 | 1 | 1 | 1 | 500 block of Hay Avenue | Between | Joanna | Wall |
| 1 | 1 | 1 | 1 | 600 block of Hay Avenue | Between | Wall | Albert |
| 2 | 1 | 1 | 1.3333 | 300 block of N. Wolf Creek Street | Between | Brookside | Durwell |
| 2 | 1 | 1 | 1.3333 | 200 block of N. Wolf Creek Street | Between | Brookside | Durwell |
| 2 | 1 | 1 | 1.3333 | 100 block of S. Orchard Street | Between | Westbrook | Simmons |
| 2 | 1 | 1 | 1.3333 | 110 block of N. Orchard Street | Between | Western | Mound |
| 1 | 1 | 2 | 1.3333 | 300 block of Hay Avenue | Between | Sycamore | Cusick |
| 1 | 1 | 2 | 1.3333 | 400 block of Hay Avenue | Between | Cusick | Joanna |
| 2 | 1 | 1 | 1.3333 | 500 block of Main Street | Between | Jefferson | Salem |
| 2 | 1 | 1 | 1.3333 | 500 block of Vine Street | Between | Jefferson | Wall |
| 2 | 1 | 1 | 1.3333 | 600 block of Vine Street | Between | Wall | Salem |
| 2 | 1 | 2 | 1.6667 | 400 block of N. Wolf Creek Street | Between | Karland | Brookside |
| 2 | 1 | 2 | 1.6667 | 100 block of N. Wolf Creek Street | Between | Durwell | Main |
| 2 | 1 | 2 | 1.6667 | 10 block of N. Wolf Creek Street | Between | Main | Market |
| 2 | 1 | 2 | 1.6667 | 10 block of S. Wolf Creek Street | Between | Market | Hay |
| 3 | 1 | 1 | 1.6667 | 100 block of S. Clay Street | Between | Westbrook | Simmons |
| 3 | 1 | 1 | 1.6667 | 10 block of N. Clay Street | Between | Western | Church |
| 2 | 1 | 2 | 1.6667 | 10 block of W. McKinley Street | Between | Hill | Wolf Creek |
| 1 | 1 | 3 | 1.6667 | 10 block of E. McKinley Street | Between | Wolf Creek | Maple |
| 2 | 1 | 2 | 1.6667 | 10 block of Main Street | Between | Wolf Creek | Walnut |

The following table shows a detail of the pipe greater than 50-years old along with a replacement ranking and probable construction cost for primarily the 4-inch waterlines. These are shown on Exhibit 8 along with high maintenance areas that have a significant number of repairs. Some 6-inch waterlines are included that would have impact to the 4-inch waterline replacement and/or the available flows for the areas that could not meet the modeled fire flow constraints. Some of the pipes overlap with the pipes included for meeting fire flows in the previous section and are included in the list below and ranked for replacement based on need to meet fire flows and age.


| Label | Dia. (in) | Approx. Installation Year | Length (ft) | Location | Included in Fire Flow Improvements | Priority Ranking | Probable Construction Cost* |
|-------|-----------|---------------------------|-------------|---|------------------------------------|------------------|-----------------------------|
| P-276 | 4 | 1951 | 551 | Church St | Yes | 1 | \$99,180 |
| P-277 | 6 | 1963 | 180 | Church St | Yes | 1 | \$32,400 |
| P-274 | 4 | 1951 | 420 | Church St | | 1 | \$138,420 |
| P-271 | 4 | 1951 | 349 | | | | |
| P-453 | 6 | 1960 | 273 | Lisa Court | Yes | 1 | |
| P-248 | 6 | 1960 | 103 | Poplar St | | | |
| P-249 | 6 | 1960 | 565 | Poplar St Verify connection if this is connected to the 12", these 6" lines are adequate | | | |
| P-225 | 4 | 1956 | 561 | Main St | Yes | 1 | |
| P-226 | 4 | 1956 | 325 | (north of Columbia) verify connection to the 10" on Salem Street | | | |
| P-553 | 4 | 1956 | 682 | | | | |
| P-430 | 4 | 1982 | 749 | Market St to H-233 | Yes | 1 | \$134,820 |
| P-260 | 4 | 1959 | 28 | S Clay St | Yes | 1 | \$115,380 |
| P-265 | 4 | 1959 | 613 | | | | |
| P-263 | 4 | 1953 | 605 | S Orchard St | Yes | 1 | \$108,900 |
| P-264 | 4 | 1959 | 278 | Simmons between Orchard/Clay | Yes | 1 | \$50,040 |
| P-285 | 4 | 1964 | 311 | Osage Alley - s from Harshman St | Yes | 1 | \$55,980 |
| P-619 | 4 | 1984 | 222 | Walnut St to H-399 | Yes | 1 | \$39,960 |
| P-618 | 4 | 1963 | 722 | Walnut St | | 2 | \$129,960 |
| P-262 | 4 | 1959 | 320 | Westbrook between Clay/Simmons | Yes | 1 | \$57,600 |
| P-345 | 4 | 1960 | 1,167 | Vine St - High Maintenance Area | | 2 | \$324,540 |
| P-346 | 4 | 1956 | 636 | | | | |
| P-347 | 4 | 1956 | 620 | Wall St - High Maintenance Area | | 2 | \$111,600 |
| P-231 | 4 | 1965 | 979 | Hay Ave (sw of Wolf Creek Trail) | | 2 | \$230,580 |
| P-334 | 4 | 1956 | 302 | | | | |
| P-337 | 4 | 1956 | 297 | Hay Ave (ne of Wolf Creek Trail) | | 2 | \$211,860 |
| P-338 | 4 | 1956 | 138 | | | | |
| P-339 | 4 | 1960 | 358 | | | | |
| P-340 | 4 | 1960 | 384 | | | | |
| P-378 | 4 | 1956 | 94 | March Ave (approx 100' connecting the 6" to the Western Ave 12") | | 3 | \$16,920 |
| P-377 | 6 | 1956 | 1003 | March Ave - 1000' of 6" | | 5 | \$180,540 |
| P-292 | 4 | 1951 | 458 | N Hill St - From Western to Mound | | 3 | \$82,440 |



FROM THE DESK OF...
RONALD E. FLETCHER, OFE
DIRECTOR OF FIRE / FIRE CHIEF

MEMORANDUM

July 12, 2023

TO: Sonja Keaton, City Manager
FROM: Ronald Fletcher, Fire Chief 
REF: Hay Avenue Water System Improvements

The water main that runs the entire length of Hay Avenue, and continuing efforts to improve it, is important to the Brookville Fire Department as it relates to water available for firefighting. Originally constructed in the mid 1950's, this main has historically offered extremely poor volume. Recent improvements along other sections of Hay Avenue have delivered the desired increase in available water volume, and I respectfully request that we continue to prioritize this project.

This section of Brookville was once the "business center" and it still contains old, large buildings that require a great deal of water when on fire. In the area of Hay Avenue and Jefferson Street the water available from the hydrant here is woefully poor. Unfortunately, this hydrant is the primary water source for more than 31,500 square feet of commercial space and several residential structures. Residential structure fires can require a needed water flow of 1000 gallons per minute or more. The fire hydrant here offers less than **300 gallons per minute**. The lack of water offered by the current water main makes it challenging to suppress a building fire in this area, and even more challenging to protect neighboring buildings exposed to the original fire building.

Fire departments today face numerous challenges – adequate staffing, homes full of combustibles that burn extremely fast, and building contents that require a greater fire flow than fifty years ago. We can often overcome these challenges with a good water supply. The difficult nature of our job, combined with a poor water supply, place our residents and our firefighters in a dangerous position.

I support and encourage efforts to improve the water line along Hay Avenue. Please feel free to contact me with questions / concerns.

August 4, 2023

Ohio Public Works Commission

This letter is about the proposed upgrades to the Hay Ave. Roadway Improvements, Phase III project. The age of the existing 4" water main is approximately 70 years old. This water main is unlined cast iron producing rusty drinking water for residents in the area. The improvement to 8" ductile iron would improve quality and fire flow for the area. Hay Ave has connectivity to several other areas that have existing 4" water main. Upgrade of the Hay Ave. water main provides connectivity, allowing other areas to be upgraded to 8" water main in the future.

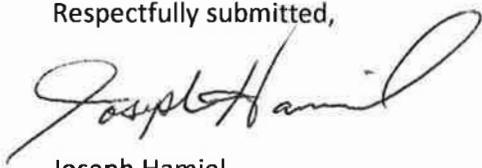
The existing storm lines are in poor condition, with cracked lines washing away aggregate and undermining the asphalt pavement. Improvement of the storm lines will provide access for homeowners as we continue to combat inflow and infiltration into the sanitary system.

The pavement conditions on Hay Ave. have suffered extreme deterioration. The pavement was last resurfaced in 2002 and requires base repair in several areas. Restoration patches exist in multiple locations from previous water main break repairs.

If you have any questions or need additional information upon reviewing this application, please feel free to contact me at (937) 833-2135 x401.

The City of Brookville appreciates your attention to this project and would appreciate any financial assistance extended.

Respectfully submitted,



Joseph Hamiel
Service Superintendent