ALLEGAN COUNTY ROAD COMMISSION



TOWNSHIP GUIDE

Adopted by the Board of County Road Commissioners, November 4, 2020



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1. INTRODUCTION

Whether you are new to township government or have many years of experience, we hope this guide will be a help to you throughout your career. The Allegan County Road Commission has strived to maintain positive relationships with our township partners and developed this guide to better explain our policies and processes to enhance our cooperative effort of maintaining and improving the public roads in Allegan County.

The Allegan County Road Commission (ACRC) is comprised of a three-member Board of County Road Commissioners (Board) who are appointed by the Allegan County Board of Commissioners. Each Road Commissioner is appointed to a six-year term and the terms for each Road Commissioner are staggered two years from each other.

Each Road Commissioner represents the entire county while historically they have been appointed from the different geographic areas. The areas within the county are divided into three tiers. The west tier (Laketown, Fillmore, Saugatuck, Manlius, Ganges, Clyde, Casco and Lee Townships), center tier (Overisel, Salem, Heath, Monterey, Valley, Allegan, Cheshire and Trowbridge Townships) and the east tier (Dorr, Leighton, Hopkins, Wayland, Watson, Martin, Otsego and Gun Plain Townships).

The Board is administrative in nature and is charged with setting policies and the performance of duties imposed by law. Other duties include, adopting the annual budget, awarding bids and contracts, and authorizing the purchase and disposal of equipment and facilities. The Board employs the chief administrative officer, and adopts position classifications, compensation and benefits for ACRC employees.

Board meetings are held typically every other Wednesday beginning at 9 am. The Board meeting schedule is available on the Road Commission website at www.alleganroads.org. The Board members do not have regular office hours. Questions or concerns on day to day operations should be directed to the Managing Director, County Highway Engineer or Maintenance Superintendent. If Board action is needed, the Managing Director will propose adding the item to the agenda for the Board meeting.

The Managing Director is the chief administrative officer of the ACRC and is responsible for managing and administering the organization, coordinating activities, and overseeing engineering, financials, personnel, equipment and facilities, and operations.

The ACRC utilizes a County Highway Engineer responsible for the Engineering Department, a Finance Director for accounting and budgeting, an Equipment & Facilities Superintendent for maintenance and oversight of the equipment and facilities, a Traffic & Safety Superintendent for overseeing various countywide traffic duties, and a Maintenance Superintendent responsible for operations.



2. ROUTINE MAINTENANCE

The ACRC receives funding from the State of Michigan through the Michigan Transportation Fund which comes from fuel taxes, vehicle registrations and some miscellaneous fees. These funds provide the revenue to maintain the roads under ACRC jurisdiction and cover the costs of the following maintenance items.

- Grading gravel roads
- Filling washouts
- Patching soft spots or low areas on gravel roads 50 cubic yards of gravel or less
- Patching holes in paved roads
- Roadside mowing*
- Brush chopping within the right of way
- Cleaning culverts, catch basins and storm sewers
- Cleaning bottoms of existing drainage ditches
- Maintaining traffic signs on public roads according to the ACRC Sign Policy
- Repairing and replacing guardrail and posts
- Painting centerlines on paved roads and edge lines on roads with paved shoulders
- Winter maintenance including snow plowing and ice control
- Tree trimming, tree and stump removal
- Maintaining bridges
- Replacing deteriorated road culverts with new culverts less than 36 inches in diameter
- Replace deteriorated driveway culverts as needed

^{*} The ACRC will competitively bid and contract for roadside mowing within all townships. Townships may choose to include a third mowing if they agree to pay the bid price. Townships may mow the roadsides within their township or contract for the mowing of their roadsides separately from the ACRC contract. The ACRC will reimburse the township up to the current average bid price per centerline mile on local and primary roads two times per year. Any contractor who mows on county roads must obtain a permit from the ACRC. All mowing performed must meet ACRC specifications for ACRC participation. Overhead charges will not be applied to mowing.



3. SPECIAL MAINTENANCE

The following items of special maintenance work, which are specifically requested by townships for the local road system, are paid for by the township according to the following schedule. Estimates will be provided for projects that will be competitively bid.

• Gravel Resurfacing

This work is bid and awarded through the ACRC by contract. The cost is determined by the unit price per cubic yard as bid at the amount applied, plus the current ACRC overhead costs. The leveling of the gravel will be done at the expense of the ACRC.

• Chip Seal, Slurry Seal, Micro-Surface, Fog Seal and Crack Seal

This work is bid and awarded through the ACRC by contract. The cost is determined by the unit prices bid and the amounts of the pay items used, plus the current ACRC overhead costs on the contract cost.

Dust Control

Townships are responsible for the cost as billed to the ACRC by the contractor. There is no charge to the township for the ACRC to prepare the roads for dust control. The townships establish the terms directly with the contractors and notify the ACRC of the contractor selected, the number of applications, and the cost, so the work order can be prepared and grading coordinated with the contractor. ACRC overhead costs will not be applied to dust control.

• Brush and Tree Trimming

This work could be completed by ACRC forces, bid and awarded by contract, or completed by a contractor on a time and materials basis. The cost is based on the ACRC cost of labor and equipment, the bid amount, or the costs billed by the contractor. This type of work is requested by townships over what the ACRC considers normal maintenance of dead and dying trees. ACRC overhead costs will not be applied to brush and tree trimming when contracted but will be when ACRC forces complete the work.

New Ditching

This work could be completed by ACRC forces, bid and awarded by contract, or completed by a contractor on a time and materials basis. The cost is based on the ACRC cost of labor and equipment, the bid amount, or the costs billed by the contractor. This type of work is requested by townships to establish ditches in locations that do not have ditches. ACRC overhead costs will not be applied to ditching when contracted, only when ACRC forces complete the work.



4. LOCAL CONSTRUCTION

The Board has established the following policies regarding construction work on local roads.

The ACRC will provide the preliminary engineering necessary for any construction projects covered in this section. Preliminary engineering involves surveying, design, right of way acquisition, geotechnical work, and preparing the plans and specifications for bidding and construction. The ACRC will advertise and competitively bid construction projects through their office. Smaller projects may be done on a time and materials basis or by getting quotes from various contractors.

Board policy requires townships to fund construction costs for the following types of work on the local road system. The ACRC will provide estimated costs for each type of work when the township requests a work order.

New Construction

New construction work is building a road where one does not exist. This work could be completed by ACRC forces, bid and awarded by contract, or completed by a contractor on a time and materials basis. The cost is based on the ACRC cost of labor, equipment and materials, the bid amount, or the costs billed by the contractor, plus the cost for construction engineering. The construction engineering includes staking, inspection and testing, and will not exceed 10% of the final contract cost. The construction engineering cost is based on labor, equipment, materials, and overhead costs for the project.

Board policy requires construction of local roads to meet certain design standards. The minimum width for a new local road is 32' and the ACRC uses the American Association of State Highway Transportation Officials (AASHTO) design criteria for establishing horizontal and vertical curves, clear zones, and other geometric standards. The entire right of way will be cleared of trees and brush to allow for drainage improvements and grading.

• Reconstruction, Renovation, and Hot Mix Asphalt (HMA) Resurfacing/Surfacing

This work could be completed by ACRC forces, bid and awarded by contract, or completed by a contractor on a time and materials basis. The cost is based on the ACRC cost of labor, equipment and materials, the bid amount, or the costs billed by the contractor, plus the cost for construction engineering. The construction engineering includes staking, inspection and testing and will not exceed 10% of the final contract cost. The construction engineering cost is based on labor, equipment, materials, and overhead costs for the project.

Reconstructions and renovations are used to improve existing gravel or paved roads. Board policy requires reconstruction of local roads to meet certain design standards.



The minimum width for a reconstructed local road is 32', and the ACRC uses the American Association of State Highway Transportation Officials (AASHTO) design criteria for establishing horizontal and vertical curves, clear zones, and other geometric standards whenever possible. The entire right of way will be cleared of trees and brush to allow for drainage improvements and grading.

Existing paved roads may be renovated or resurfaced with the recommendation of the ACRC engineering staff. Renovation or resurfacing projects may be limited on width depending on the existing road footprint. The ACRC recommends a minimum 22' paved surface whenever possible.

• Guard Rail Installation or Complete Replacement

Installation or replacement of guardrail on a construction project is determined by current design standards and will be included in the cost of the project to the township. Township requests for guardrail in new locations on local roads will be at their expense.

• Culvert Replacement

Culverts are defined as a drainage structure having a span of 20 feet or less. If a culvert of any size is to be replaced as part of a road reconstruction project, the cost will be part of the total road project cost. If a culvert is to be replaced as a stand alone or emergency project, the township will be billed for the total cost of the work, whether by contract or ACRC forces.

Many times smaller culverts are replaced on a time and materials basis with ACRC forces working with a contractor. Large culverts, like concrete box culverts, typically require construction plans and are bid as a project.

Board policy requires individual or emergency replacement culverts 36 inches and larger to be paid for by the township. The ACRC will pay for culvert replacement less than 36 inches. Many times the size is dictated by the Michigan Department of Environment, Great Lakes & Energy (EGLE) or the Allegan County Drain Commission as permits are generally required for replacing culverts. The size used to determine whether the culvert will be funded by the township or the ACRC is based on the replacement culvert. Policy also requires replacement culverts to be made of concrete unless it is deemed not practical by the County Highway Engineer.

• Bridge Replacement

Bridges are defined as structures having a span of more than 20 feet. Multiple culverts may be defined as a bridge if they meet certain requirements for size and spacing between culverts. The ACRC participates in the Local Bridge Program which is overseen by the Michigan Department of Transportation. Bridge replacement,



Rehabilitation, and preventative maintenance applications are submitted to our Regional Bridge Council annually to be evaluated for funding. Selected projects are typically funded with a combination of Federal, State and ACRC funds. The minimum local match amount the ACRC pays is 5% of the construction cost. Townships would be expected to participate in the cost of extensive or unusual approach road construction, when the limits of federal and state funding are exceeded.

If a bridge is replaced outside the Local Bridge Program, the ACRC will still pay 5% of the construction costs with the township funding any remaining local cost. The participation amounts may be negotiated.

• Undeveloped Roads or Seasonal Roads

Construction costs on undeveloped roads or seasonal roads are the responsibility of the township. The township has the option of using a special assessment district or other means of property owner contribution to fund the project. The ACRC requires these types of roads to be built to ACRC local road standards in order to be certified and maintained for the entire year. Smaller projects may be done on a time and materials basis or by getting quotes from various contractors.



5. PRIMARY CONSTRUCTION

The Board has established the following policies regarding construction work on primary roads. The policies for primary road construction and renovation apply to all projects regardless of the source of funding. Primary road shoulder paving cost participation by townships only applies when a project is funded by ACRC or primary millage revenue. Safety projects funded through the Federal Local Safety Program do not require any contributions from townships.

New Construction

New construction work is building a road where one does not exist. This work could be completed by ACRC forces, bid and awarded by contract, or completed by a contractor on a time and materials basis. Township contribution amounts will be negotiated between the ACRC and the township.

Board policy requires construction of local roads to meet certain design standards. The minimum width for a new primary road is 34' and the ACRC uses the American Association of State Highway Transportation Officials (AASHTO) design criteria for establishing horizontal and vertical curves, clear zones, and other geometric standards. The entire right of way will be cleared of trees and brush to allow for drainage improvements and grading.

Reconstruction

When a gravel or paved primary road is reconstructed for pavement or repaving, the township shall contribute \$50,000 per mile towards the project cost.

Renovation

When an existing paved primary road is resurfaced and major renovation work is required, such as extensive building of shoulder widths, ditch relocation, tree removals and spot grade improvements, but most of the original paved surface is only resurfaced, the township shall contribute \$35,000 per mile towards the project cost.

Shoulder Paving

When a primary road is being resurfaced and the shoulders are to be paved for the first time, the township shall pay the cost of the top two inches of asphalt for the width of the paved shoulder, at the bid unit cost of the asphalt to be used. Future road resurfacing shall include the cost of the shoulders as part of the project.



6. PROJECT SELECTION PROCESS

Projects not classified as routine maintenance require township participation. The ACRC utilizes a work order form as the legal binding agreement between the township and the ACRC to do this type of work. A sample work order is shown in Appendix A.

The ACRC staff provides annual recommendations and current data to the townships to help in their project selections. Within the next few years, the ACRC anticipates being able to provide each township an asset management plan to aid in project selection in order to optimize the local road system within each township.

In December of each year, the Maintenance Superintendent will provide each township with gravel recommendations. These recommendations are based on inspection of the gravel roads within the townships, discussion with district foremen on how the gravel surface is functioning, and historical data of when the road was last graveled. The recommendations will be prioritized based on these factors and each township will select which locations they are able to fund based on their budget and local input.

The County Highway Engineer coordinates rating all paved roads in Allegan County each year using the Pavement Surface Evaluation and Rating (PASER) system. This is a rating system using a scale of 1-10 that has been used in Michigan since 2004 to analyze the condition of paved roads by looking at surface distresses. The latest PASER ratings for local roads are provided to the townships in November of each year for use in the project selection process. More information on the PASER ratings, including what factors are included in the ratings and recommended treatments depending on condition, is included in Appendix B.

The ACRC requires township project selections to meet the following deadlines:

Reconstruction/Renovation – September two years prior to construction (ie. September 2021 for 2023 construction)

Paving/Resurfacing – January for following year construction (ie. January 2021 for 2022 construction)

Culvert replacements – September for next year construction (ie. September 2021 for 2022 construction)

Gravel - work orders by March for placement that year



The ACRC sends letters to adjacent property owners on construction and renovation projects to inform them of the project, give them a brief explanation of what the project will entail, and provide contact information so they can provide input and discuss concerns. Maintenance and paving projects are typically less disruptive, and with the amount of these types of projects we complete each year, property owners are not notified directly by the ACRC. If the township wants to provide additional notification, the ACRC will supply additional information for the township to use as requested.

In the past, the ACRC provided work orders for the various types of special maintenance and construction type projects to the townships, bid the projects, then asked each township for approval of the bid prices prior to awarding the contracts. The additional approval of bid prices can cause significant delays in the short construction season we have in Michigan.

Beginning in 2021, the ACRC will provide the townships an estimated cost for paving and gravel projects, and if bid prices come back at or below the estimated cost, the project will be awarded to the lowest qualified bidder meeting the specifications. If bid prices are higher than the estimated cost, the township will be asked to approve them prior to awarding the contract.



7. REVENUE SHARING

Beginning in 2018, the Board approved the Local Road Revenue Sharing Policy (LRRSP). This policy was a direct result of increased State funding provided to the ACRC and distributed through the Michigan Transportation Fund (MTF). The LRRSP is contingent on the funding from the State, through the MTF, being received by the ACRC.

The LRRSP is based on a 1:1 cost share with the townships. The rate per township has increased each year as revenues have increased. For 2021, the maximum amount of revenue sharing to each township in Allegan County is \$50,000. The Board will review the amount annually to determine the availability in future years. LRRSP funds not utilized in the calendar year they are available will not be carried over for use in future years, nor be made available to other townships.

The eligible uses for the matching funds from the LRRSP are:

- Crack seal
- Chip seal
- Fog seal
- Slurry seal
- Micro-surface
- HMA surfacing/resurfacing
- Gravel resurfacing
- Reconstruction
- Culvert replacement
- Dust control
- Brush and tree trimming beyond normal maintenance
- Guardrail installation or replacement

In addition to these eligible activities on the local road system, the LRRSP will allow for townships to use the matching funds to fulfill costs required for renovation, reconstruction, and paved shoulders on the primary road system.



8. PRIMARY MILLAGE

Allegan County has a countywide millage dedicated to primary roads. The one mill primary road millage has been in place since 1968. It was originally voted in for bridge and culvert replacements and funded 111 bridges and culverts between 1968 and 1982.

In 1982 the millage language changed from bridge and culvert replacements to primary road resurfacing. In 2008 the language changed again to include "preservation and preparation" along with resurfacing. This allowed for the millage funds to be used for a wider variety of work including chip seal, large culvert replacements, and renovation type projects.

When the millage was renewed in 2012 it was for a six-year period instead of the historical fiveyear period to align with the regular election cycle.

The millage was established to split the revenue up equally between six areas. Each area contains four townships. About 30% of the revenue collected countywide goes to the cities and villages within Allegan County. The ACRC keeps track of the running balances for each area by tracking the revenues and expenses for projects. Depending on the year, some areas may have a negative balance, while others have a positive balance. This allows for funds to be reserved and carried forward, allowing for larger projects which typically results in better bid prices.

Each year the ACRC develops a proposed plan for projects and meets with each area to discuss the proposal and review the projects from the previous year. This annual meeting is an opportunity for townships to provide input on millage projects as well as discussing local roads. The ACRC uses this opportunity to provide information to the townships on estimated costs for road work, changes to policies or procedures and networking with township officials. The ACRC Board, Managing Director, County Highway Engineer and Maintenance Superintendent attend the meetings to allow new township officials to get to know who they are working with and be able to discuss any project or maintenance concerns.



9. ASSET MANAGEMENT

According to the Moving Ahead for Progress in the 21st Century Act (MAP-21), "Asset management is a strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on both engineering and economic analysis based upon quality information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation and replacement actions that will achieve and sustain a desired state of good repair over the lifecycle of the assets at minimum practicable cost." In short, it is doing the right treatment, at the right time, to maintain the asset in good condition, at the lowest cost. The ACRC follows principles of asset management to help determine the right treatment at the right time to efficiently utilize limited funding.

The ACRC is responsible for maintaining approximately 1,798 miles of roads, 155 bridges and an estimated 6,000+ culverts. We are responsible for the 5th highest centerline miles of road and the 9th highest number of bridges within any county in the State. Recent changes in State law require us to develop a formal asset management plan for certified roads under our jurisdiction by October 1, 2022. With the structure and policies we have in place, we intend to provide each township with an asset management plan for local roads in addition to having a plan for primary roads.



APPENDIX A – EXAMPLE WORK ORDER

Construction Y	ear 20					Township		
TOWNSHIP WORK ORDER FOR CONSTRUCTION or SPECIAL MAINTENANCE ON PUBLIC ROADS								
return 1 copy	to the Road will be return	I Commission ned to the Tow	by emai Vnship Boa	I, fax or US M ard. This is legal	l ail for approvented for the proof that the	are to sign, date, and val and signature. An Township Board is in Commission.		
1308 Lin	b: Board of County Road Commissioners of Allegan County 1308 Lincoln Road Allegan, Michigan 49010							
Under provisions of the general highway laws and specifically Act No. 51 P.A. 1951 as amended, the following road work was authorized by the Township Board under date of								
INSERT PROJECT DESCRIPTION HERE								
Township Super	visor	 Date		Township Clerk		Date		
Township Super	VISUI	Dale		Township Clerk	`	Dale		
Approved by Board of County	Road Comi	missioners of a	Allegan Co	_, Chairman ounty	Date			



APPENDIX B – PASER RATING INFORMATION

		Asphalt 10	Asphalt 9	Asphalt 8
		New	Like new	◆ Occasional transverse crack >40′
		construction No	condition No	apart
		defects	defects	◆ Crack width tight (hairline) or
	7	Less than 1 year	More than 1 year old	sealed Few if any longitudinal cracks
	0	old Only a "10"	Recent overlay with or	on joints Recent seal coat or slurry
	0	for 1 year	without a crush and	seal (*see below)
	9	Recent base improvement	<u>shape</u>	Little or no maintenance required
		No action required	No action required	·

Asphalt 7

- ◆ Trans. cracks 10′-40′ apart
- ◆ Cracks open < 1/4" Little or no crack erosion Little or no raveling Few if any patches in good

First signs of wear

condition

Suggested Action Maintain with crack

Asphalt 6

- Trans. cracks less than 10' apart
- Initial block cracking (6'-10' Blocks)
- Cracks open ¼" -1/2" Blocks are large and stable Slight to moderate polishing or flushing No patches or few in good condition Slight raveling Sound structural condition

Suggested Action Maintain with sealcoat

Asphalt 5

- Secondary cracks (crack raveling)
- Moderate block cracking (1' 5')
- First sign of longitudinal cracks at edge
- Cracks open >½" Patching/wedging in good condition Moderate raveling Extensive to severe flushing & polishing Sound structural condition

Suggested Action Maintain with sealcoat or thin overlay

Asphalt 4

- ◆ Longitudinal cracking in the wheel paths
- ◆ Rutting ½" 1" deep
- ◆ Severe block cracking: <1' blocks Severe surface raveling Multiple longitudinal & transverse cracks with slight crack erosion

Patching in fair condition

First signs of structural weakening

Suggested Action Structural overlay >2"

Asphalt 3

- < 25% alligator cracking (first signs)
- Moderate rutting 1"- 2" deep
- Severe block cracking (Alligator) Longitudinal & transverse cracks showing extensive crack erosion Occasional potholes Patches in fair/poor condition

Suggested Action Structural overlay >2" Patching & repair prior to a major overlay Milling would extend overlay life

Asphalt 2

- > 25% alligator cracking
- ◆ Severe rutting or distortion >2" Closely spaced cracks with erosion Frequent Extensive patches in poor condition

Suggested Action Reconstruction with base repair Crush and shape possible

Asphalt 1

Loss of surface integrity Extensive surface distress

Suggested Action Reconstruction with base repair

Fair