



Office of the Village Manager

207 S. Brownson Ave.
P.O. Box 208
Kingsley, MI 49649

June 7, 2024

Bidder:

The Village of Kingsley will receive sealed bids in the Office of the Village Manager, 207 S. Brownson Avenue, P.O. Box 208, Kingsley, MI 49649, until **June 28, 2024 at 10:00 AM** for the following:

***REQUEST FOR PROPOSALS
REDEVELOPMENT READY COMMUNITY CERTIFICATION PLANNING SERVICES***

If the specifications are obtained from the Village's website link at villageofkingsley.com, it is the sole responsibility of the Bidder to check the website for updates and addenda prior to the bid being submitted.

The Village of Kingsley reserves the right to accept or reject any or all bids, waive irregularities, and to accept the bids either on an entire or individual basis that is in the best interest of the Village. The Village of Kingsley accepts no responsibility for any expense incurred by the Bidder in the preparation and presentation of a bid. Such expenses shall be borne exclusively by the Bidder. Only the successful Bidder will be notified.

You must indicate on the outside of the sealed envelope that the bid is for the "RFP – Redevelopment Ready Community Certification Planning Services". You must submit TWO (2) Sealed Copies of the bid to the Village Manager's Office prior to the above indicated time and date or the bid will not be accepted with a digital copy.

Please note that if you have previously submitted an informal quote, you will still need to submit a sealed bid prior to the date and time specified above in order to be considered. Please ensure that all requirements listed in the specifications are met. If you have any questions, please contact Kaitlyn Aldrich, Village Manager, at 231-263-7778 or kvmanager@villageofkingsley.com before the bid is submitted.

PLEASE SUBMIT BID TO: Kaitlyn Aldrich, Village Manager
207 S. Brownson Avenue
P.O. Box 208
Kingsley, MI 49649

Introduction

The Village of Kingsley is seeking proposals from Vendors to provide planning services to complete the RRC Best Practices to become a certified community by **February 1, 2026**.

For information about the Village of Kingsley and to view our current website, visit www.villageofkingsley.com

Background

The Village of Kingsley is currently RRC engaged and actively working towards the RRC Essentials path. A Baseline Report, including a memorandum from our Senior Planner with the Michigan Economic Development Corporation (MEDC), was completed in 2020 and is attached as *Appendix A*.

The Baseline Report will include notes stating whether certain criteria have been updated since the original report or if another consultant has been hired to complete a task.

In the fall of 2023, the Downtown Development Authority (DDA) entered into a Development Agreement with the Grand Traverse County Landbank to redevelop several parcels in downtown Kingsley. A key component of the agreement is to have the Village of Kingsley officially certified as “Redevelopment Ready” pursuant to the Redevelopment Ready Community Program. The Village does not have the capacity to complete the best practices in the timeframe outlined in the development agreement. Therefore, professional planning services are required to complete this certification.

Proposal Schedule

June 7, 2024	RFP Issued
June 19, 2024	Deadline to Submit Questions
June 21, 2024 @ 3:00 p.m.	Optional Pre-proposal Meeting
June 28, 2024 @ 10:00 a.m.	Proposals Due
July 8-11, 2024 3p-7p	Proposal Interviews
July 11, 2024	Proposal Selection
August 5, 2024	Proposal Approved by the DDA Board
August 13, 2024	Proposal Approved by the Village Council

Optional Pre-Proposal Meeting

A pre-proposal meeting is optional and will be held based on demand. If enough interest is expressed, the meeting will occur on June 21, 2024, at 3:00 p.m. EST. Attendance is optional, but should be viewed as an opportunity for bidders to ask relevant questions about the RFP and the process. Bidders intending to participate in the pre-proposal meeting should indicate their interest by emailing the Project Manager, Kaitlyn Aldrich, at kvmanager@villageofkingsley.com. Upon commencement of a virtual meeting, please be prepared to provide the moderator with your company contact information including name, phone number, and a valid email address.

Proposal Format

Proposals should be prepared as simply as possible and provide a straight forward, concise description of the Vendor's capabilities to satisfy the requirements of the RFP. All parts, pages, figures, and tables must be numbered and labeled clearly. The proposal should be organized into the following major parts:

1. Company Background
2. Implementation Plan and Timeline
3. Client References
4. Contract Terms and Conditions
5. Cost Quotations

Instructions relative to each part of the response to this RFP are defined in the remainder of this section. Failure to closely follow the proposal format shall be cause for rejection of the proposal.

Company Background (Section 1)

The Vendor should describe the company's background including:

- How long the company has been in business
- A brief description of the company, including past history, present status, future plans, etc.
 - Note any parent/subsidiary relationships
 - Note any name changes/acquisitions
- Company size and organization
- Main principal of the organization
- Contact information
- Total number of employees. Number of full-time and part-time employees. Number of technical staff and certifications.
- Identify specific vendor representatives that will be assigned to this project.

Implementation Plan and Timeline (Section 2)

The Vendor must provide, as part of the response, a detailed implementation plan for the entire project. It should include evaluation, process, phases, reporting, communication and updates. The Vendor shall provide a completion date and timeline based upon the enclosed specifications. Implementation will not occur until all contract(s) are signed.

Client References (Section 3)

Include in your proposal a list of three or more customers for whom the vendor has provided similar services. The Village is particularly interested in local government related clients located in Michigan of comparable size and service model. Information must include the following information:

- Name of client with contact person with phone and email address
- Description and date of service that Vendor provided

Contract Terms and Conditions (Section 4)

The Vendor is to state any exceptions to the conditions listed and add any conditions/terms deemed important by the Vendor. Sample contract (license) and support (service) agreements should also be provided in this part of the Vendor's response. Any forms and contracts the Vendor(s) proposes to include as part of any agreement resulting from this bid between the Vendor(s) and the Village must be submitted as part of the proposal. Failure to include a contract for such items will be interpreted as meaning that support for any items not specifically contracted for, and provided by said Vendor, are supported by the Vendor at **no additional cost**. Inclusion of contracts does not imply acceptance of that contract format and/or verbiage by the Village.

Cost Quotations (Section 5)

All prices quoted must include all that will be necessary to make the Village of Kingsley Redevelopment Ready Community Certified by February 1, 2026, for the purposes stated herein.

Each proposal shall be considered binding and in effect for a period of sixty (60) days following the proposal's opening.

Submitted by:

Signature

Company Name

Name and Title (Print)

Company Address

Phone

Fax

City,

State,

Zip

EMAIL ADDRESS:

Sole proprietorship/partnership/corporation

If corporation, state of corporation

APPENDIX A

VILLAGE OF KINGSLEY
MEDC BASELINE REPORT AND MEMORANDUM

Memorandum

TO: Village of Kingsley, Village Council

FROM: Pablo Majano, MEDC Senior Redevelopment Ready Communities Planner

DATE: April 28, 2020

RE: **Redevelopment Ready Communities® Baseline Report**

I am pleased to inform you that we have completed the formal RRC evaluation. The findings of our evaluation and recommended actions to assist the community in ultimately achieving RRC certification are included in the RRC Baseline Report. This briefing memo is intended to provide key highlights of the report and lay out the next steps in the RRC process.

Redevelopment Ready Communities: RRC is a free technical assistance program offered through the Michigan Economic Development Corporation (MEDC) which aims to help communities incorporate best practices in planning, zoning and economic development to encourage redevelopment and new investment. MEDC Community Development also uses RRC as a prioritization factor when determining investments through our programs (visit www.miplace.org for more information on those programs). Communities who fully align with the best practices can become RRC certified which come with its own set of benefits. Village of Kingsley has been formally engaged with RRC since September 2019. There are currently more than 270 communities across Michigan engaged in the program.

Baseline Report: The Baseline Report completes a key step in the RRC process. Using responses from the self-evaluation, the RRC program took a deeper dive into the Village's plans, zoning ordinance, site plan review process, priority development sites, training and more to make initial determinations regarding how well the existing practices align with the RRC best practices. The six RRC best practices consist of 41 objective measurable criteria. Green indicates the best practice has been satisfied, yellow means it is close to being administered and red means it is missing. Key findings include:

- The Village's existing practices already align with 35% of the RRC best practices including:
 - An updated downtown plan
 - A user-friendly zoning ordinance
 - Providing green infrastructure standards.
- The Village is partially aligned with another 38% of the RRC best practices. Major areas of partial alignment include:
 - Updating the master plan to meet best practice expectations
 - Developing a flowchart of the whole development process that includes timelines.
 - Document internal review process, along with clear roles, responsibilities and timelines.
 - Posting an updated capital improvements plan online

- Finally, the Village has a handful of areas where we found little or no alignment with the best practice criteria. Those items have a status of red in the report.

Reaching Certification: With this Baseline Report in hand, Village of Kingsley is now ready to move into the third and final phase of the RRC process. During this final phase the community will work to address each of the best practice criteria identified as red or yellow at their own pace. The report includes specific recommendations for each criterion; however, RRC is a dynamic program and is always willing to have open discussions if the Village has a different idea for how to meet a best practice criterion. During this phase the Village of Kingsley will have access to RRC technical assistance tools such as the RRC Online Library (www.miplace.org/rrclibrary), guidance from your RRC Planner, and matching technical assistance funds to help with the cost of larger projects (if needed). There is no deadline for reaching certification and RRC understands that each community will approach this phase at their own pace given available resources at any given time.

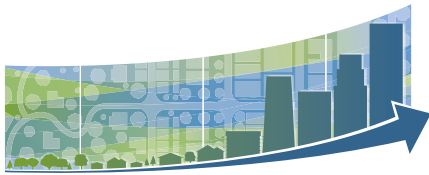
Next Steps: The next formal step in the process is to review the report and, if desired, pass a resolution to continue with RRC. Upon passage of that resolution the Village can begin to access the aforementioned tools to assist with reaching full alignment (and therefore certification). ***We ask that the resolution be passed within 30 days of receiving this memo.***

I look forward to working with the Village of Kingsley as it seeks to align with the best practices. It is our hope that through the RRC best practices communities of all shapes and sizes will be a strong position to leverage the excitement around Michigan and attract additional redevelopment and investment. If you have any questions on RRC or this Baseline Report, please feel free to contact me at your convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "Pablo Majano", with a long horizontal flourish extending to the right.

Pablo Majano



redevelopment ready
communities®

RRC Baseline Report

Village of Kingsley

March 2020



MICHIGAN ECONOMIC
DEVELOPMENT CORPORATION

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Redevelopment Ready Communities® (RRC) is a certification program supporting community revitalization and the attraction and retention of businesses, entrepreneurs and talent throughout Michigan. RRC promotes communities to be development ready and competitive in today's economy by actively engaging stakeholders and proactively planning for the future—making them more attractive for projects that create places where people want to live, work and invest.

To become formally engaged in the RRC program, communities must complete the RRC self-evaluation and a community representative must complete the best practice training series. The governing body must also pass a resolution of intent, outlining the value the community sees in participating in the program. In September 2019, village council passed a resolution of intent to participate in the program, training was completed and submitted the self-evaluation.

Developed by experts in the public and private sector, the RRC Best Practices are the standard to achieve certification, designed to create a predictable experience for investors, businesses and residents working within a community; communities must demonstrate that all best practice criteria have been met to receive RRC certification. This evaluation finds the community currently in full alignment with 35 percent of the best practice criteria and partially aligned with another 38 percent. The evaluation determined that strengths currently lie within strong zoning regulations and the foundation of a streamlined development review process. Challenges identified include updating the master plan, developing a public participation plan, creating an overarching marketing strategy, and updating the economic development plan.

This report includes recommendations for how the community can fully align with the best practices. Each recommendation has been customized to fit Kingsley and is backed by research and discussions specific to the community; however, these recommendations are just the beginning of the conversation. RRC is focused heavily on intent versus prescriptive “to-dos.” As the community works through the process, it may identify other ways to meet the intent of a particular best practice. The community's RRC planner will be there every step of the way to discuss those ideas, direct the community to resources and provide general guidance. In addition to the community's RRC planner, other partners should be at the table. RRC is a collaborative effort and is most successful when all parties are willing to engage in open dialogue so that Michigan communities can be at the forefront of developing unique identities and prosperous businesses.




Once the community has had a chance to digest the contents of this report, it will need to decide whether to continue with the RRC process. If it opts to reach for certification, it will result in a fully streamlined, predictable and transparent development process that is guided by a shared community vision. This will increase the community's ability to grow local investment and attract outside investment. It will also allow the Michigan Economic Development Corporation to better understand the community's desires for the future and how state tools and resources can help achieve that goal. MEDC looks forward to working with Village of Kingsley on its efforts to reach certification and to a prosperous relationship for many years to come.

The basic assessment tool for evaluation is the RRC Best Practices. These six standards were developed in conjunction with public and private sector experts and address key elements of community and economic development. A community must demonstrate all of the RRC Best Practice components have been met to become RRC certified. Once received, certification is valid for three years.

Measurement of a community to the best practices is completed through the RRC team’s research, observation, as well as the consulting advice and technical expertise

of the RRC advisory council. The team analyzes a community’s development materials, including, but not limited to: the master plan; redevelopment strategy; capital improvements plan; budget; public participation plan; zoning regulations; development procedures; meeting minutes; applications; economic development strategy; marketing strategy; and website.

A community’s degree of attainment for each best practice criteria is visually represented in this report by the following:

	Green indicates the best practice component is currently being met by the community.
	Yellow indicates some of the best practice component may be in place, but additional action is required.
	Red indicates the best practice component is not present or is significantly outdated.

This report represents the community’s current status in meeting the RRC Best Practices. This baseline establishes a foundation for the community’s progress as it moves forward. All questions should be directed to the RRC team at RRC@michigan.org.

Kingsley has completed 35 percent of the Redevelopment Ready Communities® criteria and is in the process of completing another 38 percent.						
1.1.1	1.1.2	1.1.3 (N/A)	1.1.4	1.2.1	1.2.2	1.2.3
2.1.1	2.1.2	2.1.3	2.1.4	2.1.5	2.1.6	2.1.7
2.1.8	3.1.1	3.1.2	3.1.3	3.1.4	3.1.5	3.1.6
3.1.7	3.1.8	3.2.1	3.2.2	4.1.1	4.1.2	4.2.1
4.2.2	4.2.3	4.2.4	5.1.1	5.1.2	5.2.1	5.2.2
6.1.1	6.1.2	6.1.3	6.1.4	6.1.5	6.1.6	

Best Practice 1.1—The plans

Best Practice 1.1 evaluates community planning and how the redevelopment vision is embedded in the master plan, corridor plan and capital improvements plan (CIP). The master plan sets expectations for those involved in new development and redevelopment, giving the public some degree of certainty about the community's vision for the future, while assisting the community in achieving its stated goals. Local plans can provide key stakeholders with a road map for navigating the redevelopment process in the context of market realities and community goals.

The Michigan Planning Enabling Act (MPEA), Public Act 33 of 2008, and the RRC Best Practices require that the governing body create and approve a master plan as a guide for development and review the master plan at least once every five years after adoption. The master plan was last adopted in 2018. To fully align with the RRC Best Practices; an updated plan will need to:

- Incorporate timelines and responsible parties for identified goals, and action items
- Incorporate a zoning plan
- Progress on the master plan is annual reported to the governing body

Master plans are a great tool to use when establishing the foundation for the community vision and future growth. A vision that includes the overall direction for the community, the desired look and feel for the community, and long-range goals the community wants to achieve. Ensuring the plan is available online for stakeholders and potential future investors to review is important. A key component to a master plan is the zoning plan. As the desired look and feel for land uses are discussed, recommendations should be provided on what changes need to be made in the zoning ordinance in order to accommodate the vision described. It is recommended to implement a zoning plan moving forward.

The master plan has a strong vision for the future, addresses future/existing land uses, addresses infrastructure, and addresses complete streets elements. Strategies for priority redevelopment areas include the downtown core area, highway commercial area, and industrial areas. The identified goals and objectives developed will truly assist the community in enhancing

their existing quality of life and support missing necessities identified from community input. A key objective here is to include timelines and electing a responsible party for developed goals. This will ensure that the community's vision is being incorporated and priorities for the community are transparent and will be measured for progress. A way to address this recommendation without amending the existing plan is to establish an annually revolving implementation table that identifies 3–4 goals in more detail. A key message in the master plan is, "A master plan is a 'living' document that needs to be used and modified regularly," therefore it's important to develop an annual review of progress. At the end of the year, the planning commission should have the ability to revise the goals and determine if new ones need to be rotated in or if items are still in progress. This progress should be shared in an annual planning commission report to the governing body. RRC has a planning commission annual report template which is a great resource Kingsley can use to create a report.

Identified through the master plan are the goals for the downtown development and tax increment financing plan (DDA/TIF). Those goals are to:

1. Maintain small town character
2. Provide essential services for Kingsley residents
3. Improve pedestrian experience and diminish negative vehicular traffic impacts
4. Provide a place for active and passive recreation
5. Provide an environment for housing of all types

The DDA/TIF plan was developed in 2003 and identified projects, estimated costs, goals and priorities that will contribute towards the overall purpose of the plan. Set to expire in 2034, the TIF plan along with master plan does a good job on supporting projects in an area of concentrated development that will move the needle on supporting the community vision and implementing good planning practices to develop an active and vibrant downtown area. A comprehensive matrix has also been developed that identifies prioritized projects, descriptions, estimated costs, and potential partnerships. The plan is available online and includes a map of the DDA.

Over the years, as communities grow, infrastructure

Best Practice 1.1—The plans *continued*

needs to adapt and pave the way for future growth and reinvestment. Infrastructure projects should consider new technology, transportation laws, building codes, building design, and community layout. A capital improvements plan (CIP) is an essential tool for the planning and development of the physical and economic well-being of a community. A goal identified in the master plan is that “the CIP should be developed with a clear understanding of community objectives regarding growth and land use as outlined in the master plan to assure that large-scale public expenditures are

coordinated with long term planning goals.” In short, the CIP is used to implement the vision and goals identified in other plans, including the master plan and downtown plan; and provides a link between planning and budgeting for capital projects. The 2015–2020 capital improvements plan will need to be updated and be annually reviewed. The CIP should reflect the current fiscal year projecting out five years totaling six years. Mentioned earlier, projects identified should align with existing adopted plans. The CIP should be continued to be posted online.

Status	Evaluation criteria	Recommended actions for certification	Estimated timeline
1.1.1	The governing body has adopted a master plan in the past five years. Under contract with Networks Northwest to Complete in 2025	<input type="checkbox"/> Incorporate timelines and responsible parties for identified goals, defined actions <input type="checkbox"/> Include a zoning plan <input type="checkbox"/> Report progress on the master plan annually	12 months
1.1.2	The governing body has adopted a downtown plan.	✓	
1.1.3	The governing body has adopted a corridor plan.	N/A	
1.1.4	The governing body has adopted a capital improvements plan.	<input type="checkbox"/> Update the six-year capital improvements plan which is updated yearly and post online	12 months

1.1.4 Capital Improvements Plan is outdated since 2020. Water, sewer, and road capital improvement projects have been identified (See Appendix B). General Fund, DDA, and Equipment have projects are identified with no funding sources in place. This exercise needs to be done with the Planning Commission and the entire CIP public process needs to take place with the Planning Commission.

Best Practice 1.2—Public participation

Best Practice 1.2 assesses how well the community identifies and engages its stakeholders on a continual basis. Public participation aims to prevent or minimize disputes by creating a process for resolving issues before they become an obstacle. Predictability and public support are essential to attract the right type of development to a community. Developers and representatives of the village are not the only key stakeholders in what happens within Kingsley; proactive public input is critical in creating a harmonious community.

Kingsley is very proactive when it comes to public engagement efforts within the community. Weekly manager rounds, monthly businesses coffee meetings, quarterly newsletters, weekly senior lunches are a few of many public engagement techniques used. Basic methods such as the Open Meetings Act, newspaper posting, website posting, postcard mailings are also used. Social media is a heavily used tool to inform the public on what is happening with the local communities. Creating a straightforward process to ensure the voices of community members are heard helps create a sense of place and investment and has the potential to attract community members to participate in the future of Kingsley.

It is recommended that public participating plan be documented. Facilitating and ensuring consistent future public engagement is important and an all-inclusive comprehensive public engagement plan should be developed. This plan can help determine which methods of engagement it would like to pursue, identify when and how each method would be used, and establish ways to measure the effectiveness of each method. When formalizing the public participation strategy, the plan should identify goals and objectives, key stakeholders, methods of communication, strategies for outreach and how to communicate results to the public. Staff are already practicing plenty of great engagement efforts, the plan will help document those efforts and ensure that

it continues to be utilized now and in the future. Once the public participation plan is created it should identify key stakeholders such as local and regional economic development agencies, and state and municipal partners. News and media outlets are another opportunity for partnerships in public participation to get the news out on community events, meetings, or seeking public input. The plan can also be a chance to encourage stakeholders to identify opportunities for partnerships.

The final component of any public participation strategy is to ensure that the results of public participation efforts are shared so stakeholders who were not able to attend can learn what happened and those who did attend can see the results of their efforts. Kingsley is constantly obtaining feedback, via Facebook or in person, and is sharing information on engagement efforts using social media and the newsletters. Again, all these great initiatives should be documented.

Based on the information obtained during this evaluation, this report recommends the following to help reach RRC certification:

- Describe public participation methods and appropriate venues to use each method.
- Identify key stakeholders.
- Develop specific actions for meeting objectives.
- Be formatted to allow a third-party to adhere to the public participation strategy if needed.
- Document method to track and share success of various outreach methods.
- Establish a method to assist a developer in soliciting input on a proposal early in the site plan approval process.

Ultimately, with this information outlined in a plan, the village and its stakeholders will have a clear understanding of expectations for communicating in a consistent and transparent manner.

Best Practice 1.2—Public participation *continued*

Status	Evaluation criteria	Recommended actions for certification	Estimated timeline
1.2.1	The community has a documented public participation plan for engaging a diverse set of community stakeholders.	<input type="checkbox"/> Create a formalized public participation plan	10 months
1.2.2	The community demonstrates that public participation efforts go beyond the basic methods.	✓	
1.2.3	The community shares outcomes of public participation processes.	✓	

Best Practice 2.1—Zoning regulations

Best Practice 2.1 evaluates the Village’s zoning ordinance and assesses how well it implements the goals of the master plan. Zoning is a significant mechanism for achieving desired land use patterns and quality development. Foundationally, the Michigan Zoning Enabling Act (MZEA), Public Act 110 of 2006, requires that a zoning ordinance be based on a plan to help guide zoning decisions. Information on the zoning ordinance can be found online. The ordinance provides a clear set of definitions and requirements for each zoning district. To improve on user-friendliness, Kingsley could consider adding a land-use matrix and links to make the document easier to navigate. It is recommended that the current zoning ordinance be reviewed to ensure alignment with the existing master plan.

The zoning ordinance is the regulatory tool used to implement the community vision identified in the master plan. It is an expectation that communities allow for mixed-use housing by right in core concentrated areas of developed. The downtown area is zoned C-1, “Commercial District,” which allows dwelling units by right as long as they are located above ground floor of a building and have two parking spaces provided for each unit, in addition to the commercial use.

A goal identified in the master plan and downtown plan is to include a variety of housing options within the downtown area. This could mean senior living, workforce housing, live/work units, micro units, duplexes or even triplex units. This is an opportunity to develop an environment that is less car dependent, encourages walkability, and provides easy access to medical supplies and food. Common necessities needed to live comfortably are essential to the quality of life a community can provide. While the zoning ordinance allows for live/work units, duplexes and accessory dwelling units, these uses are outside of the concentrated area of development. Consideration should be given for additional housing options in core areas.

While not required for certification, it is recommended that the zoning ordinance be revisited to allow for additional housing types in suitable locations that encourage the desired environment of many housing types as described in adopted community

plans. Providing additional housing types will increase the diversity in housing stock for Kingsley giving the opportunity to supply housing market demands for different audiences.

Kingsley takes pride in the look and feel of its community. Maintaining the small-town character is important in order to preserve the identity of the community. It is recommended that Historic Preservation elements be incorporated into the zoning ordinance. Design guidelines should be placed in the Central Business District that can serve as a historic preservation element around building design, material or in similar characteristics to other buildings. Additional design elements such as build-to-lines, ground floor transparency, outdoor dining and parking in the rear should be considered to increase a welcoming pedestrian-friendly environment.

Mentioned earlier, Kingsley has several areas of priority redevelopment. These commercial areas will tend to introduce a higher volume of traffic. To help mitigate safety concerns, the village should address traffic control through zoning standards. It is recommended that standards to improve non-motorized transportation be implemented into the zoning ordinance. Non-motorized transportation standards such as traffic calming, sidewalk connectivity language, required bicycle parking, and public realm standards are all ways the community can meet this expectation. In terms of flexible tools used to encourage new development and redevelopment, the village meets this criterion by providing non-conforming regulations and allowing for compatible new-economy businesses in commercial and industrial districts.

Nationwide communities are planning for sustainable development. Standards for green infrastructure are being implemented across the state of Michigan ensuring our resources are preserved for the present, and for future generations to come. Kingsley provides a series of beneficial sustainable standards, these include:

- The use of renewable energy through solar energy systems
- Tree preservation standards
- Buffering standards around water bodies

As seen in many cities, parking has become either

Best Practice 2.1—Zoning regulations *continued*

overly burdensome or underutilized. For this reason, it is important for communities to apply flexible parking standards. It is expected that a zoning ordinance provides two or more flexible parking standards. Section 152.224 covers parking requirements. While an applicant can demonstrate to the planning commission or through the zoning administrator with additional documentation that there is sufficient spaces to support an existing use,

in order to obtain a reduction or parking elimination, and additional flexible parking standard will need to be provided. This can include:

- Bike parking
- Shared parking agreements
- Payment-in-lieu of parking
- Parking waivers
- Parking maximums

Status	Evaluation criteria	Recommended actions for certification	Estimated timeline
2.1.1	The governing body has adopted a zoning ordinance that aligns with the goals of the master plan.	<input type="checkbox"/> Review master plan to ensure goals are in alignment with zoning ordinance	12–24 months
2.1.2	The zoning ordinance provides for areas of concentrated development in appropriate locations and encourages the type and form of development desired.	<input type="checkbox"/> Consider additional design elements within the downtown area <input type="checkbox"/> Include historic preservation standards	12–24 months
2.1.3	The zoning ordinance includes flexible tools to encourage development and redevelopment.	✓	
2.1.4	The zoning ordinance allows for a variety of housing options.	✓	
2.1.5	The zoning ordinance includes standards to improve non-motorized transportation.	<input type="checkbox"/> Provide standards to improve non-motorized transportation	12–24 months
2.1.6	The zoning ordinance includes flexible parking standards.	<input type="checkbox"/> Include an additional parking standard as recommended in the report	12–24 months
2.1.7	The zoning ordinance includes standards for environmental preservation and green infrastructure.	✓	
2.1.8	The zoning ordinance is user-friendly.	✓	

The Village is contracted with Cypher Group, LLC for its Zoning Administrative Services. Any proposed zoning ordinance amendments can be facilitated through our ZA and will go through Planning Commission for approval. Link to zoning ordinance: https://codelibrary.amlegal.com/codes/kingsley/latest/kingsley_mi/0-0-0-1

Best Practice 3.1—Development review policy and procedures

Best Practice 3.1 evaluates the community's development review policies and procedures, project tracking, and internal/external communications. An efficient site plan review process is integral to being redevelopment ready and can assist a community in attracting investment dollars while ensuring its zoning ordinance and other laws are followed.

The following criteria were found to be missing when evaluated against the RRC Best Practice 3.1:

- The appropriate departments engage in joint site plan reviews.
- The community has a clearly documented internal staff review process.
- The community promptly acts on development requests.
- The community has a method to track development projects.
- The community annually reviews successes and challenges with the development review process.

Applications for site plans are submitted through the zoning administrator prior to the next scheduled planning commission meeting. There two types of site plans that can be submitted in addition to the special use permit. A basic site plan which can be approved by the zoning administrator without planning commission approval or a detailed site plan which required approval through the planning commission. It is important to have an internal document that tracks the site plan and compliance review process. This gives direction and tracks the flow of approval. Once a site plan is submitted to the zoning administrator, documenting the following steps and who is responsible for reviewing the document before and after planning commission is important. This is where the joint site plan team can be introduced.

The team can provide valuable information to an applicant early in the application process, whether it may be unforeseen costs, police and fire safety issues, development barriers, or code interpretation that may impede development. Everyone involved in the

development review process should be on the same page on day one of the application process so road bumps can be avoided, and expectations are made clear. Departments or staff that could be added to the joint site plan review team are:

- Police chief
- Fire chief
- Building inspector
- Village manager
- County partners

It is an expectation to define and offer conceptual site plan review meetings for applicants. This helps to ensure all materials are being turned in on time and gives the zoning administrator or appropriate staff, and the applicant an opportunity to discuss any hurdles and how to address them. Offering a conceptual site plan also has the potential to save time and money for any applicant seeking to get site plan approval. Village of Kingsley encourages this type of service through its development and construction process flowchart.

To paint a better picture of the site plan review process, it is recommended that the draft visual flowchart that has been developed include timelines. This sets an expectation to any applicant on when to expect approval of a project or how long it will take to go through the process of a site plan review. This has the potential to improve efficiency, transparency, and predictability in the site plan review process and give a general understanding of the entire development review process.

It is recommended that a system should be set up to track projects from application submittal to occupancy. This will confirm that there is coordination with permitting and inspections staff and ensure an efficient and timely approval process. Lastly, a feedback mechanism should also be created to improve any internal processes or cost barriers that may arise. Any feedback is recommended to be reviewed annually by the joint site plan review team to capture lessons learned and amend the process when needed.

Best Practice 3.1—Development review policy and procedures *continued*

Status	Evaluation criteria	Recommended actions for certification	Estimated timeline
3.1.1	The zoning ordinance articulates a thorough site plan review process.	✓	
3.1.2	The community has a qualified intake professional.	✓	
3.1.3	The community defines and offers conceptual site plan review meetings for applicants.	✓	
3.1.4	The appropriate departments engage in joint site plan reviews.	<input type="checkbox"/> Develop a joint site plan review team	10 months
3.1.5	The community has a clearly documented internal staff review policy.	<input type="checkbox"/> Document internal review process, along with clear roles, responsibilities and timelines	10 months
3.1.6	The community promptly acts on development requests.	<input type="checkbox"/> Develop an easy to follow flowchart of development processes that includes timelines <input type="checkbox"/> Demonstrate how staff coordinates with permitting and inspections staff to ensure a smooth and timely approval process	10 months
3.1.7	The community has a method to track development projects.	<input type="checkbox"/> Develop a project tracker from submittal to occupancy	10 months
3.1.8	The community annually reviews the successes and challenges with the development review process.	<input type="checkbox"/> Create a feedback mechanism to gather input from applicants after they go through the process <input type="checkbox"/> Develop a process to review input by the joint site review team identify potential improvements to the process	10 months

With our new Zoning Administrator on board as of 5/1/24, 3.1.4-3.1.8 may make progress or may be a joint effort with the consultant. See Appendix C for existing flowcharts.

Best Practice 3.2—Guide to Development

Best Practice 3.2 evaluates the availability of the community’s development information and pertinent planning and zoning information that an applicant needs. Having all development-related information in a single location can greatly increase the ability of an applicant to access what they need efficiently. Including this information online can also maximize capacity, as staff will spend less time answering questions when applicants can have these questions answered by the community’s website.

Under the form’s web page information is housed on the fee schedule, land use permit, sign permit, applications for zoning change and construction process flow chart. Additional information such as the master plan, or future land-use map is harder to find. It is one thing to put all the necessary documents online, it’s another to know how to navigate the process.

It is recommended that a document be created, or a narrative be developed, that shows how residents, developers, or entrepreneurs should navigate the development process. Whether it is pulling a roofing

permit, opening a business, adding space or constructing a large project, the “Guide for Development” should function for everyone, it should be efficient and transparent. All development-related information can be located on the “Doing Business in Kingsley” web page. This is where Kingsley can show a potential applicant how to navigate the development review process. Additional development-related information that should be added in one easy to find location should include:

- Economic development strategy
- Contact information for all staff involved in the development process
- Conceptual meeting procedures
- Flowcharts
- Downtown plan
- Capital improvements plan
- Additional items pertinent to Kingsley

The fees associated with development are reviewed annually through the budget cycle to help ensure that costs are fair and affordable for the customer and community.

Status	Evaluation criteria	Recommended actions for certification	Estimated timeline
3.2.1	The community maintains a “Guide to Development” that explains policies, procedures and steps to obtain approvals.	<input type="checkbox"/> Add additional information to the online guide to development or develop a stand-alone guide <input type="checkbox"/> Develop instructions on how to use the “Guide for Development”	12 months
3.2.2	The community annually reviews the fee schedule.	✓	

See Appendix C for current Guide to Development. Fee schedule will need reviewed in 2024 and 2025 to meet RRC Certified requirements (it must be reviewed annually).

Best Practice 4.1—Recruitment and orientation

Best Practice 4.1 evaluates how a community conducts recruitment and orientation for newly appointed or elected officials and board members. Such officials sit on the numerous boards, commissions, and committees that advise community leaders on key policy decisions. Information on boards and commissions can be found online under the “Boards & Commission” web page for the following groups:

- Downtown development authority/brownfield redevelopment authority
- Planning commission

The board and commission application can be found on the forms web page. All boards and commissions with a general description should be posted online, including the Zoning Board of Appeals. The process for applying to a board or commission should also be clearly identified to allow for a clear understanding of how someone can get appointed to a board or commission. To allow for more applicants, the community could consider an

option to offer training for those interested in a board position. There are multiple resources that offer free training, which are further explained in Best Practice 4.2. Desired skill-sets or board or commission facts should be advertised online to give an idea to the public the types of applicants that should consider applying. For example, available positions could be advertised with language such as “If you are interested in architecture, community layout design, or historic preservation—the planning commission could be a perfect board for you,” to give potential applicants a preview of the skill-sets that pertain to each board or commission.

When new members join a board or commission it is important to ensure they are up-to-speed on responsibilities and relevant issues. The community, at a minimum, should provide all of the necessary information needed for a board member to be most effective in their position. The village manager prepares packets that includes bylaws and organizational reports

Status	Evaluation criteria	Recommended actions for certification	Estimated timeline
4.1.1	The community sets expectations for board and commission positions.	<input type="checkbox"/> Develop desired skill-sets for development-related boards and commissions <input type="checkbox"/> Document appointment process	10 months
4.1.2	The community provides orientation packets to all appointed and elected members of development-related boards and commissions.	<input type="checkbox"/> Add additional information to orientation packets for boards and commissions as recommended in the report	10 months

4.1.1 is now COMPLETE.

Best Practice 4.2—Education and training

Best Practice 4.2 assesses how a community encourages training and tracks educational activities for appointed and elected officials, board members, and staff. Trainings provide officials and staff with an opportunity to expand their knowledge and, ultimately, make more informed decisions about land use and redevelopment issues, which increases predictability for the development process overall. An effective training program includes four components: financial resources to support training; a plan to identify priority topics and track attendance; consistent encouragement to attend trainings; and sharing of information between boards and commissions to maximize the return on investment for the community.

The following criteria were found to be missing when evaluated against the RRC Best Practice 4.2:

- The community identifies training needs and tracks attendance for elected and appointed officials and staff
- The community shares information between elected and appointed officials and staff

Staff will need to show the RRC planner how funding is allocated for training purposes. It is an expectation that attendance for trainings is tracked. It is recommended that a method to track attendance of trainings be developed, either through a spreadsheet or a simple system that works for the community. If this method is currently done, a copy should be shared with the planner. This process is very important in order to have an accurate record of trainings that will support staff,

boards, and commissions with information that can greatly benefit their skill-sets when making decisions for the community. This will also assist in identifying training needs, a good time to do this is through the annual meeting with the village council in which goals are identified by officials. Information sharing is another key component of this process, so those who were not able to attend the training can have an idea of any valuable lessons learned that will benefit the community. Members are given the opportunity to report back on a training attended during weekly operations updates or public meetings.

A valuable resource any community has is its website and social media. When resources are limited, staff and local officials can find many training opportunities that are online or in person, through the Michigan Association of Planning, American Planning Association, MSU Extension, as well as visiting the MEDC Community Development website (www.miplace.org).

It is recommended that a collaborative work session be held at least annually which includes training on development-related topics and an opportunity to go over the annual planning commission report. Once the planning commission’s annual report is created (as required by the Michigan Planning Enabling Act), it should be shared during the annual meeting in order to ensure all ideas and opportunities for improvement are being discussed and possibly implemented.

Status	Evaluation criteria	Recommended actions for certification	Estimated timeline
4.2.1	The community has a dedicated source of funding for training.	<input type="checkbox"/> Show RRC planner how funding is being allocated toward training	12 months
4.2.2	The community identifies training needs and tracks attendance for elected and appointed officials and staff.	<input type="checkbox"/> Create a method to track trainings attended or demonstrate an existing method which meets the intent of this criteria	12 months
4.2.3	The community encourages elected and appointed officials and staff to attend trainings.	✓	
4.2.4	The community shares information between elected and appointed officials and staff.	<input type="checkbox"/> Hold an annual joint meeting between development-related boards. <input type="checkbox"/> Prepare an annual planning commission report	12 months

4.2.1 General Fund allocations have been made for training.

4.2.4 Trustees provide reports to boards at every meeting.

Or the Village Manager provides Council reports to appointed boards. Annual meetings are held between Council/DDA and Council/Planning Commission.

Best Practice 5.1—Economic development strategy

Best Practice 5.1 evaluates goals and actions identified by the community to assist in strengthening its overall economic health. Strategic economic development planning is critical to attracting jobs and new investment in communities; therefore, it is critical for Kingsley to work with local partners to adopt a comprehensive economic development strategy for the community. An effective economic development strategy will work in collaboration with key stakeholders such as local businesses and neighboring municipalities to articulate a clear vision and strategy, and drive regional and local efforts to the area in attracting the types of jobs that residents and visitors want to see. Village of Kingsley has developed an “Economic Development Action Plan” in partnership with the Traverse Bay Economic Development Corporation, in 2013. The plan does a good job identifying opportunities and challenges, it takes into consideration regional efforts, discusses local incentives and has a detailed action plan. Missing

from the economic development plan are timelines and responsible parties.

Developed in 2013, now would be a good time to look into the developed action plan and find out where Kingsley stands in terms of economic development. What goals have been accomplished? And how relevant are existing goals? Incorporating timelines and responsible parties will ensure the action plan is being implemented and annually reviewed. While it’s recommended that an annual review take place, staff is strongly encouraged to review the plan monthly.

Kingsley has a strong economic development plan which can be further enhanced with the recommendations provided in this section. A well-executed economic development strategy will further support a pedestrian-friendly environment, attract new businesses, create new housing opportunities, and increase economic opportunity for residents and existing businesses.

Status	Evaluation criteria	Recommended actions for certification	Estimated timeline
5.1.1	The community has approved an economic development strategy.	<input type="checkbox"/> Incorporate responsible parties and timelines into economic development strategy. This can be accomplished by developing a separate document.	12–24 months
5.1.2	The community annually reviews the economic development strategy.	<input type="checkbox"/> At a minimum, review the economic development strategy annually	12–24 months

Best Practice 5.2—Marketing and promotion

Best Practice 5.2 evaluates how the community promotes and markets itself. Marketing and branding are essential tools in the promotion of a community’s assets and unique attributes. People are attracted to places that evoke positive feelings and to communities that take pride in their town and their history.

It is recommended that local and regional stakeholders work together to develop a comprehensive marketing strategy. The development of a unified marketing strategy is intended to define physical assets, local resources and establish consistent messaging when talking about Kingsley. The marketing strategy should identify opportunities and outline steps to attract businesses, consumers, and real estate development. Coordinating marketing efforts with other local, regional, and state partners extends the marketing message to a wider audience; providing more opportunities for prospective businesses, consumers, and real estate investors to learn about what the community has to offer. Key partners can provide helpful insight into how a community can use existing assets to further strengthen community events, image, and more. The marketing strategy should build upon the vision, values, and goals outlined in locally adopted planning documents, including the master plan

and economic development strategy. The RRC process is a perfect opportunity to develop a marketing message and steps to attract talent to the outside community outlining why someone would want to live, work, invest; or discover the great things that exist in the community. The strategy should summarize what makes Kingsley unique, identify who target audiences are, and strengthen the image for the community.

A website is often the first point of interaction between a community and its residents, businesses, potential developers, and even tourists. As such, having an up-to-date and easy to navigate website is essential for any Redevelopment Ready Community®. Developers will visit the website to learn more about the development process, fees, community activities, and more. The website lay-out while clean in design needs to be updated to be more organized. There is space for improvement and making information easier to find. Having different web pages for different functions is a good place to begin. As documents become completed, they should be made available online for the public or future investors to read. Links should be double-checked to make sure they are working properly.

Status	Evaluation criteria	Recommended actions for certification	Estimated timeline
5.2.1	The community has developed a marketing strategy.	<input type="checkbox"/> Create a unified marketing strategy as outlined in Best Practice 5.2.1	12 months
5.2.2	The community has an updated, user-friendly municipal website.	<input type="checkbox"/> Add missing items to website as items become completed.	12 months

New Village website will go live in June or July of 2024. As documents and resources continue to be developed, they will be made available as resources on our website.

Best Practice 6.1—Redevelopment Ready Sites®

Best Practice 6.1 assesses how a community identifies, envisions, and markets their priority redevelopment sites. Communities must think strategically about the redevelopment of properties and investments should be targeted in areas that can catalyze further development around it. Instead of waiting for developers to propose projects, Redevelopment Ready Communities® identify priority sites and prepare information to assist developers in finding opportunities that match the community’s vision. Once the community has established a solid foundation for redevelopment through locally adopted plans, the final step toward RRC certification is the identification and prioritization of at least three redevelopment sites. Kingsley will have the opportunity to work with the Redevelopment Services Team when close to certification in order to package sites. With the three existing identified sites the village should prepare to gather basic information and supply that to the

Redevelopment Services Team once Kingsley reaches that stage.

The vision for the sites should be derived and crafted from adopted community plans (master plan, economic development plan, marketing plan, CIP) and staff should continually ensure that the framework is in place to support that vision. Basic information should be gathered as required under evaluation criteria 6.1.2.; from there, sites should be packaged into a short, marketable document. At least one site package should be developed further into a complete property information package, which includes an expanded list of more technical items (as applicable); such as environmental conditions, traffic studies, etc. A complete list of additional technical items can be found under evaluation criteria 6.1.5. Finally, the sites should be actively marketed via the Kingsley website and its economic development partners.

Status	Evaluation criteria	Recommended actions for certification	Estimated timeline
6.1.1	The community identifies and prioritizes redevelopment sites.	✓	
6.1.2	The community gathers basic information for prioritized redevelopment sites.	<input type="checkbox"/> Gather basic information for prioritized sites as outlined in the RRC Best Practices	24 months
6.1.3	The community has development a vision for the priority redevelopment sites.	<input type="checkbox"/> Develop a vision for each of the sites	24 months
6.1.4	The community identifies potential resources and incentives for prioritized redevelopment sites.	<input type="checkbox"/> Identify financial or other incentives for each site	24 months
6.1.5	A property information package for the prioritized redevelopment site(s) is assembled.	<input type="checkbox"/> Complete at least one property information package	24 months
6.1.6	Prioritized redevelopment sites are actively marketed.	<input type="checkbox"/> Market the complete property information package online	24 months

The Village Manager is aware of priority redevelopment sites and possible Brownfield opportunities.

Redevelopment Ready Communities® assists communities in maximizing their economic potential by embracing effective redevelopment tools and best practices. As mentioned at the beginning of this report, Kingsley is at a perfect place to take full advantage of RRC to ensure the processes and development-friendly atmosphere currently in place continue well into the future. It is recommended that the village's RRC efforts begin by establishing a solid foundation for recruitment and ongoing education of elected and appointed officials. It is important to continue to recruit and train representatives to make effective decisions around land use and development that will impact the community. Having the right tools in place will provide a pathway

for continued success for the Kingsley. Once complete, the next steps should focus on updating the public participation plan and master plan.

Upon reviewing the baseline report and determining whether these actions and RRC certification in general) fit within the community's vision for the future, the governing body must pass a resolution of support to proceed with the RRC program and continue efforts to complete the missing criteria. During that time, RRC will be in regular contact with local representatives to follow its progress and offer support and assistance as needed. Once all criteria are met, the community will be certified as a Redevelopment Ready Community®.

APPENDIX B

IDENTIFIED CAPITAL IMPROVEMENT PROJECTS



Village of Kingsley, MI – Major and Local Streets

CONDITION RATING & RECOMMENDATIONS

August 4, 2023



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Appendices

Appendix A. PASER Map

Appendix B. NCPP Method and Overview

Appendix C. PASER Table

EXECUTIVE SUMMARY

Wade Trim was hired to accompany Village of Kingsley's staff with condition assessment of the Village's non-federal aid eligible streets. On July 14th, 2023, Village DPW staff and Wade Trim conducted Pavement Surface Evaluation and Rating (PASER) survey of 7.5 miles of Village streets. The streets eligible for federal aid are evaluated regularly by a third party, and those ratings are included in this report to provide a complete picture of their condition. The 2.58 miles of Major Streets fall into the following categories: Good - 0.926 miles, Fair - 0.439 miles, and Poor - 1.212 miles. The 6.205 miles of Local Streets fall into the following categories: Good - 0.748 miles, Fair - 1.059, and Poor - 4.360 miles. Based on the condition of the Village streets 5.61 miles would benefit from a rehabilitation/reconstruction such as a crush and shape with minimum two course asphalt overlay, 2.59 miles would benefit from crack sealing and preventative maintenance such as chip seal, and 0.33 miles would benefit from structural improvement such as an asphalt overlay. The recently reconstructed section of South Brownson Avenue, 0.25 miles, is the only street that doesn't need any work currently.

RATING AND TREATMENT METHODS

The Pavement Surface Evaluation and Rating (PASER) system was used to evaluate the Village of Kingsley's roads. PASER was developed by the University of Wisconsin Transportation Information Center to provide a simple, efficient, and consistent method for evaluating road conditions through visual inspection. The widely used PASER system has specific criteria for assessing asphalt, concrete, sealcoat, and brick and block pavements. Information regarding the PASER system and PASER manuals may be found on the Transportation Asset Management Committee (TAMC) website at: http://www.michigan.gov/tamc/0,7308,7-356-82158_82627--,00.html.

The TAMC has adopted the PASER system for measuring statewide pavement conditions in Michigan for asphalt, concrete, composite, sealcoat, and brick- and block-paved roads. Broad use of the PASER system means that data collected at the Village of Kingsley is consistent with data collected statewide.

1.1 PASER Ratings

PASER data is collected using certified inspectors in a slow-moving vehicle using GPS-enabled data collection software provided to road-owning agencies. The method does not require extensive training or specialized equipment, and data can be collected rapidly, which minimizes the expense for collecting and maintaining this data.

The PASER system rates surface condition using a 1-10 scale where 10 is a brand-new road with no defects that can be treated with routine maintenance, 5 is a road with distresses but is structurally sound that can be treated with preventive maintenance, and 1 is a road with extensive surface and structural distresses that requires complete reconstruction.

Roads with lower PASER scores generally require costlier treatments to restore their quality than roads with higher PASER scores. The cost-effectiveness of treatments generally decreases as the PASER number decreases. As a road deteriorates, it costs more dollars per mile to fix it, and the dollars spent are less efficient in increasing the road's service life. Nationwide experience and asset management principles has proven that a road that has deteriorated to a PASER 4 or less will cost more to improve and the dollars spent are less efficient. Understanding this cost principle helps to make well informed and fiscally responsible decisions regarding roadway projects upon completion of the PASER condition assessment.

The TAMC has developed statewide definitions of road condition by creating three simplified condition categories - "good," "fair," and "poor" - that represent bin ranges of PASER scores having similar contexts regarding maintenance and/or reconstruction. The definitions of these rating conditions are:

- “Good” roads, according to the TAMC, have PASER scores of 8, 9, or 10. Roads in this category have very few, if any, defects and only require minimal maintenance; they may be kept in this category longer using proactive preventative maintenance (PPM). These roads may include those that have been recently seal-coated or newly constructed. Figure 1 illustrates an example of a road in this category.
- “Fair” roads, according to the TAMC, have PASER scores of 5, 6, or 7. Roads in this category still show good structural support, but their surface is starting to deteriorate. Figure 1 illustrates two road examples in this category. Capital preventative maintenance (CPM) can be cost effective for maintaining the road’s “fair” condition or even raising it to “good” condition before the structural integrity of the pavement has been severely impacted. CPM treatments can be likened to shingles on a roof of a house: while the shingles add no structural value, they protect the house from structural damage by maintaining the protective function of a roof covering.
- “Poor” roads, according to the TAMC, have PASER scores of 1, 2, 3, or 4. These roads exhibit evidence that the underlying structure is failing, such as alligator cracking and rutting. These roads must be rehabilitated with treatments like a heavy overlay, crush and shape, or total reconstruction. Figure 1 illustrates one road in this condition.

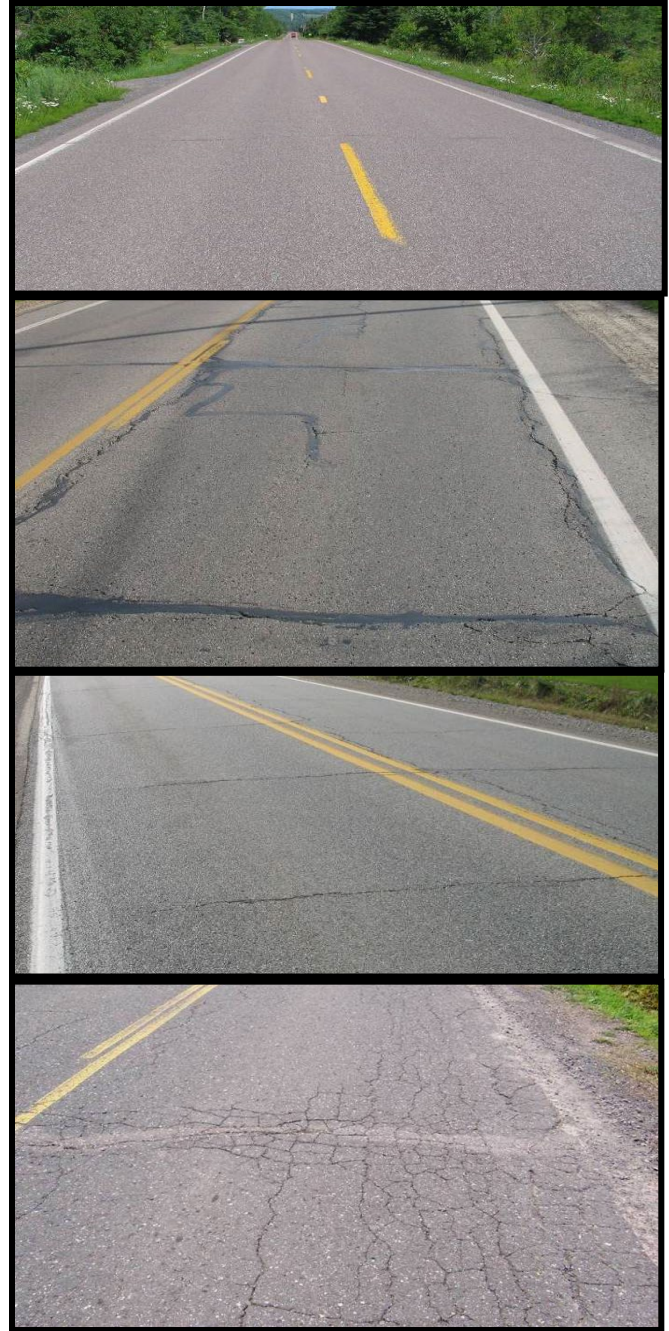


Figure 1: PASER Road Ratings. Top image, above – PASER 8 road that is considered “good” by the TAMC and exhibits only minor defects. Second image, above – PASER 5 road that is considered “fair” by the TAMC and exhibits structural soundness, but could benefit from CPM. Third image, above – PASER 6 road that is considered “fair” by the TAMC. Bottom image, above – PASER 2 road that is considered “poor” by the TAMC exhibiting significant structural distress.

1.2 Pavement Treatments

The aim of selecting repair treatments is to balance costs, benefits, and road life expectancy. All pavements are damaged by water, traffic weight, freeze/thaw cycles, and sunlight. Each of the following treatments and strategies - reconstruction, structural improvements, and CMP -counter at least one of these pavement-damaging forces.



Figure 2: Examples of Reconstruction Treatments.

(Left) reconstructing a road and (right) road prepared for full-depth repair.

Reconstruction

Pavement reconstruction treats failing or failed pavements by completely removing the old pavement and base and constructing an entirely new road (Figure 2). Every pavement must eventually be reconstructed and is usually done as a last resort after more cost-effective treatments are completed, or if the road requires significant changes to road geometry, base, or buried utilities. Compared to the other treatments, which are all improvements of the existing road, reconstruction is the most extensive rehabilitation of the roadway and the most expensive per mile and most disruptive to regular traffic patterns. Reconstructed pavement will subsequently require one or more of the previous maintenance treatments to maximize service life and performance. A reconstructed road lasts approximately 25 years and costs an average of \$1,000,000 per centerline mile for a two-lane road.

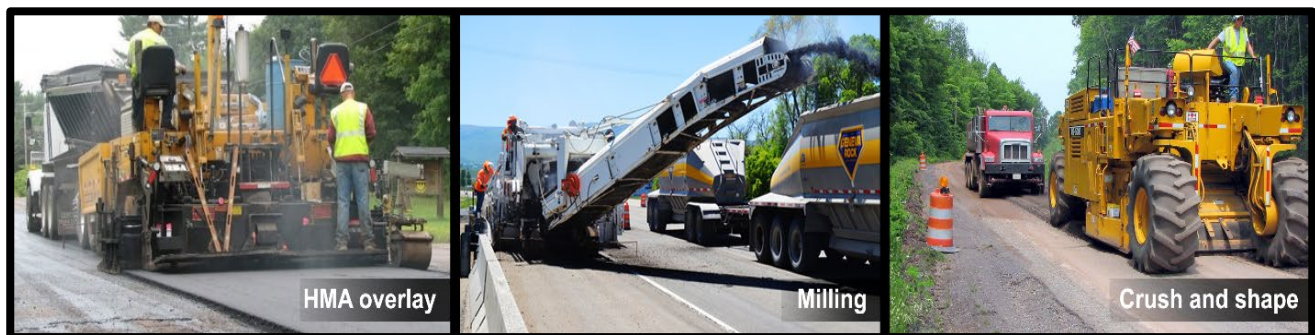


Figure 3: Examples of Structural Improvements Treatments.

(From left) HMA overlay on an un-milled pavement, milling asphalt pavement, and pulverization of a road during a crush-and-shape project.

Structural Improvement

Roads requiring structural improvements exhibit alligator cracking and/or rutting and rated poor in the TAMC scale. Road rutting is evidence that the underlying structure is beginning to fail, and it must be rehabilitated with a structural treatment. Examples of structural improvement treatments include HMA overlay, with or without milling, and crush and shape (Figure 3). The following descriptions outline the main structural improvement treatments used.

Hot-Mix Asphalt (HMA) Overlay With/Without Milling

An HMA overlay is a layer of new asphalt (liquid asphalt and stones) placed on an existing pavement (Figure 3). Depending on the overlay thickness, this treatment can add significant structural strength. This treatment also creates a new wearing surface for traffic and seals the pavement from water, debris, and sunlight damage. An HMA overlay lasts approximately 5 to 10 years and costs \$100,000 to \$200,000 per centerline mile for a two-lane road. The top layer of severely damaged pavement can be removed by milling, a technique that helps prevent structural problems from being quickly reflected up to the new surface. Milling is also done to keep roads at the same height of curb and gutter that is not being raised or reinstalled in the project. Milling adds approximately \$20,000 per centerline mile to the HMA overlay cost.

Crush and Shape

During a crush and shape treatment, the existing pavement and base are pulverized and then the road surface is reshaped to correct imperfections in the road's profile (Figure 3). An additional layer of gravel is often added, along with a new wearing surface, such as an HMA overlay or chip seal. Additional gravel and an HMA overlay provide an increase in the pavement's structural capacity. This treatment is usually done on rural roads with severe structural distress; adding gravel and a wearing surface makes it more prohibitive for urban roads if the curb and gutter is not raised. Crush and shape treatments last approximately 25 years and cost \$575,000 per centerline mile for a two-lane road.

Capital Preventive Maintenance

Capital Preventive Maintenance (CPM) addresses pavement problems of fair-rated roads before the structural integrity of the pavement is severely impacted. CPM is a planned set of cost-effective treatments applied to an existing roadway that slows further deterioration and maintains or improves the functional condition of the system without significantly increasing the structural capacity. Examples of such treatments include crack seal, fog seal, chip seal, slurry seal, and microsurface (Figure 4). The purpose of the following CPM treatments is to protect the pavement structure, slow the rate of deterioration, and/or correct pavement surface deficiencies. The following descriptions outline the main CPM treatments used by road agencies.



Figure 4: Examples of Capital Preventive Maintenance Treatments.

(From left) crack seal, fog seal, chip seal, and slurry seal/microsurface.

Crack Seal

Water that infiltrates the pavement surface weakens the pavement structure and allows traffic loads to cause more damage to the pavement than in normal, dry conditions. Crack sealing helps to prevent water infiltration by sealing cracks in the pavement with asphalt sealant (Figure 4). Crack sealing lasts approximately 2 years and costs \$8,000 per centerline mile for a two-lane road. Even though it does not last very long compared to other treatments, it does not cost very much compared to other treatments. This makes it a very cost-effective treatment when looking at what crack filling costs per year of the treatment's life.

Fog Seal

Fog sealing sprays a liquid asphalt coating onto the entire pavement surface to fill hairline cracks and prevent damage from sunlight (Figure 4). Fog seals are best for good to very good pavements and last approximately 2 years at a cost of \$6,000 per centerline mile for a two-lane road.

Chip Seal

A chip seal, also known as a sealcoat, is a two-part treatment that starts with liquid asphalt sprayed onto the old pavement surface followed by a single layer of small stone chips spread onto the wet liquid asphalt layer (Figure 4). The liquid asphalt seals the pavement from water and debris and holds the stone chips in place, providing a new wearing surface for traffic that can correct friction problems and help to prevent further surface deterioration. Chip seals are best applied to pavements that are not exhibiting problems with strength, and their purpose is to help preserve that strength. These treatments last approximately 5-7 years and cost \$56,000 per centerline mile of a two-lane road, depending on surface condition when placed.

Slurry Seal/Microsurface

A slurry seal or microsurface's purpose is to protect existing pavement from being damaged by water and sunlight. The primary ingredients are liquid asphalt (slurry seal) or modified liquid asphalt (microsurface), small stones, water, and Portland cement applied in a very thin (less than a half an inch) layer (Figure 4). The main difference between a slurry seal and a microsurface is the modified liquid asphalt used in microsurfacing provides different curing and durability properties, which allows microsurfacing to be used for filling pavement ruts. Since the application is very thin, these treatments do not add any strength to the pavement structure and only serves to protect the

pavement's existing strength by sealing the pavement from sunlight and water damage. These treatments work best when applied before cracks are too wide and too numerous. A slurry seal treatment lasts approximately 4 years and costs \$40,000 per centerline mile for a two-lane road, while a microsurface treatment tends to last for 7 years and costs \$50,000 per centerline mile for a two-lane road.

ASSET MANAGEMENT

Asset Management, according to Public Act 199 of 2007, means an “ongoing process of maintaining, upgrading and operating physical assets cost-effectively, based on a continuous physical inventory and condition assessment.”

The implementation of an asset management decision process allows an agency to make the best decisions for their transportation network based on information they can collect. The process enables good stewardship, transparent decision processes, and measurable performance. The following figure provides an overview of the asset management process.

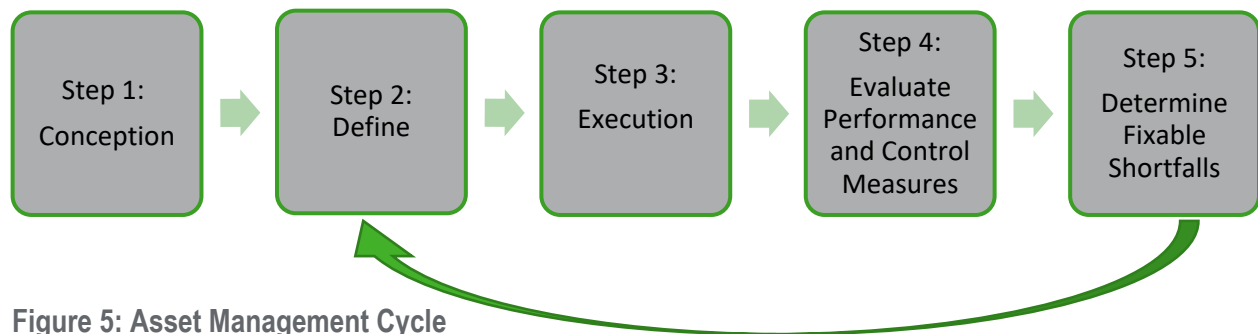


Figure 5: Asset Management Cycle

1.3 Village of Kingsley Asset Inventory

The Village of Kingsley is the jurisdictional authority of all public roads, and support systems located within the village limits. Support systems include assets such as street signs, lighting, and pavement markings. Currently the Village maintains 2.94 miles of Major Streets and 6.09 miles of Minor Streets as approved on the Village's ACT 51 inventory map from 2022. Of the 2.94 miles of Major Streets approximately 1.25 miles are eligible for Federal Aid funding, the remaining 7.78 miles of Major and Local Street are funded out of the Village's ACT 51 distributions. It should be noted that the software (RoadSoft) used state-wide to collect condition ratings is not integrated with Michigan's Act 51 inventory maps. Minor differences between the Geographic Information System (GIS) lengths in RoadSoft and the certified lengths approved by Act 51 do exist. For planning purposes, this difference is insignificant. The following sections use RoadSoft length for planning and condition reporting.

Major and Local Streets Condition

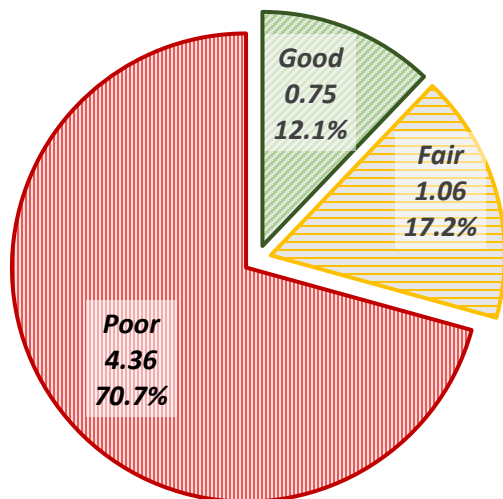
The following table summarizes the condition of the Village’s major streets. Federal fund eligible roads are rated on a routine bases by Networks Northwest, MDOT, and a local representative as part of the TAMC state-wide data collection program. In preparation for this report, certified Village staff, along with certified Wade Trim staff, conducted surface condition assessment of the major and local streets not eligible for federal funds. The Village streets consist of asphalt surfaces so no distinction in surface type is noted.

Table 2-1 Major Streets PASER Ratings											
	10	9	8	7	6	5	4	3	2	1	Total
Fed Aid	0.252	0.000	0.489	0.000	0.000	0.000	0.069	0.444	0.000	0.000	1.25
Major St	0.000	0.000	0.185	0.000	0.375	0.064	0.063	0.362	0.274	0.000	1.32
Total	0.252	0.000	0.674	0.000	0.375	0.064	0.132	0.806	0.274	0.000	2.58
Good: 0.926 Miles			Fair: 0.439 Miles				Poor: 1.212 Miles				

Table 2-2 Local Streets PASER Ratings											
	10	9	8	7	6	5	4	3	2	1	Total
Local St	0.00	0.000	0.748	0.731	0.062	0.266	0.405	3.661	0.294	0.000	6.205
Good: 0.748 Miles			Fair: 1.059 Miles				Poor: 4.360 Miles				

Figures 6 and 7 show the percentage of good, fair, and poor streets separated by major and local classifications. Appendix A contains a map depicting ratings by street.

Local Streets PASER Scores



Major Streets PASER Scores

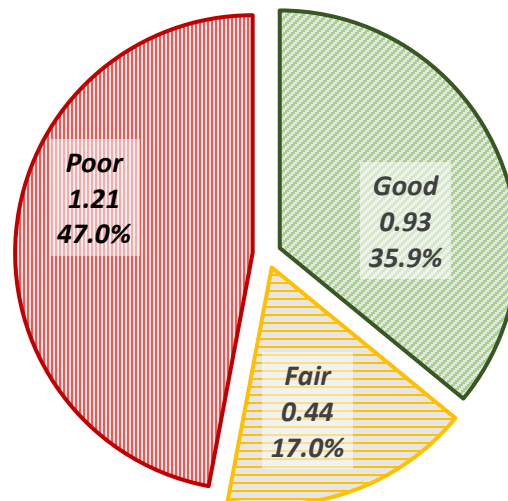


Figure 6
PASER Ratings and Recommendations

Figure 7
11

RECOMMENDATIONS

A multi-disciplinary approach is used to determine the renewal, replacement, and improvement projects to implement in any given year. This process takes into consideration the condition of a pavement, stakeholder needs, and the changing needs of the area around a street. The decision process is focused around the following key areas:

- The general condition of the street (e.g., the pavement, shoulders, and utilities).
- The PASER rating of the street.
- The volume of traffic, or number of trips, found on the street.
- The ability to provide, or the need for, safety improvement projects.
- The potential for improved economic development in an area.
- The ability to coordinate with other projects that may be disturbing the street such as utility work or improving the public right-of-way.
- The ability to partner with other jurisdictions and agencies to share the cost burden of a project.

A method developed by the National Center for Pavement Preservation (NCP) provides an overall indicator of the impact selected fixes have on the network. An example and description of the method is included as Appendix B. This method is preferable for the Village of Kingsley due to the road network size. It provides a cost benefit analysis in a simple format that doesn't require computer/software upgrades or specialized training beyond standard office software.

The basic principle of the NCP method is represented in the figure below.

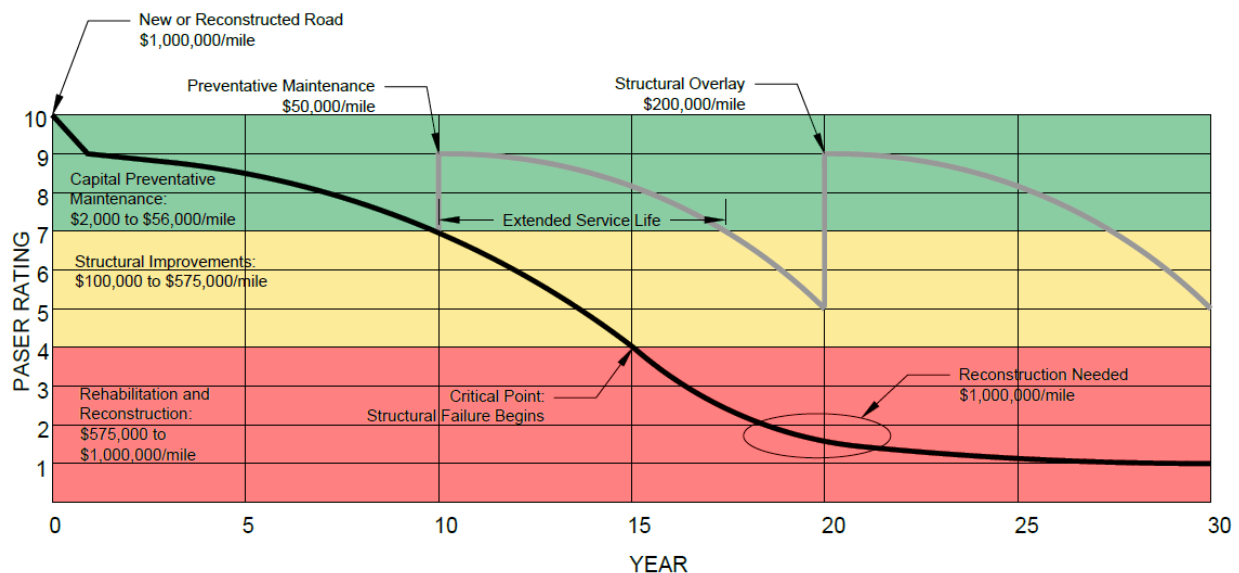


Figure 8: Asphalt degradation and maintenance

By applying a mix of fixes to the network, the service life of a pavement can be extended with less investment than waiting until rehabilitation or reconstruction is needed.

1.4 Village of Kingsley Network

The tables 10 and 11 provide a sample of the NCPP method for the current state of the Villages network. Table 3-1 and 3-2 summarizes recommended fixes given a pavements condition. Overlap in pavement condition and recommended fixes do exist, environmental factors and engineering judgement should be used to determine the appropriate fix.

Treatment Name	Years of Life	Trigger Range, Rest
Reconstruction	25	1-3, 10
Rehabilitation Heavy	25	2-3, 10
Rehabilitation	15	4-6, 9
Heavy CPM	7	5-7, 8
Light CPM	2	6-7, 7
Post Recon Chip Seal	10	8-9, 9

Treatment Name	\$/Mile	Years of Life
Reconstruction	575,000 to 1,000,000	25
Rehabilitation Heavy		
Crush and Shape	575,000 to 750,000	25
2" HMA Overlay	150,000	10
Crack Relief Layer and 1.5" HMA Overlay	165,000	12
Rehabilitation		
1.5" HMA Overlay	110,000	10
Crack Relief Layer and HMA Ultra-Thin Overlay	100,000	9
Heavy CPM		
Crack Seal and Chip Seal/Microsurface	58,000	5
HMA Wedge and Chip Seal/Microsurface	110,000	9
HMA Ultra-Thin Overlay	60,000	7
CPM		
Crack Seal	6,800	2-3
Post Reconstruction Chip Seal	45,000	10

**Milling for HMA Overlays add approximately \$20,000 per mile.*

Table 12 shows a sample scenario optimizing the years added to the villages network. Depending on the budget available and applicable treatments, recommendations will vary year by year.

Table 12: Sample project selection												
Prop Fix	Fix Type	PASER Trigger	Miles Available	Target Miles	Miles Selected	\$/Mile	Years Added	Total Work Needed	Target Budget	Selected Budget	Target Total Gain	Total Gain
1	Crack Seal	7	0.00	0.00	0.00	\$ 6,800.00	3	\$ -	\$ -	\$ -	0.0	0.0
2	Crack Seal & Chip Seal	5-7	2.10	2.10	2.10	\$ 58,000.00	5	\$ 121,858.00	\$ 121,858.00	\$ 121,858.00	10.5	10.5
3	Crush and Shape	2-4	5.61	0.53	0.57	\$ 575,000.00	25	\$ 3,225,750.00	\$ 306,637.00	\$ 325,450.00	13.3	14.2
4	crck rlf lyr & Ultra-thin	4-5	0.00	0.00	0.00	\$ 100,000.00	9	\$ -	\$ -	\$ -	0.0	0.0
5	Ultra-Thin	4-5	0.00	0.00	0.00	\$ 60,000.00	9	\$ -	\$ -	\$ -	0.0	0.0
6	1.5" HMA Overlay	3-5	0.00	0.00	0.00	\$ 110,000.00	10	\$ -	\$ -	\$ -	0.0	0.0
7	HMA wedge(s) & Chip Seal	3-5	0.00	0.00	0.00	\$ 110,000.00	9	\$ -	\$ -	\$ -	0.0	0.0
8	C&S w/ HMA Shoulders	1-3	0.00	0.00	0.00	\$ 750,000.00	25	\$ -	\$ -	\$ -	0.0	0.0
9	crck rlf lyr & HMA Overlay	3-5	0.00	0.00	0.00	\$ 165,000.00	12	\$ -	\$ -	\$ -	0.0	0.0
10	trench add HMA shld, chip seal	5-6	0.00	0.00	0.00	\$ 200,000.00	5	\$ -	\$ -	\$ -	0.0	0.0
11	2" HMA Overlay	5-7	0.33	0.33	0.33	\$ 150,000.00	10	\$ 49,500.00	\$ 49,500.00	\$ 49,500.00	3.3	3.3
12	Post Recon Chip Seal	8-9	0.49	0.49	0.00	\$ 45,000.00	10	\$ 22,005.00	\$ 22,005.00	\$ -	4.9	0.0
13	No Work Needed	NA	0.25	NA	0.00	\$ -	0	\$ -	\$ -	\$ -	NA	NA
Totals			8.78	2.96	3.00			\$ 3,419,113.00				
Budget		\$ 500,000.00			Target Total Gain Sum						32.0	Target Total Yrs Gained
Fed Aid		\$ -			Target Sum				\$ 500,000.00	\$ 496,808.00	28.0	Selected Total Yrs Gained
					Budget				\$ 500,000.00	\$ 500,000.00	9	Total Yrs Needed
					Balance				\$ -	\$ 3,192.00	19.2	Balance
Total		\$ 500,000.00										

Appendix C contains the list of village roads and recommended fix based on condition. Using the NCPP method, the Village should focus initial efforts on preserving the streets in its system with the lowest cost fixes available, if funding allows, the highest volume street should be rehabilitated followed by subsequent streets.

Alternatives to standard fixes

While not desirable, reactionary maintenance can be applied to streets whose conditions begin to require excessive routine maintenance such as pothole patching. In these instances, HMA wedging can provide a more durable surface compared to standard pothole patching. The caveat being the condition of the road isn't improved, but the time to failure can be extended. This should be limited to roads with the highest maintenance costs and no near-term project planned. This method can be a cost-effective solution compared to complete reconstruction of low volume streets with underground utilities in good condition.




Rejuvenators are an emerging method of pavement preservation. Rejuvenators are applied by spraying emulsions on the existing pavement which replace compounds lost due to environmental factors. These compounds are intended to replace and restore the flexibility and durability of aging asphalt. As asphalt ages it becomes less flexible and is more prone to cracking from thermal contraction and expansion. This is seen in the inevitable transverse cracking typical of streets rated as PASER 5-7. With this newer method of CPM there is likely to be variability in the performance of products, but it should be watched as a strategy to implement early in a pavement's life as the technology matures.

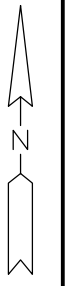
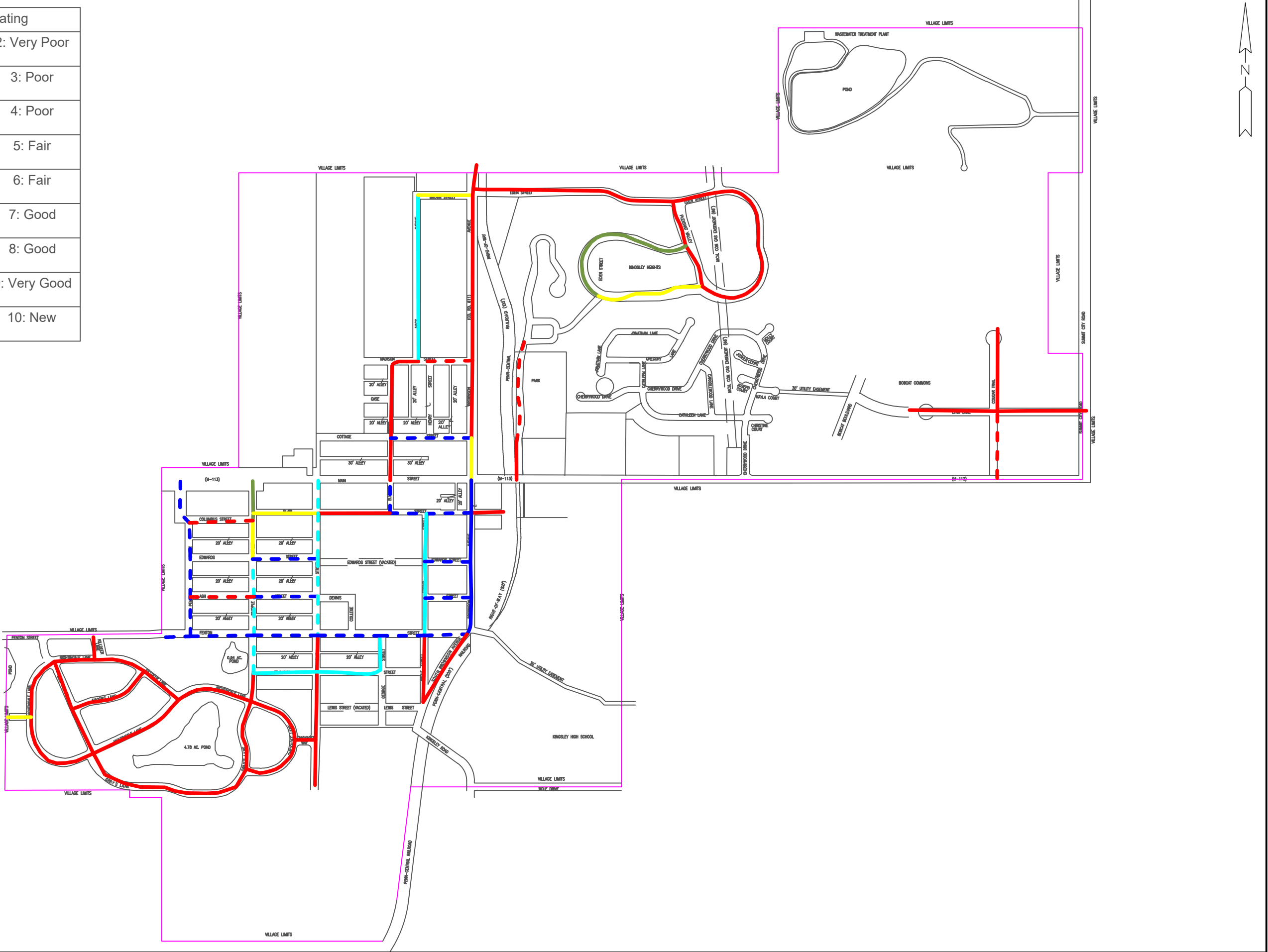
Listed as a fix in section 3.1 is a crack-relief layer and HMA overlay. This method is a standard chip seal applied to a milled or un-milled surface and then overlaid by HMA, or HMA Ultra-Thin. While

more costly than standard HMA overlays or mill and HMA overlays, area agencies have had success in increasing the time for reflective cracking to emerge. This is best applied to streets with limited structural defects such as alligator cracking, but when thermal cracking is extensive enough to compromise the life span of traditional HMA overlays.



Appendix A. PASER Map


PASER Rating	
	2: Very Poor
	3: Poor
	4: Poor
	5: Fair
	6: Fair
	7: Good
	8: Good
	9: Very Good
	10: New




JOB NO. **KIN2007**
 SHEET **1**

2023 LOCAL ROAD
 PASER RATINGS

VILLAGO OF KINGSLEY
 207 SOUTH BRONSON AVE,
 KINGSLEY MI, 49649



10850 East Traverse Highway, Suite 2260
 Traverse City, MI 49684
 231.947.7400
 www.wadetrिम.com



Appendix B.
N CPP Method and Overview

A Quick Check of Your Highway Network Health

By Larry Galehouse, Director, National Center for Pavement Preservation and Jim Sorenson, Team Leader, FHWA Office of Asset Management

Historically, many highway agency managers and administrators have tended to view their highway systems as simply a collection of projects. By viewing the network in this manner, there is a certain comfort derived from the ability to match pavement actions with their physical/functional needs. However, by only focusing on projects, opportunities for strategically managing entire road networks and asset needs are overlooked. While the “bottom up” approach is analytically possible, managing networks this way can be a daunting prospect. Instead, road agency administrators have tackled the network problem from the “top down” by allocating budgets and resources based on historical estimates of need. Implicit in this approach, is a belief that the allocated resources will be wisely used and prove adequate to achieve desirable network service levels.

Using a quick checkup tool, road agency managers and administrators can assess the needs of their network and other highway assets and determine the adequacy of their resource allocation effort. A quick checkup is readily available and can be usefully applied with minimum calculations.

It is essential to know whether present and planned program actions (reconstruction, rehabilitation, and preservation) will produce a net improvement in the condition of the network. However, before the effects of any planned actions on the highway network can be analyzed, some basic concepts should be considered.

Assume every lane-mile segment of road in the network was rated by the number of years remaining until the end of life (terminal condition). Remember that terminal condition does not mean a failed road. Rather, it is the level of deterioration that management has set as a minimum operating condition for that road or network. Consider the rated result of the current network condition as shown in Figure 1.

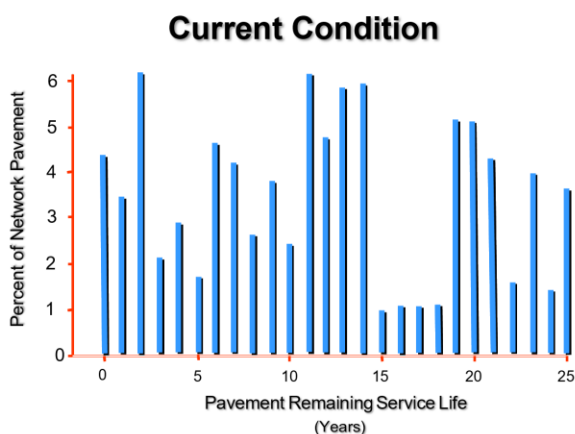


Figure 1 – Current Condition

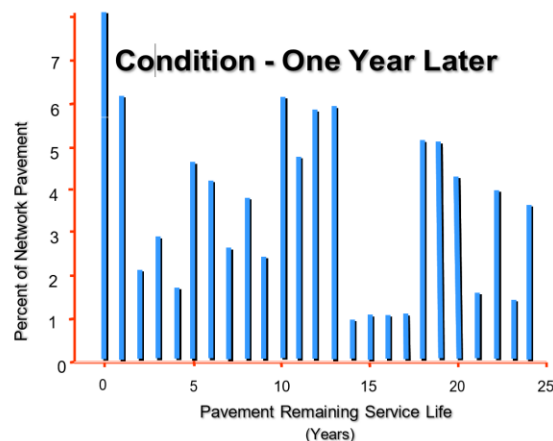


Figure 2 – Condition One Year Later

If no improvements are made for one year, then the number of years remaining until the end of life will decrease by one year for each road segment, except for those stacked at zero. The zero-stack will increase significantly because it maintains its previous balance and also becomes the recipient of those roads having previously been stacked with one year remaining. Thus, the entire network will age one year to the condition shown in Figure 2, with the net lane-miles in the zero-stack raised from 4% to 8% of the network.

Some highway agencies still subscribe to the old practice of assigning their highest priorities to the reconstruction or rehabilitation of the worst roads. This practice of “worst first” (i.e., continually addressing only those roads in the zero-stack) is a proven death spiral strategy because reconstruction and rehabilitation are the most expensive ways to maintain or restore serviceability. Rarely does sufficient funding exist to sustain such a strategy.

The measurable loss of pavement life can be thought of as the network’s total lane-miles multiplied by 1 year, i.e., lane-mile-years. Consider the following quantitative illustration. Suppose your agency’s highway network consisted of 4,356 lane-miles. Figure 3 shows that without intervention, it will lose 4,356 lane-mile-years per year.

Agency Highway Network = 4,356 lane miles

Each year the network will lose

4,356 lane-mile-years

Figure 3 – Network Lane Miles

To offset this amount of deterioration over the entire network, the agency would need to annually perform a quantity of work equal to the total number of lane-mile-years lost just to maintain the status quo. Performing work which produces fewer than 4,356 lane-mile-years would lessen the natural decline of the overall network, but still fall short of maintaining the status quo. However, if the agency produces more than 4,356 lane-mile-years, it will improve the network.

In the following example, an agency can easily identify the effect of an annual program consisting of reconstruction, rehabilitation, and preservation projects on its network. This assessment involves knowing the only two components for reconstruction and rehabilitation projects: lane-miles and design life of each project fix. Figure 4 displays the agency’s programmed activities for reconstruction and Figure 5 displays it for rehabilitation.

Reconstruction Evaluation

Projects this Year = 2

Project	Design Life	Lane Miles	Lane-Mile - Years	Lane-Mile Cost	Total Cost
No. 1	25 years	22	550	\$463,425	\$10,195,350
No. 2	30 years	18	540	\$556,110	\$10,009,980
Total =			1,090		\$20,205,330

Figure 4 - Reconstruction

Rehabilitation Evaluation

Projects this Year = 3

Project	Design Life	Lane Miles	Lane-Mile - Years	Lane-Mile Cost	Total Cost
No. 10	18 years	22	396	\$263,268	\$5,791,896
No. 11	15 years	28	420	\$219,390	\$6,142,920
No. 12	12 years	32	384	\$115,848	\$3,707,136
Total =			1,200		\$15,641,952

Figure 5 – Rehabilitation

When evaluating pavement preservation treatments in this analysis, it is appropriate to think in terms of “extended life” rather than design life. The term design life, as used in the reconstruction and rehabilitation tables, relates better to the new pavement’s structural adequacy to handle repetitive loadings and environmental factors. This is not the goal of pavement preservation. Each type of treatment/repair has unique benefits that should be targeted to the specific mode of pavement deterioration. This means that life extension depends on factors such as type and severity of distress, traffic volume, environment, etc. Figure 6 exhibits the agency’s programmed activities for preservation.

Preservation Evaluation

Project	Life Extension	Lane Miles	Lane-Mile-Years	Lane-Mile Cost	Total Cost
No. 101	2 years	12	24	\$2,562	\$30,744
No. 102	3 years	22	66	\$7,743	\$170,346
No. 103	5 years	26	130	\$13,980	\$363,480
No. 104	7 years	16	112	\$29,750	\$476,000
No. 105	10 years	8	80	\$54,410	\$435,280
Total		=	412		\$1,475,850

Figure 6 – Preservation

To satisfy the needs of its highway network, the agency must accomplish 4,356 lane-mile-years of work per year. The agency’s program will derive 1,090 lane-mile-years from reconstruction, 1,200 lane-mile-years from rehabilitation, and 412 lane-mile-years from pavement preservation, for a total of 2,702 lane-mile-years. Thus, these programmed activities fall short of the minimum required to maintain the status quo, and hence would contribute to a net loss in network pavement condition of 1,653 lane-mile-years. The agency’s programmed tally is shown in Figure 7.

Network Trend

Programmed Activity	Lane-Mile-Years	Total Cost
Reconstruction	1,090	\$20,205,330
Rehabilitation	1,200	\$15,641,952
Preservation	412	\$1,475,850
Total	2,702	\$37,323,132
Network Needs (Loss)	(-) 4,356	
Deficit =	- 1,654	

Figure 7 – Programmed Tally

This exercise can be performed for any pavement network to benchmark its current trend. Using this approach, it is possible to see how various long-term strategies could be devised and evaluated against a policy objective related to total-network condition.

Once the pavement network is benchmarked, an opportunity exists to correct any shortcomings in the programmed tally. A decision must first be made whether to improve the network condition or just to maintain the status quo. This is a management decision and system goal.

Continuing with the previous example, a strategy will be proposed to prevent further network deterioration until additional funding is secured.

The first step is to modify the reconstruction and rehabilitation (R&R) programs. An agonizing decision must be made about which projects to defer, eliminate, or phase differently with multi-year activity. In Figure 8, reductions are made in the R&R programs to recover funds for less costly treatments in the pavement preservation program. The result of this decision recovered slightly over \$6 million.

Program Modification

Programmed Activity	Lane-Mile-Years	Cost Savings
Reconstruction <i>31 lane miles</i> (40 lane miles)	820 (1,090)	\$5,004,990
Rehabilitation <i>77 lane miles</i> (82 lane miles)	1,125 (1,200)	\$1,096,950
Pavement Preservation (84 lane-miles)	(412)	0
Total =	2,357 (2,702)	\$6,101,940

Figure 8 – Revised R and R Programs

Modifying the reconstruction and rehabilitation programs has reduced the number of lane-mile-years added to the network from 2,702 to 2,357 lane-mile-years. However, using less costly treatments elsewhere in the network to address roads in better condition will increase the number of lane-mile-years added to the network. A palette of pavement preservation treatments, or mix of fixes, is available to address the network needs at a much lower cost than traditional methods.

Preservation treatments are only suitable if the right treatment is used on the right road at the right time. In Figure 9, the added treatments used include concrete joint resealing, thin hot-mix asphalt (HMA) overlay (≤ 1.5”), microsurfacing, chip seal, and crack seal. By knowing the cost per lane-mile and the treatment life-extension, it is possible to create a new strategy (costing \$36,781,144) that satisfies the network need. In this example, the agency saved in excess of \$500,000 from traditional methods (costing \$37,323,132), while erasing the 1,653 lane-mile-year deficit produced by the initial program tally.

Programmed Activity	Lane-Mile -Years	Total Cost
Reconstruction (31 lane-miles)	820	\$15,200,340
Rehabilitation (77 lane-miles)	1,125	\$14,545,002
Pavement Preservation (84 lane-miles)	412	\$1,475,850
Concrete Resealing (4 years x 31 lane-miles)	124	\$979,600
Thin HMA Overlay (10 years x 16 lane-miles)	160	\$870,560
Microsurfacing (7 years x 44 lane-miles)	308	\$1,309,000
Chip Seal (5 years x 79 lane-miles)	395	\$1,104,420
Crack Seal (2 years x 506 lane-miles)	1,012	\$1,296,372
Total =	4,356	\$36,781,144

Figure 9 – New Program Tally

In a real-world situation, the highway agency would program its budget to achieve the greatest impact on its network condition. Funds allocated for reconstruction and rehabilitation projects must be viewed as investments in the infrastructure. Conversely, funds directed for preservation projects must be regarded as protecting and preserving past infrastructure investments.

Integrating reconstruction, rehabilitation, and preservation in the proper proportions will substantially improve network conditions for the taxpayer while safeguarding the highway investment.



**Appendix C.
PASER Table**

Road Name	From	To	National Function Class	PASER Rating	LENGTH	Recommended Fix	Federal Aid Eligible
Ash St	Pearl	Whipple St	Local	2	0.103	Crush and Shape	No
Ash St	Whipple St	Clark	Local	8	0.104	Crack Seal & Chip Seal	No
Brown St	Mack	Brownson	Local	4	0.089	Crush and Shape	No
Chickadee Ln	Grays Ln	Chickadee Way	Local	3	0.11	Crush and Shape	No
Chickadee Ln	Chickadee Way	Grays Ln & Nightingale Ln	Local	3	0.103	Crush and Shape	No
Chickadee Way	Chickadee Ln	Clark St	Local	3	0.034	Crush and Shape	No
Clark St	W Main St	W Blair St	Local	6	0.053	Crack Seal & Chip Seal	No
Clark St	W Blair St	Edwards St	Local	6	0.074	Crack Seal & Chip Seal	No
Clark St	Edwards St	Ash St	Local	6	0.061	Crack Seal & Chip Seal	No
Clark St	Ash St	Fenton St	Local	6	0.064	Crack Seal & Chip Seal	No
Clark St	Fenton St	Franklin St	Local	3	0.059	Crush and Shape	No
Clark St	Franklin St	Chickadee Way	Local	3	0.11	Crush and Shape	No
Clark St	Chickadee Way	Dead End or Start	Local	3	0.074	Crush and Shape	No
Columbus St	Pearl St	Whipple St	Local	2	0.103	Crush and Shape	No
Cottage St	Brownson	Elm St	Local	8	0.131	Crack Seal & Chip Seal	No
Cottage St	Elm St	City/Twp Line	Local	0	0.038	Crush and Shape	No
Cougar Trl	M 113	Lynx Ln	Local	2	0.109	Crush and Shape	No
Cougar Trl	Lynx Ln	Dead End or Start	Local	3	0.134	Crush and Shape	No
Dennis St	Spring	Brownson	Local	8	0.075	Crack Seal & Chip Seal	No
E Blair St	W Blair St & Elm St	Spring St	Local	8	0.059	Crack Seal & Chip Seal	No
E Blair St	Spring St	S Brownson Ave	Local	8	0.073	Crack Seal & Chip Seal	No
E Blair St	S Brownson Ave	Dead End or Start	Local	3	0.053	Crush and Shape	No
Eden St	N Brownson Ave	Pleasant Valley Dr	Local	3	0.327	Crush and Shape	No
Eden St	Pleasant Valley Dr	Pleasant Valley Dr	Local	3	0.373	Crush and Shape	No
Eden St	Pleasant Valley Dr	Rawling Pl	Local	4	0.173	Crush and Shape	No
Eden St	Rawling Pl	Pleasant Valley Dr	Local	5	0.266	2" HMA Overlay	No
Edwards St	Whipple St	Clark St	Local	8	0.106	Crack Seal & Chip Seal	No
Edwards St	Spring	Brownson	Local	8	0.075	Crack Seal & Chip Seal	No
Elm St	Blair	Main	Local	8	0.053	Crack Seal & Chip Seal	No
Elm St	Main	Cottage St	Local	3	0.069	Crush and Shape	No
Elm St	Cottage St	Madison	Local	3	0.121	Crush and Shape	No
Fenton St	City/Twp Line	Pearl St	Major Collector	8	0.001	Post Recon Chip Seal	Yes
Fenton St	City/Twp Line	Pearl St	Major Collector	8	0.039	Post Recon Chip Seal	Yes
Fenton St	Pearl St	Whipple St	Major Collector	8	0.103	Post Recon Chip Seal	Yes
Fenton St	Whipple St	Clark	Major Collector	8	0.104	Post Recon Chip Seal	Yes
Fenton St	Clark	George	Major Collector	8	0.1	Post Recon Chip Seal	Yes
Fenton St	George	Spring	Major Collector	8	0.073	Post Recon Chip Seal	Yes
Fenton St	Spring	Brownson	Major Collector	8	0.069	Post Recon Chip Seal	Yes
Franklin St	Whipple	Clark St	Local	7	0.103	Crack Seal & Chip Seal	No
Franklin St	Clark St	George	Local	7	0.105	Crack Seal & Chip Seal	No
George St	Franklin	Fenton	Local	7	0.055	Crack Seal & Chip Seal	No
Grays Ln	Nightingale Ln	Maggies Ln	Local	3	0.083	Crush and Shape	No
Grays Ln	Chickadee Ln & Nightingale Ln	Franklin St & Whipple St	Local	3	0.046	Crush and Shape	No
Grays Ln	Maggies Ln	Nightingale Ln	Local	3	0.079	Crush and Shape	No
Grays Ln	Nightingale Ln	Chickadee Ln	Local	3	0.29	Crush and Shape	No
Grays Ln	Chickadee Ln	Chickadee Ln & Nightingale Ln	Local	3	0.114	Crush and Shape	No
Killdeer Ln	Fenton St	Nightingale Ln	Local	3	0.037	Crush and Shape	No
Killdeer Ln	Nightingale Ln	Maggies Ln	Local	3	0.085	Crush and Shape	No
Killdeer Ln	Maggies Ln	Nightingale Ln	Local	3	0.072	Crush and Shape	No

Road Name	From	To	National Function Class	PASER Rating	LENGTH	Recommended Fix	Federal Aid Eligible
Lynx Ln	Summit City Rd	Cougar Trl	Local	3	0.145	Crush and Shape	No
Lynx Ln	Cougar Trl	Dead End or Start	Local	3	0.142	Crush and Shape	No
Mack Ave	Madison	Brown	Local	7	0.27	Crack Seal & Chip Seal	No
Madison Ave	N Brownson Ave	Mack Ave	Local	2	0.088	Crush and Shape	No
Madison Ave	Mack Ave	Elm St	Local	3	0.042	Crush and Shape	No
Maggies Ln	Grays Ln	Killdeer Ln	Local	3	0.138	Crush and Shape	No
N Brownson Ave	Main	Cottage St	Major Collector	4	0.069	Crush and Shape	Yes
N Brownson Ave	Cottage St	Madison	Major Collector	3	0.126	Crush and Shape	Yes
N Brownson Ave	Madison	Brown	Major Collector	3	0.268	Crush and Shape	Yes
N Brownson Ave	Brown	Eden St	Major Collector	3	0.01	Crush and Shape	Yes
N Brownson Ave	Eden St	City/Twp Line	Major Collector	3	0.04	Crush and Shape	Yes
Nighthawk Ln	Nightingale Ln	Dead End or Start	Local	4	0.038	Crush and Shape	No
Nightingale Ln	Killdeer Ln	Grays Ln	Local	3	0.065	Crush and Shape	No
Nightingale Ln	Grays Ln	Nighthawk Ln	Local	3	0.105	Crush and Shape	No
Nightingale Ln	Nighthawk Ln	Grays Ln	Local	3	0.156	Crush and Shape	No
Nightingale Ln	Grays Ln	Killdeer Ln	Local	3	0.166	Crush and Shape	No
Nightingale Ln	Killdeer Ln	Chickadee Ln & Grays Ln	Local	3	0.125	Crush and Shape	No
Park St	Main	Attribute Change	Local	3	0.061	Crush and Shape	No
Park St		Parkview Dr & Kingsley Ridge Dr	Local	2	0.165	Crush and Shape	No
Pearl St	Fenton	Ash St	Local	8	0.064	Crack Seal & Chip Seal	No
Pearl St	Ash St	Edwards St	Local	8	0.066	Crack Seal & Chip Seal	No
Pearl St	Edwards St	Columbus	Local	8	0.054	Crack Seal & Chip Seal	No
Pearl St	Pearl St	W Main St	Local	8	0.073	Crack Seal & Chip Seal	No
Pleasant Valley Dr	Eden St	Eden St	Local	3	0.072	Crush and Shape	No
Pleasant Valley Dr	Eden St	Eden St	Local	3	0.076	Crush and Shape	No
S Brownson Ave	Maple	Fenton	Local	3	0.131	Crush and Shape	No
S Brownson Ave	Fenton	Dennis St	Major Collector	10	0.061	No Work Needed	Yes
S Brownson Ave	Dennis St	Edwards St	Major Collector	10	0.058	No Work Needed	Yes
S Brownson Ave	Edwards St	Blair	Major Collector	10	0.08	No Work Needed	Yes
S Brownson Ave	Blair	Main	Major Collector	10	0.053	No Work Needed	Yes
Spring St	Brownson	Fenton St & Spring St	Local	3	0.109	Crush and Shape	No
Spring St	Fenton St & Maple St	Dennis St	Local	7	0.06	Crack Seal & Chip Seal	No
Spring St	Dennis St	Edwards St	Local	7	0.06	Crack Seal & Chip Seal	No
Spring St	Edwards St	Blair	Local	7	0.078	Crack Seal & Chip Seal	No
W Blair St	Whipple	Clark	Local	4	0.105	Crush and Shape	No
W Blair St	Clark	E Blair St & Elm St	Local	3	0.117	Crush and Shape	No
Whipple St	Franklin	Fenton	Local	6	0.062	Crack Seal & Chip Seal	No
Whipple St	Fenton	Ash St	Local	6	0.062	Crack Seal & Chip Seal	No
Whipple St	Ash St	Edwards St	Local	6	0.061	Crack Seal & Chip Seal	No
Whipple St	Edwards St	Columbus St	Local	4	0.063	Crush and Shape	No
Whipple St	Columbus St	W Blair St	Local	5	0.012	2" HMA Overlay	No
Whipple St	W Blair St	Main	Local	2	0.052	2" HMA Overlay	No

KINGSLEY SEWER	2024	
CAPITAL IMPROVEMENT PROJECTS SUMMARY		
CAPITAL IMPROVEMENT IDEAS WERE GENERATED FROM	ALL IDEAS CAME FROM VILLAGE STAFF & JOSH HALL	

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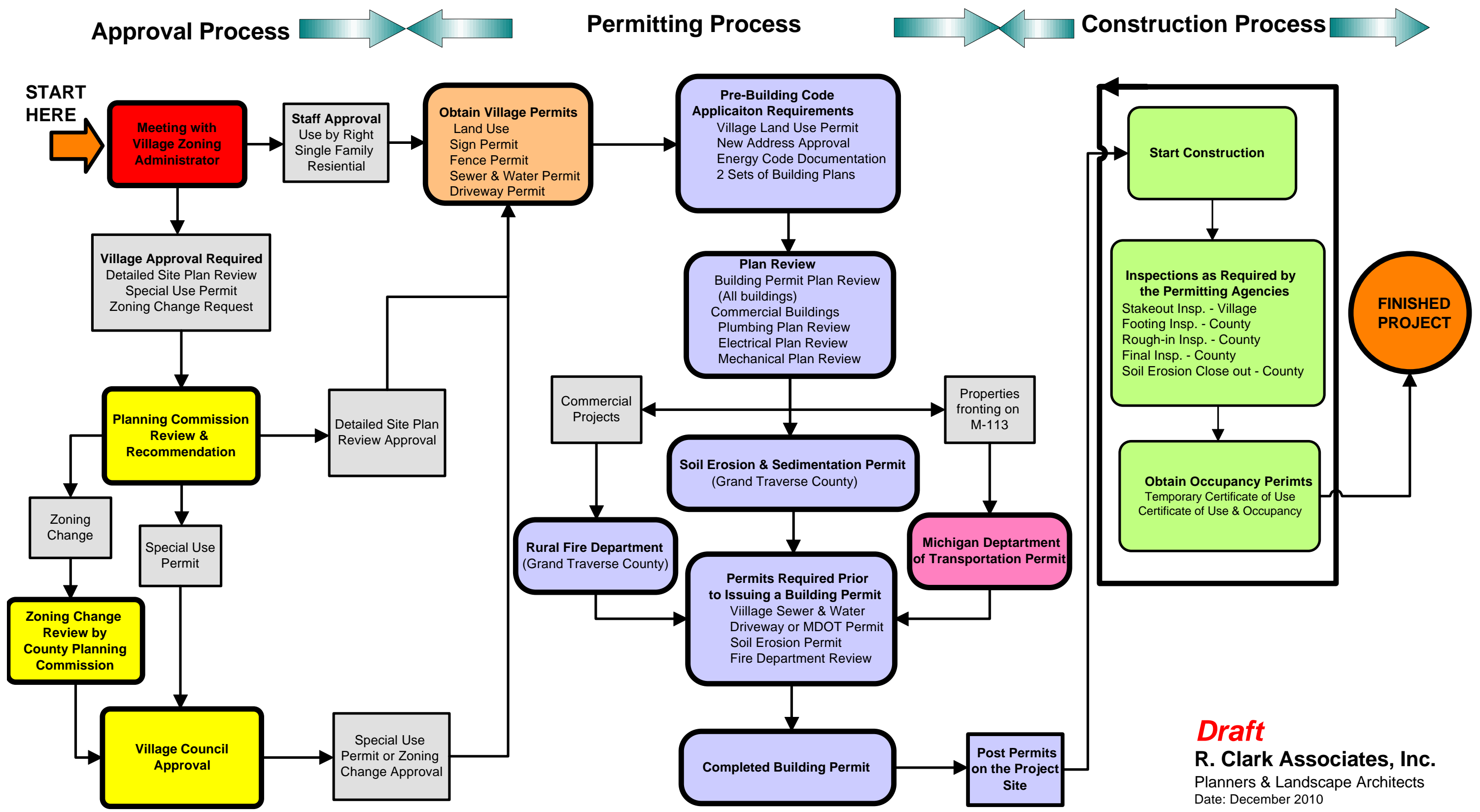
CAPITAL PROJECTS - FOR DETAILS OF EACH PROJECT SEE INDIVIDUAL PAGES	ESTIMATED PROJECT COST	CASH CONTRIBUTION FROM RATES	AMOUNT FINANCED	COMPLETE IN YEAR OF	IS THIS YEAR FLEXIBLE?	MONEY NEEDED ANNUALLY
Proper Headworks – Grit and debris removal	\$500,000	\$50,000	\$450,000	2030	YES	\$8,333
Mixers in the selector tanks	\$30,000	\$30,000	\$0	2028	YES	\$7,500
A new Roof over the exposed plant	\$500,000	\$50,000	\$450,000	2030	YES	\$8,333
DRIVEWAY REPAIRS DUE TO SLUDGE HAULING TRUCK	\$30,000	\$30,000	\$0	2028	YES	\$7,500
REPAIR EXTERIOR & INTERIOR LIGHTING	\$3,000	\$3,000	\$0	2025	YES	\$3,000
NEW VACTOR TRUCK	\$350,000	\$35,000	\$315,000	2030	YES	\$5,833
POLE BARN ADDITION FOR VACTOR	\$50,000	\$50,000	\$0	2030	YES	\$8,333
GIS SYSTEM IMPLEMENTATION	\$12,500	\$12,500	\$0	2025	YES	\$12,500
DISTRIBUTION SYSTEM CLEANING & TV WORK - SEWER SYSTEM WAS INSTALLED IN 1979	\$25,000	\$25,000	\$0	2027	YES	\$8,333
DISTRIBUTION SYSTEM CLEANING & TV WORK	\$25,000	\$25,000	\$0	2029	YES	\$5,000
DISTRIBUTION SYSTEM CLEANING & TV WORK	\$25,000	\$25,000	\$0	2031	YES	\$3,571
DISTRIBUTION SYSTEM CLEANING & TV WORK	\$25,000	\$25,000	\$0	2033	YES	\$2,778
			\$0			\$0
	\$1,575,500	\$360,500	\$1,215,000			\$81,016

APPENDIX C

Construction Flow Chart/Development Guide

DEVELOPMENT & CONSTRUCTION PROCESS FLOW CHART

Village of Kingsley, Michigan



Draft
R. Clark Associates, Inc.
 Planners & Landscape Architects
 Date: December 2010