



Kalamazoo
County
Road
Commission

Policy

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DRIVEWAY POLICY

CONTENTS

Page Number

SCOPE	3
DEFINTIONS	3
GENERAL REQUIREMENTS	4
PERMITS	6
RESIDENTIAL DRIVEWAY REQUIREMENTS	7
COMMERCIAL DRIVEWAY REQUIREMENTS	9
LOW USE AND TEMPORARY DRIVEWAY REQUIREMENTS	12
VARIANCE CLAUSE	12
SEVEABILITY CLAUSE	12
EXAMPLES	13

SCOPE

In accordance with PA 200 of 1969 (MCL 247.324), as amended, the highway authority is charged with the responsibility to issue driveway permits consistent with the rules promulgated by the highway authority for public safety and in the public interest. Such rules are based on traffic volumes, drainage needs, the character of adjoining land use, and other requirements. The rules prescribe rational standards for the design and location of driveways within the county road right-of-way. It is not the intent of this policy to deny reasonable access to a nonlimited access highway.

DEFINITIONS

1. "Application" for a driveway construction permit refers to the standard Application and Permit to Construct, Operate, Maintain, Use, and/or Remove Within a County Road Right-of-way form supplied by the Kalamazoo County Road Commission.
2. "Approach" is that portion of the driveway between the road pavement edge and the property line.
3. "Apron" is that portion of the driveway between the pavement edge and the back of the shoulder.
4. "Center left-turn lane" is a lane that is added between opposite directional lanes to accommodate storage of left-turning vehicles.
5. "Clear vision zone" refers to land acquired or used by the agency having jurisdiction over a highway for the purpose of maintaining unobstructed vision.
6. "Commercial driveway" is a driveway which services a commercial establishment, industry, governmental or educational institution, hospital, church, apartment building, private road access or other large traffic generator.
7. "County Engineer" shall mean the Managing Director of the Kalamazoo County Road Commission or an authorized representative.
8. "Driveway construction" shall be defined as construction of new driveway approaches, any change or reconstruction of existing driveway grades or surface, installation of drainage culverts, or any other modification of an existing driveway within the county road right-of-way.
9. "Frontage" is that portion of private property that abuts a public highway right-of-way that is not a limited access highway.
10. "Hard surfaced" is a driveway paved with asphalt or concrete.
11. "Highway, street or road" are general terms denoting a public way for purposes associated with travel, including the entire area within the right-of-way.
12. "KCRC" shall mean the Kalamazoo County Road Commission.
13. "Limited access" refers to a highway right-of-way to which occupants of abutting lands and other persons have no legal right of access to or from the highway, except at designated access points, determined by the public authority having jurisdiction over the highway.

14. "Local government" refers to the city, village, or township wherein driveway construction is proposed. A local government may have standards and specifications for the review and approval of proposed property development including access to or from abutting roads.
15. "Low use driveway" refers to cultivated or uncultivated fields, land or utility-structure access points serving an unmanned utility structure, such as a pumphouse or substation, which requires only occasional access.
16. "MDOT" shall mean the Michigan Department of Transportation. MDOT specifications are as found in the Department's most current edition of Standard Specifications for Construction.
17. "Passing lane" is a paved area within the right-of-way which will allow vehicles to pass to the right of a left-turning vehicle.
18. "Permittee" is a property owner, contractor, governmental agency, or its legally authorized agent who is applying for, or who has been issued, a permit.
19. "Residential driveway" is a driveway which serves a single-family dwelling, two single-family dwellings, three single-family dwellings or one two-family dwelling.
20. "Right-of-way line" is the boundary between private property and public land under legal control of the agency having jurisdiction over the highway.
21. "Sight distance" is the distance a driver can see an approaching vehicle from the right or left.
22. "Temporary driveway" is a driveway which will be allowed for twelve months and for a specific project or function associated with a parcel of property.

GENERAL REQUIREMENTS

An application for a driveway permit shall be submitted in a manner prescribed on the Application and Permit form. Application and Permit forms are available at the KCRC office located at 3801 E. Kilgore Road, Kalamazoo, Michigan, and at township offices.

Any construction, reconstruction, or modification of an existing driveway providing vehicular access to or from a highway under the jurisdiction of the KCRC requires a permit. A permit is also required when the use of the land served by an existing driveway is changed or expanded.

Permits are to be obtained prior to the start of any construction. Specifications as provided on the permit shall be complied with, including modifications approved by authorized KCRC personnel. Developers of property are encouraged to contact the KCRC during the initial planning stage so an approved preliminary site plan, satisfactory to all parties, may be agreed upon early in the development process.

No driveway shall connect to a limited access highway or be allowed in a designated intersection clear-vision zone.

Fee

A fee is charged for the permit to cover the cost of administration and inspection. The current schedule is available for review at the KCRC office.

Plans

Permit applications shall be accompanied by plans or drawings containing applicable information listed below.

1. North arrow, road right-of-way, property lines, and existing physical features, including, but not limited to trees, shrubs, highway pavement, shoulders, ditches, utility poles, service boxes, fire hydrants, and other appurtenances.
2. Design features, including reconstructed, relocated, surfaced, resurfaced, and used or maintained drives with the following dimensions and features:
 - Widths of driveways and distance from property lines
 - Radii of driveway returns
 - Angle of driveway relative to the highway centerline
 - Dimensions of adjacent traffic lanes
 - Driveway surface material
3. Distance from each existing and proposed driveway on the site to:
 - Nearest intersecting street
 - Nearest driveway on adjacent properties
 - Street or driveway opposite the site
 - Property lines and the extension of property lines to the road centerline
 - Unobstructed sight distance from driveway to approaching roadway traffic
4. Drainage:
 - Depth of ditch
 - Direction of surface water flow on or from adjacent property

Commercial driveway plans must show additional information including existing contours and finish grades and how storm water will be retained on site. Commercial driveway plans shall be drawn on 600 mm x 900 mm (24" x 36") sheets and to a scale of not smaller than 1:500 (1"=50') horizontal and 1:50 (1"=5') vertical.

Storm Water Retention and Existing Drainage Structures

No additional runoff shall be directed or diverted onto the right-of-way, unless specifically approved by the KCRC. Existing drainage structures including, but not limited to cross-tubes, catch and leaching basins, and impoundment areas must be protected from physical damage and sedimentation.

Soil erosion and sedimentation control must comply with PROVISIONS FOR ROADSIDE SOIL/GROUND COVER DISTURBANCES, pages 23 and 24. All debris from earth change activity must be removed from the road right-of-way.

Driveway Culvert

The KCRC shall determine whether or not a culvert is required and, if required, the diameter and length of the culvert. The applicant shall furnish, install and maintain the culvert.

1. Culverts shall be installed in line with and on the same grade as the road ditch.
2. Unless specified larger, culverts shall be a minimum of 300 mm (12") in diameter and a minimum of 7.3 m (24") in length.
3. Culverts shall be galvanized steel pipe with wall thickness corresponding to diameter as specified below:

<u>Diameter</u>			<u>Wall Thickness (Gage No.)</u>	
300 mm -	600 mm	(12"-24")	1.63 mm	(16)
750 mm -	900 mm	(30"-36")	2.01 mm	(14)
1050 mm -	1350 mm	(42"-54")	2.77 mm	(12)
1500 mm -	1800 mm	(60"-72")	3.51 mm	(10)

4. Culvert headwalls shall not be permitted.
5. Culverts over 750 mm (30") in diameter shall require steel end sections meeting MDOT specifications.

Identifying Driveway at Project Site

The driveway location must be clearly identified at the project site by staking and flagging, or other method, so it can be easily found by inspectors making a field review. Information on stakes shall include the applicant's name, property address and, where applicable, plat lot number. Failure to provide this information may delay issuance of permit.

Project Inspections

To avoid later corrections, the permittee shall coordinate with the KCRC to schedule an inspection of the prepared approach grade prior to surfacing. A final inspection of work will be made before the date of permit expiration.

Compliance with KCRC Policy on Insurance

No work will be permitted within any existing county road right-of-way by any contractor until the contractor has placed on file in the KCRC office proof of insurance in accordance with the Board's Requirement for Insurance.

Traffic Control and Public Safety at Site

Appropriate control devices, barricade signs, etc., as may be necessary to protect the public, shall be provided by the owner or contractor during construction and must comply with the current edition of the Michigan Manual of Uniform Traffic Control Devices.

Local Government Review and Approval

The permittee is strongly recommended to contact the local government in which the driveway construction will occur to ensure compliance with requirements pertaining to the improvement, expansion, development or redevelopment of private property, including any access requirements, which may be applicable.

Other

Any generally accepted engineering practice or guideline, rule, or standard, not otherwise specifically provided for, shall be incorporated by this reference.

PERMITS

An application for a driveway permit shall be accepted from the property owner, contractor, governmental agency or its legally authorized agent. Permits must be approved by County Engineer, or designee, prior to commencement of driveway construction, modification or reconstruction.

If the permittee fails to obtain an appropriate permit or fails to comply with any provisions of the permit, the KCRC will halt the activity for which a permit is required until adequate corrections

have been made. Accomplished work may have to be removed. Costs incurred by the KCRC in correcting failure to comply with the terms and conditions of a permit, failure to obtain a permit, or for defective work or materials shall be borne by the applicant or person undertaking the activity.

Conditions and Limitations

A driveway permit is subject to the conditions and limitations stated on the permit form, as well as any special conditions that may be added to the permit itself:

1. Permits are authorized for one year only, after which time the application must be resubmitted.
2. Altered natural drainage shall not be permitted to flow onto the road right-of-way, unless special provisions are approved by the KCRC.
3. The permittee shall remove all surplus materials to an area outside the road right-of-way unless the permit provides for disposal at locations within the right-of-way. Excavated material shall be stockpiled so it does not adversely affect the safety of traffic.
4. Work authorized by the permit shall be completed to the satisfaction of the KCRC on or before the completion date specified in the permit. A request for an extension of time for completion shall include reasons for the extension. Approval of extension of time shall be based upon extenuating circumstances and in the absence of neglect by the permittee.
5. The permit may be suspended or revoked at will. Upon the KCRC's request, and at the permittee's expense, the permittee shall surrender the permit and alter, relocate or remove the facilities for which the permit was granted.
6. The permit shall become immediately null and void if the terms of the permit are violated. The KCRC may require immediate removal of the permittee's facilities, or may remove them without notice at the permittee's expense.
7. The permittee shall hold harmless and indemnify and keep indemnified the KCRC, its officers, board members, agents, and employees from all claims, suits and judgments to which the KCRC, its officers, board members, or employees may be subject and for all costs and actual attorney fees which may be incurred on account of injury to persons or damage to property, including property of the KCRC, whether due to the negligence of the permittee or the joint negligence of the permittee and the KCRC, arising out of the work under the permit, or in connection with work not authorized by the permit, or resulting from failure to comply with the terms of the permit, or arising out of the continued existence of the work product which is the subject of the permit.

RESIDENTIAL DRIVEWAY REQUIREMENTS

In addition to the rules and standards provided under GENERAL REQUIREMENTS and PERMITS, pages 4 to 7, the following specific requirements apply.

Location and Number of Driveways

Residential parcels with 45.7 m (150') of frontage or less shall be limited to one driveway unless a waiver of this restriction is granted. Driveways must be no closer than 15.2 m (50') from the right-of-way line of the nearest cross street, as measured from the nearest edge of the driveway. Residential parcels with over 45.7 m (150') of frontage shall be allowed up to two driveways. Should staff review identify a potential problem because of traffic volume, sight limitation, or other reason in the public interest, only one driveway will be permitted. Corner residential parcels may be permitted access on each cross street. Separate sight distance criteria for each driveway must be met. Where only one of the cross streets is a low speed residential type facility (plat street), the driveway shall be allowed only on that street.

Sight Distance Requirements

Clear-vision area, as shown in Figure 1, shall be provided at all residential driveways entering onto a roadway which is under the jurisdiction of the KCRC.

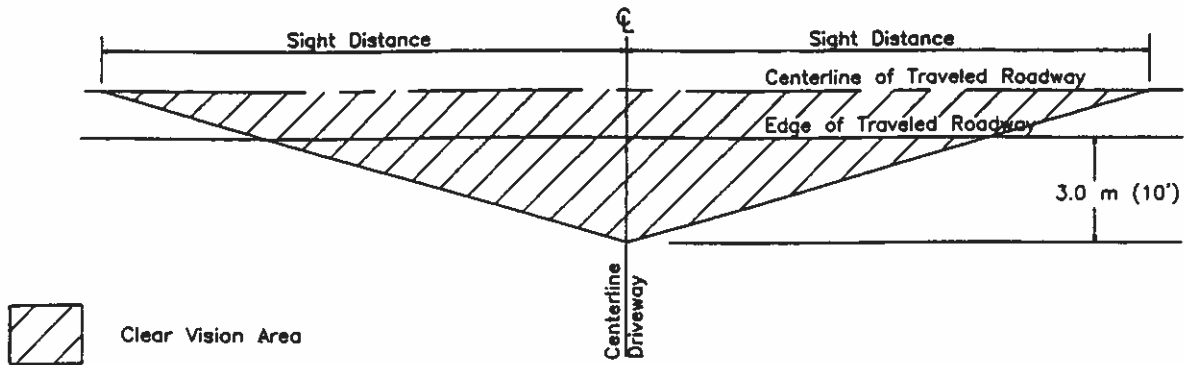


Figure 1. Clear-vision requirement for residential driveways

To provide for adequate vision, all obstructions must be removed or minimized within the clear-vision area. Sight distance, looking each way from the driveway centerline, shall be measured from an eye height of 1.1 m (3.5') to an object 1.3 m (4.25') above the roadway centerline. The eye height at the driveway centerline shall be positioned 3 m (10') from the edge of the traveled roadway.

The following minimum sight distances are based on 0% grade roads and the regulatory speed limit. Requirements for the clear-vision area are:

<u>Speed</u>	<u>Sight Distance</u>
40 km/h (25 mph)	45 m (150')
50 km/h (30 mph)	60 m (200')
55 km/h (35 mph)	70 m (225')
65 km/h (40 mph)	85 m (275')
75 km/h (45 mph)	100 m (325')
80 km/h (50 mph)	125 m (400')
90 km/h (55 mph)	140 m (450')

In the absence of a posted regulatory speed limit, 125 m (400') of sight distance is required.

Driveway and Site Plans

An application for a permit shall be accompanied by plans or drawings containing the required information listed under GENERAL REQUIREMENTS, Plans, and include applicable design details. Typical residential designs are shown in Examples I, II and III, pages 13, 14 and 15.

Material and Quality of Work

- Types and quality of material will be specifically approved on the permit. Residential driveway approaches may be constructed of approved concrete, gravel, or asphalt material. However, driveways with a grade of 4% or greater must be hard surfaced within the right-of-way. All driveways shall conform to the requirements shown in the applicable design example.

2. For the portion of the driveway within the road right-of-way, the KCRC recommends the thickness of the driveway surface and base necessary to obtain the bearing capacity for the proposed traffic loads. A gravel driveway should be constructed of stabilized gravel compacted to a minimum thickness of 200 mm (8"). The surface of a paved driveway may be asphalt or concrete. Recommended minimum standards are a 75 mm (3"), 180 kg/m² (330 lbs./s.yd.) , bituminous mix on 150 mm (6") of compacted gravel or 150 mm (6") of unreinforced concrete on 50 mm (2") of compacted gravel. The bituminous mix is to be placed in two layers.
3. Driveway apron must be flush with or below the adjacent edge of roadway pavement. Apron slope from pavement edge to back edge of shoulder shall be 4% (1/2"/ft.) or match existing shoulder slope. Responsibility for maintenance of apron surface area rests with the property owner.
4. Shoulder grades are to be re-established so driveway apron is at same level. Shoulder gravel shall be MDOT specification for 23A material.
5. On roadways lined with high back concrete curb, access can be provided by total replacement of curb with concrete gutter or by saw cutting the back of curb. Use of saw cutting must be approved by KCRC inspector. If saw cutting is permitted, a 25 mm (1") high back of curb lip must be retained and edges of the curb opening shall not exceed 45°. See Example II, page 14. Driveway slope shall be no greater than 8%. Any inlets requiring modification must be replaced by approved fixtures. Cause for rejection of final work product includes, but is not limited to cracks, voids, exposed reinforcement steel or damage to existing concrete.
6. Driveway culverts shall meet specifications described under GENERAL REQUIREMENTS, Driveway Culvert.

COMMERCIAL DRIVEWAY REQUIREMENTS

In addition to the rules and standards provided under the GENERAL REQUIREMENTS and PERMITS, pages 4 to 7, the following specific requirements apply.

Commercial driveway openings will not be allowed closer than 15.2 m (50') to a road intersection, as measured from the intersecting road right-of-way line to the nearest edge of driveway.

Developments are limited to one driveway, unless it can be shown that the property will generate sufficient traffic volumes to require additional driveways. Should additional driveways be needed, property owners are strongly recommended to consolidate their driveways with those of adjacent property owners.

Dimensions and type and quantity of materials for radii, deceleration tapers and right-turn lanes shall be determined by the KCRC. See Examples IV and V, pages 16 and 17, for minimum design requirements.

On roadways having a speed limit of 50 km/h (30 mph) or less, a variation of the two-way commercial driveway may be allowed. Example VI on page 18 illustrates a modified requirement in which the 30.5 m (100') taper normally added to the right-turn-entry radius is omitted in favor of a 15.2 m (50') radius. This creates symmetrical entry/exit radii on each side of a 7.9 m-11 m (26'-36') wide driveway.

A center left-turn lane will be required on a roadway where traffic operations, peak-hour turn movements and engineering judgment indicate that a left-turn lane will improve capacity and safety. The left-turn lane shall be a minimum of 3.4 m (11') in width and extend a minimum of 45.7 m (150') each way from the centerline of the proposed driveway. Determination of lane length and design specifications needed to accommodate the center left-turn lane shall be obtained from the KCRC.

Sight Distance Requirements

Acceptance of site access onto an existing county road is subject to the field review and recommendations of the County Engineer. Considerations include, but are not limited to, vehicle speed, sight distance, and topography. An area of clear vision, free from obstructions and encroachments, must be provided. Fences, trees, shrubs, poles, signs, boulders, mailboxes, and other obstacles must be removed or modified in this area to afford an unobstructed view in both directions of the approaching traffic.

A clear-vision area, as shown in Figure 2, shall be provided at all commercial driveways entering onto a roadway under the jurisdiction of the KCRC.

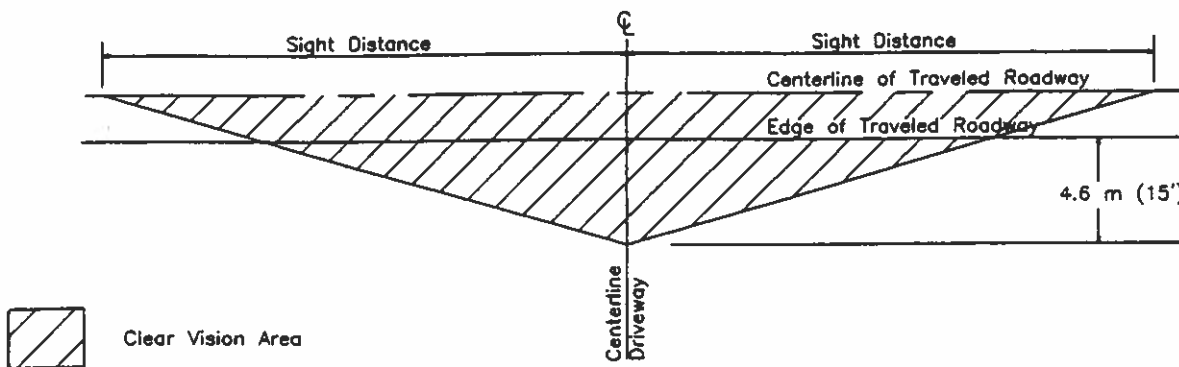


Figure 2. Clear-vision requirement for commercial driveways.

Sight distance, looking each way from the driveway centerline, shall be measured from an eye height of 1.1 m (3.5') to an object 1.3 m (4.25') above the roadway centerline. The eye height at the driveway centerline shall be positioned 4.6 m (15') from the edge of the traveled roadway.

Minimum sight distance requirements on 0% grade, according to the 85th percentile speed, are required for the clear-vision area:

<u>Speed</u>	<u>Sight Distance</u>
40 km/h (25 mph)	45 m (150')
50 km/h (30 mph)	60 m (200')
55 km/h (35 mph)	75 m (250')
65 km/h (40 mph)	95 m (325')
75 km/h (45 mph)	115 m (400')
80 km/h (50 mph)	145 m (475')
90 km/h (55 mph)	165 m (550')

Passing lane requirements

At locations on two-lane roadways, a passing lane on the opposite side of the road may be required.

Considerations necessitating the use of passing lanes include approach roadway speeds, traffic counts, traffic mix, commercial development size, adjoining land use, and accident history. Key factors are the two-way daily traffic volume and the anticipated number of peak-hour left turns

from the roadway. The number of anticipated peak-hour left turns shall be determined from the current edition of the Institute of Transportation Engineers Trip Generation manual. On roadways where the posted speed is 55 km/h (35 mph) or lower, or where the traffic volume is less than 3,500 vehicles per day, a passing lane may not be required. See Example VII, page 19, for minimum design requirements.

The KCRC may require a passing lane should the accident history along the roadway indicate that a passing lane would be beneficial to public safety.

Existing paved or unpaved shoulders shall be reconstructed to a like standard along the passing lane and its tapers.

Driveway and Site Plans

An application for a permit shall be accompanied by plans or drawings containing the required information listed under GENERAL REQUIREMENTS, Plans, and shall include applicable design features as illustrated in Examples IV through VII, pages 16 through 19. Additionally, plans must show internal traffic circulation, existing and proposed buildings and appurtenances and their dimensions, existing topographic contours at no more than 1.2 m (4') intervals, finish grades, and how storm water will be retained on site. After KCRC review, any required modifications must be made and a final site plan submitted.

Material and Quality of Work

1. Type, thickness and specifications of materials must be shown on plans. Commercial driveways are to be constructed of approved asphalt or concrete material. All driveways shall generally conform to requirements shown in the applicable design examples.
2. For the portion of the driveway within the road right-of-way, surface and base must meet material and thickness requirements to obtain the necessary bearing capacity. Minimum standards are:

Asphalt Driveway

- 40 mm (1-1/2"), 90 kg/m² (165 lbs./s.yd.) KCRC Bituminous Mix No. 4B Mod.
- 40 mm (1-1/2"), 90 kg/m² (165 lbs./s.yd.) KCRC Bituminous Mix No. 3B Mod.
- 50 mm (2"), 120 kg/m² (220 lbs./s.yd.) KCRC Bituminous Mix No. 2B Mod.
- 200 mm (8") of compacted MDOT 22A Aggregate Base

Concrete Driveway

- 150 mm (6"), MDOT Grade P1 Non-Reinforced Concrete Pavement
- 75 mm (3") of compacted MDOT 22A Aggregate Base

All driveways shall be constructed over suitable soils. Composition of bituminous mixtures shall conform to requirements in section VII., C., 12., Restoring Materials, of the KCRC's Construct, Operate, Maintain, Use and/or Remove Within the County Road Right-of-way Policy.

3. Driveway apron must be flush with or below the adjacent edge of roadway pavement. Apron slope from pavement edge to back edge of shoulder shall be 4% or match existing shoulder slope. Responsibility for maintenance of apron surface area rests with the property owner.
4. Shoulder grades are to be re-established so driveway apron is at same level. Shoulder gravel shall be MDOT specification for 23A material.
5. On roadways lined with high back concrete curb, access can be provided by total replacement of curb with concrete gutter or by saw cutting the back of curb. Use of saw cutting must be approved by KCRC inspector. If saw cutting is permitted, a 25 mm (1") high back of curb lip

shall be retained. A commercial driveway accessing concrete curb requires the construction of curb along its taper and radii. Expansion joints must be placed at the adjoining road curb. See Example V, page 17. Any inlets requiring modification must be replaced by approved fixtures and driveway slope shall not exceed 4%. Cause for rejection of final work product includes, but is not limited to cracks, voids, exposed reinforcement steel or damage to existing concrete.

6. Driveway culverts shall meet specifications described under GENERAL REQUIREMENTS, Driveway Culvert.
7. Construction of auxiliary lanes and tapers may require installation of culverts to maintain ditch line flow. Clean out structures are required for every 91.4 m (300') of enclosed drainage pipe.

LOW USE AND TEMPORARY DRIVEWAY REQUIREMENTS

In addition to the rules and standards provided under GENERAL REQUIREMENTS and PERMITS, pages 4 to 7, specific requirements outlined below shall apply. The permit application must be accompanied by plans or drawings containing the required information listed under GENERAL REQUIREMENTS, Plans, and include applicable design details. Example I, page 13 illustrates typical design features. Driveway culverts shall meet specifications described under GENERAL REQUIREMENTS, Driveway Culvert.

Low Use (Agricultural or Utility) Driveway

1. Driveways designed to access cultivated or undeveloped land, or utility structures, are allowed every 305 m (1,000').
2. Type and thickness of material will be specifically approved on the permit. Gravel or paved driveways may be accepted. Where erosion control is a perceived problem, hard-surfaced driveway may be required.
3. Sight distance requirements will be determined by the KCRC depending on proposed use.

Temporary Driveway

1. A temporary driveway shall be allowed for a maximum 12-month period and is to service a site for a specific function or project. If temporary driveway is removed by permittee within the allowable time, one-half of the fee will be returned. If permittee does not complete obligation within the agreed period of time, KCRC will remove driveway.
2. Type and thickness of material will be specifically approved on the permit. Gravel or paved driveways will be allowed, depending on use, erosion potential, maintenance, and other safety factors.
3. Sight distance requirements will be determined by the KCRC depending on proposed use.

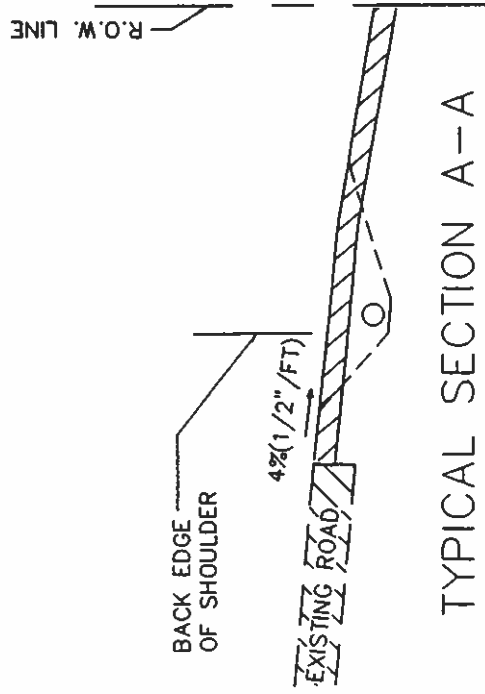
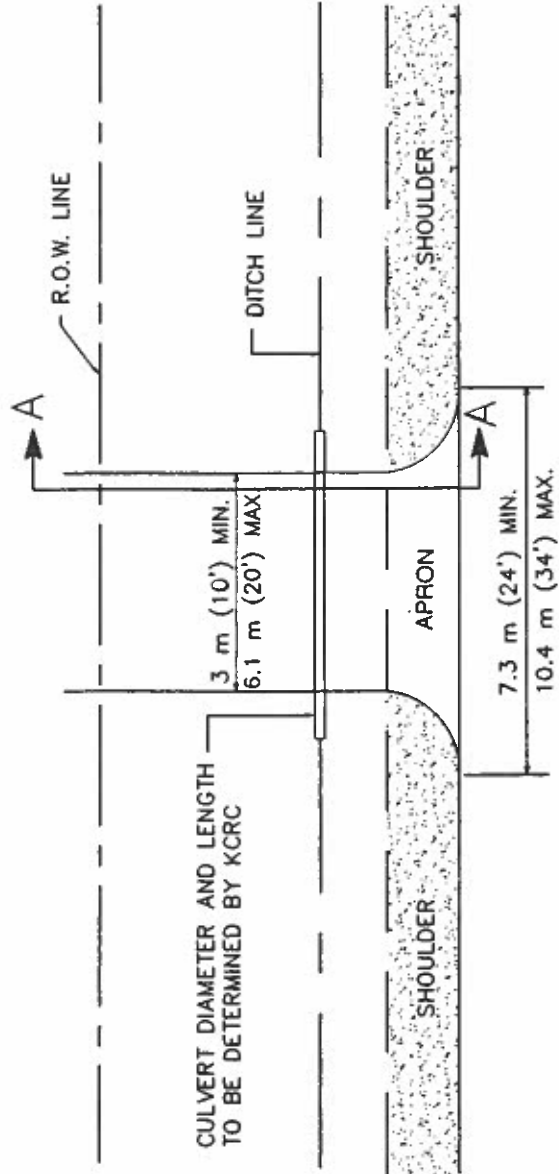
VARIANCE CLAUSE

Requests for variance from these requirements must be in writing and shall include sufficient detail to support a reasonable justification for the request. Individual requirements may be waived in cases considered meritorious.

SEVERABILITY CLAUSE

If any part of these requirements and specifications shall be found to be invalid, such invalidity shall not affect the validity of the remaining portions of this policy.

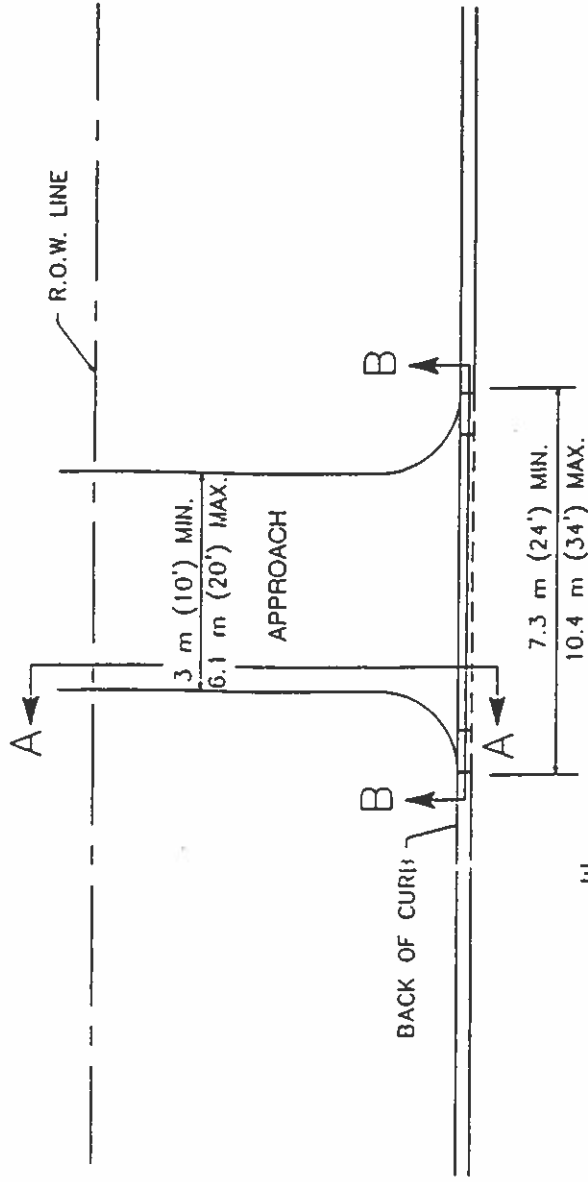
RESIDENTIAL DRIVEWAY



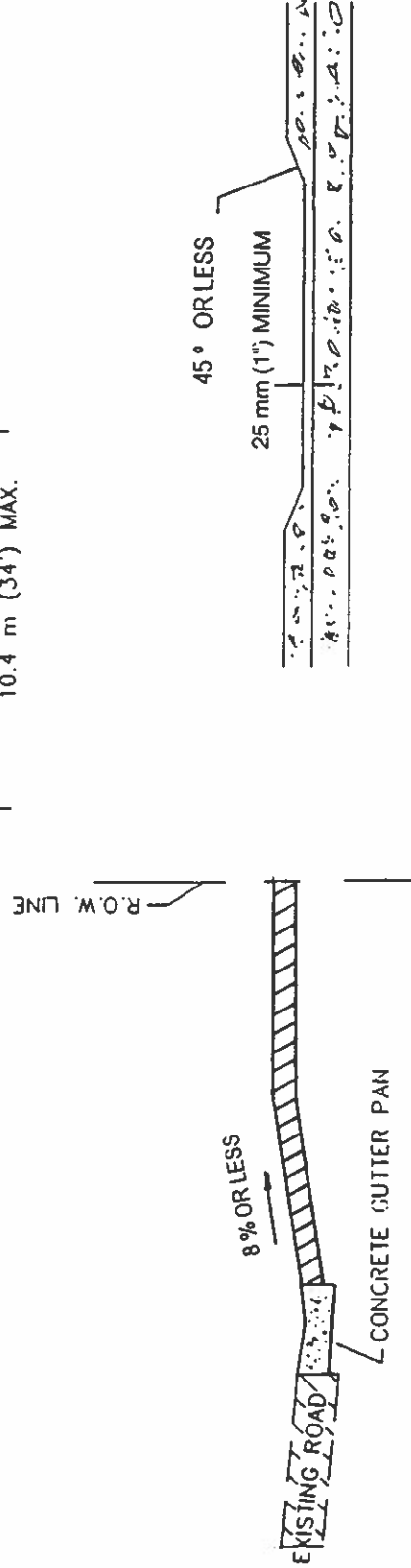
NOT TO SCALE

ALONG SHOULDER DITCH ROAD EXAMPLE 1

RESIDENTIAL DRIVEWAY



14



TYPICAL SECTION A-A

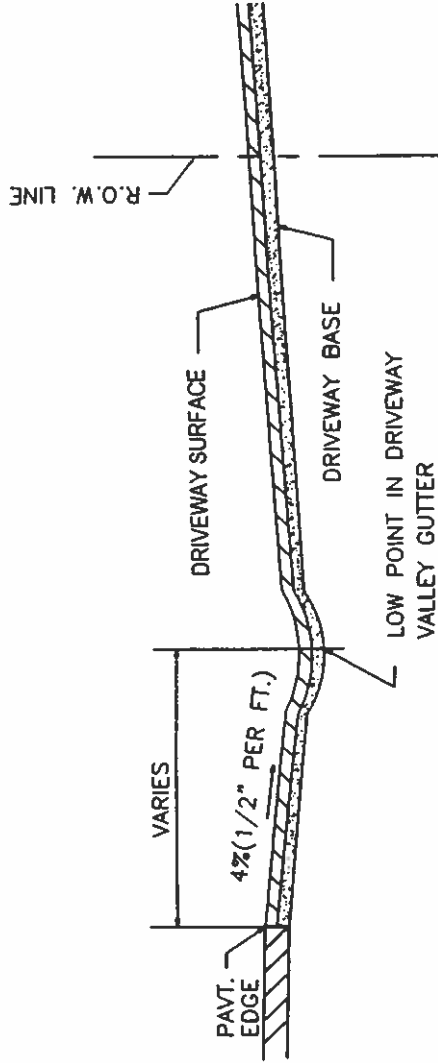
TYPICAL SECTION B-B

NOT TO SCALE

ALONG CONCRETE CURB & GUTTER ROAD EXAMPLE II

RESIDENTIAL DRIVEWAY

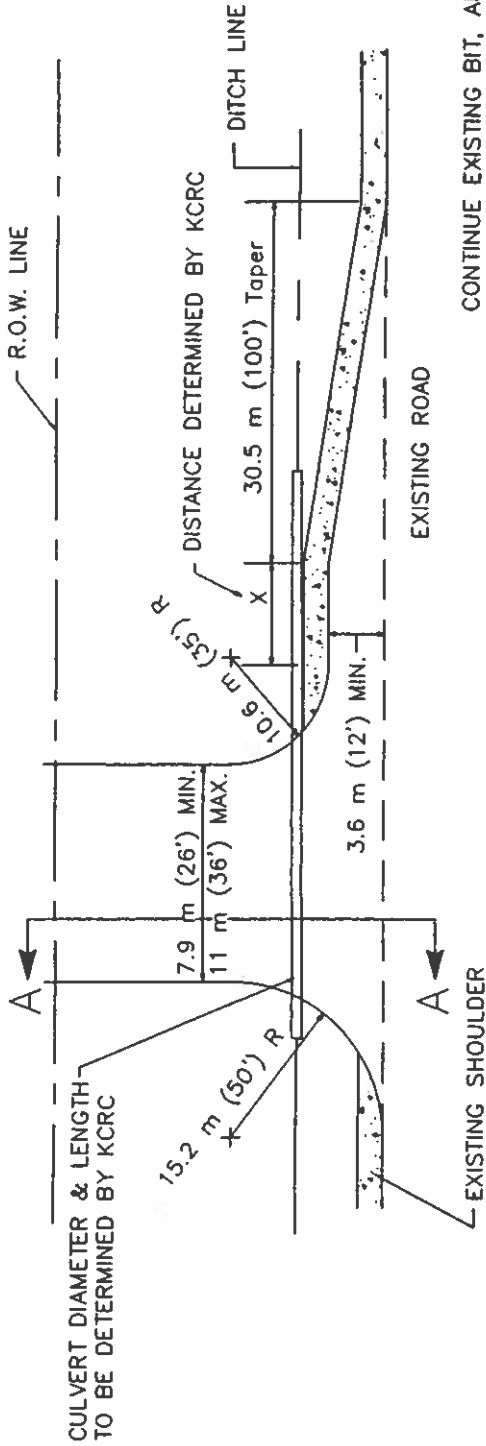
NOTE: TO BE USED AS DIRECTED BY KCRC



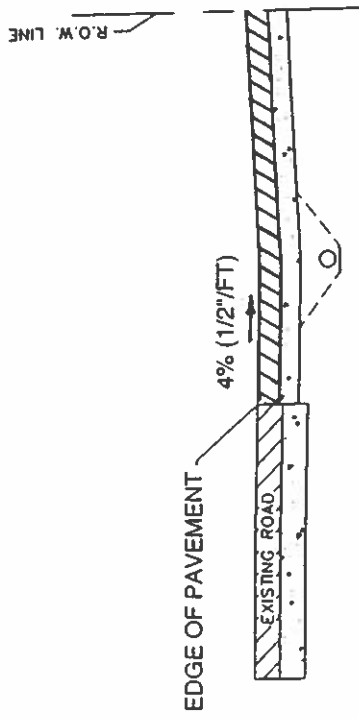
VALLEY GUTTER SECTION EXAMPLE III

NOT TO SCALE

COMMERCIAL DRIVEWAY



CONTINUE EXISTING BIT, AND OR GRAVEL SHOULDER ALONG OUTSIDE OF RIGHT TURN LANE AND TAPER.



TYPICAL SECTION A--A

THICKNESS & MATERIAL

- 40 mm (1-1/2"), 90 kg/m² (165 lbs./s.yd.) KCRC Bituminous Mix No. 4B Mod.
- 40 mm (1-1/2"), 90 kg/m² (165 lbs./s.yd.) KCRC Bituminous Mix No. 3B Mod.
- 50 mm (2"), 120 kg/m² (220 lbs./s.yd.) KCRC Bituminous Mix No. 2B Mod.
- 200 mm (8") of CIP MDOT 22A Aggregate Base

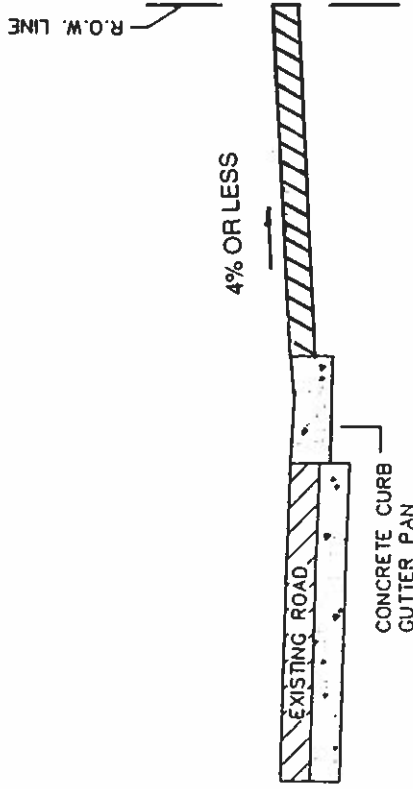
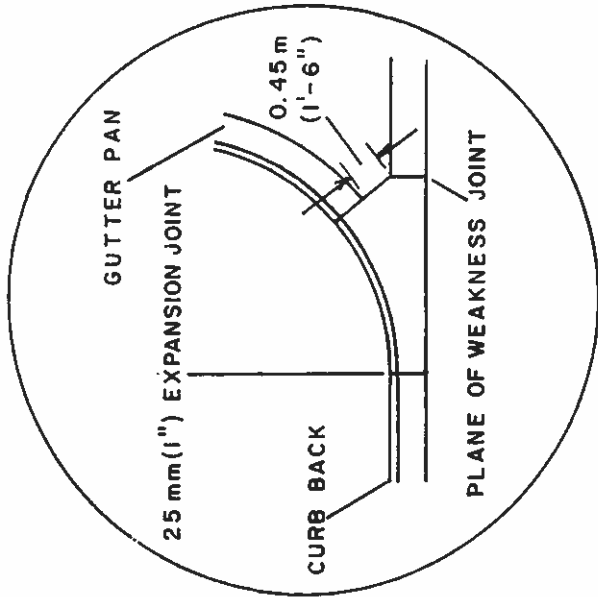
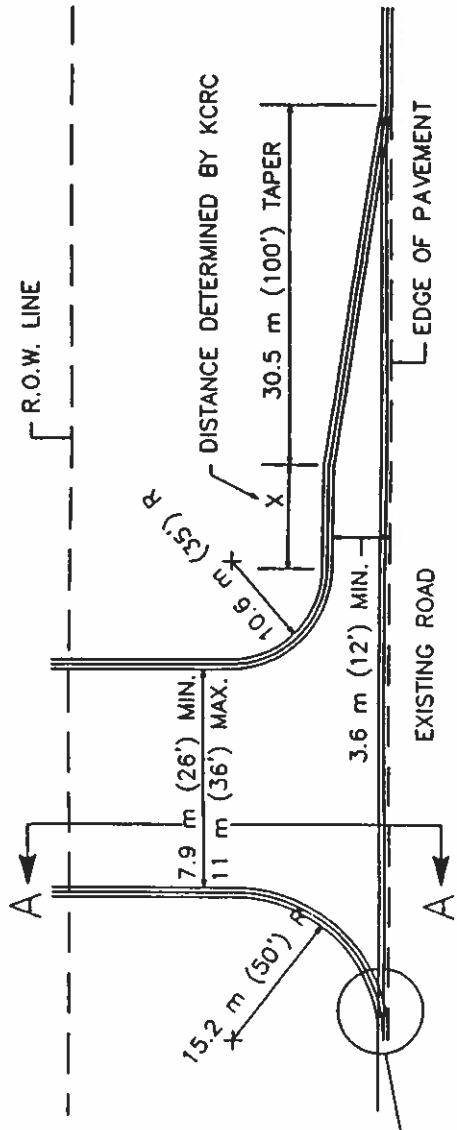
OR

- 150 mm (6"), MDOT Grade P1 Non-Reinforced Concrete Pavement
- 75 mm (3") of CIP MDOT 22A Aggregate Base

NOT TO SCALE

MINIMUM REQUIREMENTS ALONG SHOULDER DITCH ROAD EXAMPLE IV

COMMERCIAL DRIVEWAY



TYPICAL SECTION A-A

THICKNESS & MATERIAL

- 40 mm (1-1/2"), 90 kg/m² (165 lbs./s.yd.) KRCR Bituminous Mix No. 4B Mod.
- 40 mm (1-1/2"), 90 kg/m² (165 lbs./s.yd.) KRCR Bituminous Mix No. 3B Mod.
- 50 mm (2"), 120 kg/m² (220 lbs./s.yd.) KRCR Bituminous Mix No. 2B Mod.
- 200 mm (8") of CIP MDOT 22A Aggregate Base

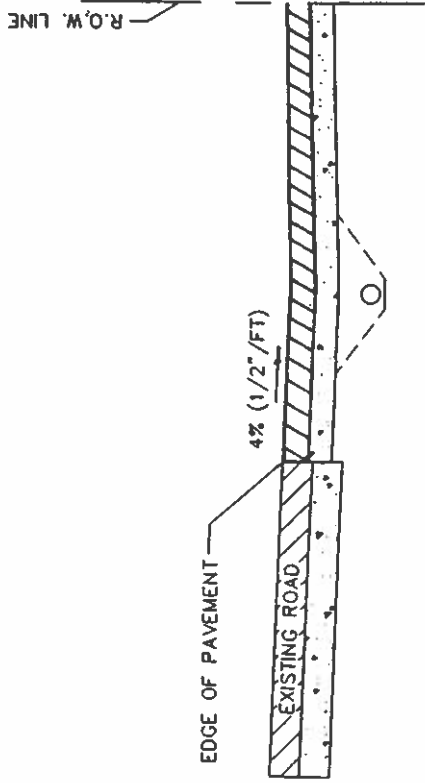
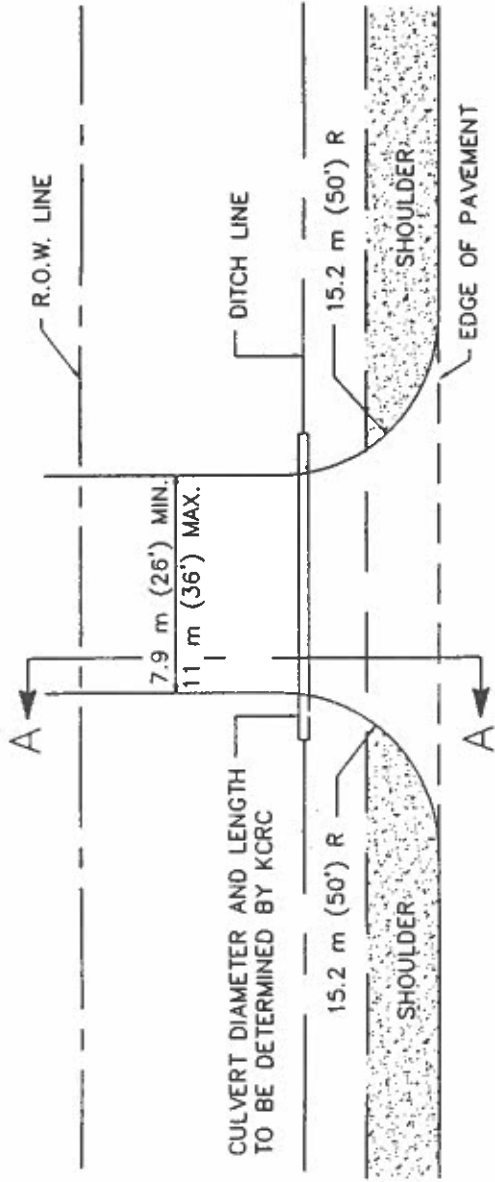
OR

- 150 mm (6"), MDOT Grade P1 Non-Reinforced Concrete Pavement
- 75 mm (3") of CIP MDOT 22A Aggregate Base

NOT TO SCALE

MINIMUM REQUIREMENTS ALONG CONCRETE CURB & GUTTER ROAD EXAMPLE V

COMMERCIAL DRIVEWAY



TYPICAL SECTION A-A

NOT TO SCALE

THICKNESS & MATERIAL

- 40 mm (1-1/2"), 90 kg/m² (165 lbs./s.yd.) KCRC Bituminous Mix No. 4B Mod.
- 40 mm (1-1/2"), 90 kg/m² (165 lbs./s.yd.) KCRC Bituminous Mix No. 3B Mod.
- 50 mm (2"), 120 kg/m² (220 lbs./s.yd.) KCRC Bituminous Mix No. 2B Mod.
- 200 mm (8") of CIP MDOT 22A Aggregate Base

OR

- 150 mm (6"), MDOT Grade P1 Non-Reinforced Concrete Pavement
- 75 mm (3") of CIP MDOT 22A Aggregate Base

MINIMUM REQUIREMENTS FOR VARIATION OF TWO-WAY COMMERCIAL DRIVEWAY EXAMPLE VI



APPLICATION AND PERMIT

**TO CONSTRUCT, OPERATE, MAINTAIN,
USE AND/OR REMOVE WITHIN
A COUNTY ROAD RIGHT-OF-WAY**

Permit Fee
Other

Permit Number
Date Issued
Receipt Number

2/00

Board of County Road Commissioners of Kalamazoo County, Michigan
3801 East Kilgore Road, Kalamazoo, Michigan 49001
Telephone: (269) 381-3171 Fax: (269) 381-1760
<http://www.kcrc-roads.com>

If applicant hires a contractor to perform work, BOTH shall assume responsibility for the provisions of this Application and Permit.

APPLICATION

APPLICANT — Please Print			CONTRACTOR — Please Print		
Name			Name		
Street			Street		
City	State	Zip	City	State	Zip
Day Phone	Evening Phone	Fax Number	Day Phone	Evening Phone	Fax Number

I do hereby make application for a permit for the purpose indicated as detailed below and/or as provided in the attached plans and specifications at the following location:

City or Township	Date Work to Begin	Date work to be completed	
Road Name and Address	Location (Cross streets between which property is located or nearest main intersection)		
Purpose	Plans and Specifications	Yes	No
	Proof of Insurance	Yes	No
	Other		

I certify that I accept the following:

1. Commencement of work set forth in the permit application constitutes acceptance of the permit as issued.
2. Failure to object within ten (10) days to the permit as issued constitutes acceptance of the permit as issued.
3. If this permit is accepted by either of the above methods, I will comply with the provisions of the permit.
4. Permittee has read and acknowledges key requirements and conditions on page 2 of this form.

APPLICANT/AUTHORIZED AGENT SIGNATURE — If Authorized Agent, I certify that I am acting as Authorized Agent on behalf of named Applicant.

NAME	TITLE	DATE
X		

**REMINDER: IF APPLYING FOR DRIVEWAY PERMIT, DRIVEWAY LOCATION
MUST BE STAKED AND IDENTIFIED BY PROPERTY ADDRESS AND APPLICANT'S NAME**

PERMIT

FOR KCRC USE ONLY BELOW THIS LINE

Additional KCRC requirements

A permit is granted in accordance with the foregoing application for the period stated above, incorporating the Key Requirements and Conditions agreed to by the permittee as found on page 2 of this form.
When Applicant hires a contractor, the Permittee is the Applicant and the Contractor.

Approved and Issued:

KCRC AUTHORIZED SIGNATURE

TITLE

DATE

Application and Permit — Key Requirements and Conditions

1. **Specifications.** All work performed under this permit must be done in accordance with the plans, specifications, maps and statements filed with and approved by the Kalamazoo County Road Commission (KCRC) and must comply with the KCRC's current requirements and specifications included in its Construct, Operate, Maintain, Use and/or Remove Within the County Road Right-of-way Policy on file at its offices, and MDOT specifications.
2. **Fees and Costs.** The permittee shall be responsible for all fees incurred by the KCRC in connection with this permit and shall deposit estimated fees and costs as determined by the KCRC, at the time the permit is issued.
3. **Escrow.** The permittee shall provide a cash deposit or letter of credit, as may be required, in a form and amount acceptable to the KCRC at the time permit is issued.
4. **Insurance.** The permittee shall furnish proof of liability insurance in accordance with the Board's Requirement for Insurance Policy. Such insurance shall cover a period not less than the term of this permit and shall provide that it cannot be canceled without ten (10) days advance written notice by certified mail, with return receipt required, to the KCRC.
5. **Indemnification.** The permittee shall hold harmless and indemnify and keep indemnified the KCRC, its officers, board members, agents, and employees from all claims, suits and judgments to which the KCRC, its officers, board members, or employees may be subject and for all costs and actual attorney fees which may be incurred on account of injury to persons or damage to property, including property of the KCRC, whether due to the negligence of the permittee or the joint negligence of the permittee and the KCRC, arising out of the work under this permit, or in connection with work not authorized by this permit, or resulting from failure to comply with the terms of this permit, or arising out of the continued existence of the work product which is the subject of this permit.
6. **Miss Dig.** The permittee must comply with the requirements of PA 53 of 1974, as amended. CALL MISS DIG AT (800) 482-7171 AT LEAST THREE (3) FULL WORKING DAYS, BUT NOT MORE THAN TWENTY-ONE (21) CALENDAR DAYS, BEFORE YOU START WORK. The permittee assumes all responsibility for damage to or interruption of underground utilities.
7. **Notification of Start and Completion of Work.** The permittee must notify the KCRC at least 72 hours before starting work and must notify the KCRC when work is completed.
8. **Restriction of Subsurface Construction During Winter season.** New construction activities shall not start after November 1. However, emergency repair of existing utilities will be permitted.
9. **Safety.** The permittee agrees to work under this permit in a safe manner and to keep the area affected by this permit in a safe condition until the work is completed. All work site conditions shall comply with Michigan Manual of Uniform Traffic Control Devices.
10. **Restoration and Repair of Road.** The permittee agrees to restore the road and right-of-way to a condition equal to or better than its condition before the work began; and to repair any damage to the road or right-of-way, which is the result of the facility whenever, it occurs or appears.
11. **Soil Erosion and Sedimentation.** The permittee shall comply with the requirements of the Natural Resources and Environmental Protection Act, Part 91 of PA 451 of 1994, as amended, and implement all applicable measures controlling soil erosion and sedimentation.
12. **Limitation of Permit.** This permit does not relieve the permittee from meeting other applicable laws and regulations of other agencies. The permittee is responsible for obtaining additional permits or releases, which may be required in connection with this work from other governmental agencies, public utilities, private entities and individuals, including property owners. Permission may be required from the adjoining property owners.
13. **Revocation of Permit.** This permit may be suspended or revoked at will. Upon the KCRC's request and at the permittee's expense, the permittee shall surrender the permit and alter, relocate or remove the facilities for which the permit was granted.
14. **Violation of Permit.** This permit shall become immediately null and void if the permittee violates the terms of this permit. The KCRC may require immediate removal of the permittee's facilities, or may remove them without notice at the permittee's expense.
15. **Assignability.** This permit may not be assigned without the prior approval of the KCRC. If approval is granted, the assignor shall remain liable and the assignee shall be bound by all the terms of this permit.
16. **Supplemental Specifications.** This permit is subject to supplemental specifications on file with the KCRC and PA 200 of 1969, as amended.