

BOARD OF COUNTY ROAD COMMISSIONERS

COUNTY OF BAY, MICHIGAN

**REVISED PERMIT RULES, STANDARDS AND SPECIFICATIONS
FOR
WORK WITHIN RIGHT-OF-WAY
OVERHEAD AND UNDERGROUND CONSTRUCTION
DRIVEWAYS, BANNERS AND PARADES**

**Adopted pursuant to Section 19b of the County Road Law, MCL 224.19b,
and Section 5 of the Driveway Act, MCL 247.325**

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**Adopted: December 22, 2004
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BAY COUNTY ROAD COMMISSION
SECTION I

SPECIFICATIONS

ADOPTED: December 22, 2004
EFFECTIVE: December 22, 2004

These Revised Permit Rules, Standards and Specifications for Work within Right-of-Way, Overhead and Underground Construction, Driveways, Banners and Parades are adopted by the Board pursuant to the provisions of both Section 19b of the County Road Law, MCL 224.19b, and Section 5 of the Driveway Act, MCL 247.325.

DEFINITIONS

BOARD

As used herein "Board" shall mean the Board of County Road Commissioners of the County of Bay and its duly appointed agents.

APPLICANT – Driveway Permit

A property owner or the property owner's authorized legal agent desiring to construct, reconstruct, relocate or resurface a driveway that connects to a county road.

APPLICANT – Right of Way Work

A public or private entity or a person making application for a permit to construct, operate, use, and/or maintain a facility within Board right-of-way for the purpose outlined within the application. A contractor who makes application on behalf of a public or private entity or a person must provide documentation of authority to make application or the Board may require that the public or private entity or a person's authorized legal agent to sign the permit application.

PERMIT HOLDER

A public or private entity or a person granted a permit for any purpose for any of the activities covered by these rules AND the Permit Holder's contractor.

The requirements for any item, or application of an item, not covered by these specifications will be determined by the Board.

A. GENERAL REQUIREMENTS

Indemnification. The Permit Holder shall hold harmless and indemnify and keep indemnified the Board, its officers and employees from all claims, suits and judgments to which the Board, its officers, 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 Board, whether due to the negligence of the Permit Holder or the joint negligence of the Permit Holder and the Board, arising out of the work under this permit, or in connection with work not authorized by the issued 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.

Miss Dig. The Permit Holder must comply with the requirements of Act 53 of Public Acts of 1974, as amended. CALL MISS DIG AT (800) 482-7171 AT LEAST THREE (3) FULL WORKING DAYS (EXCLUDING SATURDAYS AND SUNDAYS), BUT NOT MORE THAN TWENTY-ONE (21) CALENDAR DAYS, BEFORE YOU START WORK. Permit Holder assumes all responsibility for damage to or interruption of underground utilities.

Notification of Start and Completion of Work. Permit Holder must notify the Board at least five (5) days, excluding Sundays and Holidays, before starting work and must notify the Board when work is completed.

Time Restrictions. All work shall be performed Mondays through Fridays between 8:00 A.M. and 5:00 P.M. unless written approval is obtained from the Board, and work shall be performed only during the period set forth in the permit.

Safety. Permit Holder agrees to work under the permit in a safe manner and to keep the area affected by the permit in a safe condition until the work is completed. All work site conditions shall comply with the 1994 Michigan Manual of Uniform Traffic Control Devices, as amended.

Use of Crawler Equipment. The use of crawler mounted equipment on road pavements shall not be permitted unless specifically authorized in writing.

As-Constructed Drawings. The Permit Holder shall provide the Board with “as-constructed” drawings of all work performed in the road right-of-way. This shall include reproducible (preferably mylar) construction sheets showing plan and profile of the finished construction for which the Board approved the permit. This requirement shall not apply to residential driveways.

B. PUBLIC OR PRIVATE UTILITY ROAD CROSSINGS

1. All crossings of county roads will be done by approved methods other than the open-cut method unless otherwise approved by the Board.

a. Boring

This method requires the use of a casing pipe. Crossings made by utilizing this method that do not include a casing pipe will not be approved.

The casing pipe shall be welded steel pipe with a minimum thickness and diameter as shown in the table on Figure 1 in Section II of this document and minimum yield strength of 35,000 psi.

The front of the casing pipe will be equipped to positively restrict the auger and cutting head from extending in front of the casing to prevent any unsupported excavation ahead of the casing pipe. The excavation cut by the cutting head shall not exceed the outside diameter of the casing pipe by more than one inch (1").

The boring pit shall be located so that intersection of the face of the pit nearest the roadway with the bottom of the pit will be outside a theoretical slope line of 2 horizontal to 1 vertical down from the edge of the roadway shoulder. The boring pit shall be sheeted and shored as required to conform to all applicable local, state and federal safety laws. The entire boring operation shall be conducted so as to guarantee uninterrupted roadway travel. The casing pipe shall be installed by a reliable and qualified contractor with proper equipment who is versed in the boring process, and is acceptable to the Board.

If, for any reason, it becomes necessary to abandon a bore, the casing shall be left in place and completely filled with cement grout. Approval by the Board will be required before installation of a second casing is started.

When splices in the casing pipe are required, the joints shall be welded completely around the circumference of the pipe. All welding shall be done in accordance with the 2000 Edition of the American Welding Society Specification D10.12M/D10.12:2000, "Guide for Welding Mild Steel Pipe".

Upon completion of installation of the casing and utility, the voids in the casing shall be filled with pea stone or sand meeting the 2003 Michigan Department of Transportation (MDOT) Standard Specifications for Construction for Granular Material Class II in sufficient quantity to fill 90% of the void area inside of casing pipe. Once filled and accepted by the Board, the ends of the casing shall be plugged with bricks and mortar.

b. Directional Drilling

The work specified in this section consists of furnishing and installing an underground utility under a road or structure under jurisdiction of the Board using the horizontal directional drilling (HDD) method of installation (directional boring), without disturbance to that road or structure. The following requirements shall apply:

- (1) HDD may be used to install both pressure and non-pressure public or private utilities under roads or structures owned by or within designated Rights-of-Way of the Bay County Road Commission.
- (2) Work shall include and not be limited to proper installation, testing, protection of existing underground utilities, protection of the existing roadway, environmental protection and restoration of the right-of-way.
- (3) The carrier pipe shall be of the type and size as indicated on the Plans submitted by the Applicant to the Engineer for review and approval. Only the following types of carrier pipe are allowed. All others require approval by the Board.
 - (a) High Density Polyethylene (HDPE)
 - (b) Ductile Iron Pipe
 - (c) Polyvinyl Chloride with restrained joints (PVC)

- (4) All pipe and couplings shall be homogeneous throughout and free from voids, cracks, inclusions, and other defects, and shall be as uniform as commercially practicable in color, density, and other physical characteristics.
- (5) Specifications on material to be used shall be submitted to the Board. Material shall include the pipe, fittings and any other item, which is to be an installed component of the project and will remain under the road after completion of construction.
- (6) The Applicant shall not begin any work within the road right-of-way until the permit is approved by the Board.
- (7) The Permit Holder shall notify the Board a minimum of 48 hours in advance of the commencement of the permitted work.
- (8) Prior to beginning work, the Applicant must submit to the Board's Engineer a work plan detailing the schedule to be used to execute the project, a safety plan (including MSDS of any potentially hazardous substances to be used), an environmental protection plan and contingency plans for possible problems. Work plan should be comprehensive, realistic and based on actual working conditions for the particular project.
- (9) Prior to beginning work, the Applicant must submit to the Board's Engineer a to-scale shop drawing of the pilot bore plan both vertically and horizontally (suggested scale, 1" = 2' Vertical to 1" = 20' Horizontal). The plan shall show finished grade, proposed bore path, location of existing utilities, and location of shafts, pits or approach tunnels throughout the proposed project.
- (10) If the project the Applicant has requested a permit to install is a non-pressure, gravity, grade-sensitive utility (i.e. sanitary sewer), the Applicant must certify in writing the equipment they intend to use is capable of accurately installing this type of system.
- (11) The Permit Holder shall allow the Board's Engineer or designated representative access to the work being performed throughout the duration of the construction period.
- (12) Any costs associated with damages to the road or facility within the road right-of-way as a direct result of the Permit Holder's HDD operation shall be the sole responsibility of the Permit Holder.
- (13) If the nature of the work changes from that submitted and approved by the Board, the Permit Holder must inform the Board immediately and receive approval for the change prior to starting construction.

- (14) Pits that are associated with the drilling operation and are along any road shall be sheeted, if the leading edge of the excavation falls within the one-on-one influence zone of the road which begins and extends outward from the shoulder point or curb and gutter edge.
- (15) If the Permit Holder constructs the pipe on the surface, in the existing road right-of-way or easement areas as indicated on the approved Plans, the Permit Holder shall not close any driveways for a period longer than two (2) hours. Any temporary drive measures shall be approved by the Board. Permit Holder shall provide twenty-four (24) hours of notice to all property owners affected by temporary drive closures.
- (16) A tracer wire or wires shall be securely attached to the carrier pipe, be continuous under the road, structure or facility and be of sufficient length to easily attach to utility tracing equipment.
- (17) Surface restoration shall be completed in accordance with the requirements outlined in Section I, Part CC, "Restoration of Right-of-Way", to a condition as good or better than existed prior construction.
- (18) The Permit Holder shall furnish an "as-constructed" plan and profile drawing based on these recordings showing the actual location horizontally and vertically of the installation, and all utility facilities found during the installation.

c. Jacking or Tunnel

This method may be utilized for installation of steel or reinforced concrete pipe where the size makes a bored crossing impractical.

The jacking pit requirements are as noted for a bore pit under the boring method above.

The tunnel excavation shall be restricted to the outside diameter of the conduit plus one inch (1"). The excavation and removal of earth will be by manual labor utilizing air spade, etc. When reinforced concrete pipe is utilized, the following shall apply:

- (1) The pipe shall be R.C.P. C-76 Class V. The use of a push pipe is required.
- (2) Three quarter inch (3/4") plywood cut to the full diameter of the pipe or other approved means shall be used in cushioning the joints to prevent damage or crushing of the pipe. "DeWitt #10", "Sewertite" or equal bituminous mastic shall be placed for sealing the joint, and the interior joint shall be filled and pointed with a cement mortar. If premium rubber joints are to be used, they must meet ASTM C-443.

- (3) The jacking equipment must be of the required capacity plus 50% to assure that once jacking has started, the operation can continue until the operation is complete. A jacking frame shall be used to transfer the thrust from the jacks uniformly to the conduit. The conduit shall be positioned by means of guide rails that will support the conduit and allow it to travel along the required line and grade. To prevent adhesion and eventual freezing, the conduit shall be coated with a slurry of wet bentonite or another suitable lubricant.
- (4) A minimum of one 2" X 10" lubricated hardwood plank shall be placed continuously under the pipe to assist in maintaining grade and to act as a skid board. The bottom of the tunnel shall be excavated to receive the plank which shall be held in place with pegs. All voids under and alongside the plank shall be filled with sand. Additional planks shall be used as the pipe increases in size.
- (5) The type of soil encountered and overhead structures shall determine the safe distance that excavation may proceed ahead of the lead pipe. In no case shall the distance exceed five feet (5').
- (6) As soon as a section is jacked to its final position, the area outside of the pipe shall be grouted as specified. The lift holes may be used for grouting purposes. Prompt grouting shall be completed to prevent settlement from above and potential damage to overhead structures.

d. Restoration

Restoration of the bore pit area and/or jacking pit area shall be per requirements listed in Section I, Part CC of this document.

2. If the Board approves crossing the road by the open cut method, the provisions for handling traffic will be as directed by the Board. All expense shall be borne by the Permit Holder. Open cuts will not be allowed during the winter months, except in emergencies.

Traffic Control - All applicable conditions of the Michigan Manual of Uniform Traffic Control Devices, 1994 Edition, as amended must be met, and it is the responsibility of the Permit Holder to abide by these conditions and requirements. Twenty-four (24) hours prior to the start of any open cut, it is the responsibility of the Permit Holder to notify the Board, 911, the local fire, police, and ambulance agencies, and school bus facilities of the proposed roadway closing. The roadway must be restored to a travelable condition at the earliest possible time and maintained for safe travel at the expense of Permit Holder.

No road will be closed without prior approval of the Board. Approval of road closures will require that detours be installed in accordance with Section I, Part M of these specifications.

Requests for road closures must be made in writing and include the location, length of time the road will be closed, approximate starting and completion dates, and reason for the request.

Guarantee and Maintenance - For a period of twelve (12) months from the date of acceptance by the Board, the Permit Holder shall guarantee that any failures in a concrete or bituminous patch will be replaced immediately upon notification.

On all open cut crossings of gravel roadways, the surface will be checked regularly, regraded and maintained as needed by the Permit Holder without notice from the Board, until the area can be maintained by the Board using routine procedures for this work.

Open cuts not part of public utility work will require a cash or maintenance bond for a minimum amount of five thousand dollars (\$5,000) or an amount determined by the Board for each open cut. Bond must be submitted to the Board prior to issuance of an open cut permit. This bond will be released after acceptance and at the end of the twelve months guarantee period.

If the road closure is not approved, traffic shall be maintained at all times. Depending on traffic volumes and other conditions, the Board may require the Permit Holder to provide by-pass lanes (either paved or unpaved), allow one lane traffic properly controlled, or some combination thereof. Traffic control shall be in accordance with Section I, Part M of these specifications.

Open cut crossings shall be made during off-peak traffic hours, normally between the hours of 9:00 A.M. and 3:00 P.M., unless otherwise approved and/or directed by the Board.

The placement of any pressure conduit, even if by open cut, will require a casing.

C. PAVEMENT REMOVAL

For all open cut utility road crossing trenches, the Permit Holder shall remove the pavement to a minimum width of five feet (5') and at least one and one-half feet (1 1/2') wider than the trench on each side. The Permit Holder shall plate the excavation and open the road to traffic if the work cannot be completed in one working day.

If the pavement is Portland cement concrete, the remaining slab shall have a width of at least five feet (5') from the patch to an existing joint. Sawcuts of the existing pavement surface will be required, and will be cut to allow for a minimum of eighteen inches (18") of support on undisturbed soil at all points. Where the existing surface is concrete, the sawcut shall be five inches (5"), or a minimum of one-half (1/2) the depth of the concrete, whichever is greater. For all other hard surfaces, the sawcut shall be full depth. Cuts in concrete residential and commercial drives shall be as above except that the patch width shall be a minimum of three feet (3') and the remaining slab width from the patch to the existing joint shall be a minimum of three feet (3').

If the pavement is bituminous concrete, the pavement shall be cut by sawing as noted in Part C.1. above.

D. BACKFILLING AND COMPACTION OF BACKFILL

Backfill material will be either sand, mixed backfill (flowable fill), or excavated material, as approved by the Board.

Sand backfill must meet the 2003 MDOT Standard Specifications for Construction for Granular Material Class II, compacted to 95% of the maximum density in maximum of twelve inch (12") layers. Copies of density tests, performed by a testing firm acceptable to the Board shall be on file with the Board.

Mixed backfill (flowable fill) must be a slurry mixture of fly ash, cement, sand, and water, mixed to form a slurry which can be poured into the trench. The ultimate strength is to be 100 to 150 lbs. per square inch. A typical mixture is approximately 1 part cement, 6 parts fly ash, and 50 parts sand.

Excavated material backfill is the material removed from the trench to allow installation of the new utility. Backfilling requirements shall conform to the current MDOT specification for the material in use, with compaction requirements meeting those for sand backfill.

All under-drain systems which are disturbed shall be rebuilt using new material and in a manner that completely restores their function.

E. GROUTING

Grouting of all voids outside the finished sewer barrel shall be done as soon as a section is completed. Grouting pressure shall be 60 psi, which in general shall be sufficiently high to fill the voids, but not sufficient to damage the sewer, adjacent structures or utilities.

The grout holes shall be at or near crown, but the locations may be altered by the Board. Spacing shall be ten feet (10') maximum. A grout pipe at least one and one-half inches (1 1/2") in diameter, with the control valve attached thereto, shall be inserted and securely caulked into the grout hole. Grout shall be fed through this pipe at the prescribed pressure so as to completely fill all void spaces between the outer pipe wall and the surrounding earth. If there is no visible escape outlet, grouting will be considered complete when no more grout can be forced through the grout pipe under the prescribed pressure. If it becomes evident that more grout is being used than could be effective adjacent to the sewer, the source of waste shall be investigated and stopped. Grout shall consist of mixture of Portland cement thoroughly mixed with mortar sand, with sufficient water to permit steady flow through the grout pipe. The mix shall be one part of sand to one part of cement. However, the proportions may be varied by the Board. If necessary to speed up setting of grout, approved admixtures or quick setting cement shall be used.

Following satisfactory grouting operations, the grout pipe shall be removed from the grout hole after the grout has taken its initial set. The space occupied by the grout pipe shall be completely filled with stiff mortar and troweled smooth at the inner face of the sewer wall.

This space shall be at least three inches (3") deep, chipping to that depth being required if necessary. When steel pipe is utilized, the following modifications to the above shall apply:

1. The pipe shall be smooth welded steel pipe with minimum strength and thickness as noted for casings under the boring method above.
2. A copy of the design computations for the steel pipe thickness and strength verifying the proposed pipe will be required by the Board prior to the issuing of a permit.
3. Splice welds on the steel pipe shall be kept to a minimum number and shall completely surround the circumference (inside and outside) of the pipe. All welding shall be done in accordance with the 2000 Edition of the American Welding Society Specification D10.12M/D10.12:2000, "Guide for Welding Mild Steel Pipe".
4. When jacking equipment is utilized, the same requirements with regard to grouting shall apply, as noted above. Also, the lubricant and hardwood planking shall be used as stated above.
5. As soon as a section is jacked to its final position, the area outside of the pipe shall be grouted. Grout holes tapped for no smaller than one and one-half inch (1 1/2") pipe, spaced at maximum ten feet (10') centers shall be provided. The grouting operation shall proceed as noted above. A threaded plug shall be installed in each grout hole as the grouting is completed at that hole.

F. SURFACE RESTORATION

The top twelve inches (12") of the open cut crossing of a gravel roadway will be 23A dense graded aggregate as specified in the 2003 MDOT Standard Specifications for Construction, compacted to 95% of maximum density and meeting the gradation requirements listed in Section 1, Part U.7.c. of these specifications.

Repair of an open cut in a hard surface roadway (concrete, bituminous or seal) will be done by placing a bituminous or concrete patch, as noted herein, constructed flush with the existing pavement surface in a manner which will provide a smooth ride.

Concrete will be Portland cement concrete patching mixture, type P-MS per Section 603 Concrete Pavement Restoration, of the 2003 MDOT Standard Specifications for Construction. Slump of the concrete, prior to adding any chloride, will be one inch (1") to three inches (3"), and the amount of chloride to be added will be per Section 603 as noted above.

Bar or mesh reinforcement of all concrete will be required. Bar reinforcement shall be deformed steel bars, Grade 60, meeting the requirements of ASTM A-615. Reinforcing for the concrete must meet the reinforcing of the adjacent roadway for the width of the cut. Hook bolts may be required by the Board.

Bituminous concrete shall meet or exceed the 2003 MDOT Standard Specifications for Construction for Hot Mix Asphalt Construction Practices, and Plant Mixed Hot Mixed Asphalt mixture numbers 36A Wearing & 13A Leveling for use on all roadways. Minimum

application rate shall be 165#/sq. yd. for wearing courses & 165#/sq. yd. for leveling courses or application rate shall match the thickness of the existing pavement.

Immediately upon completion of the backfill and prior to final restoration, the temporary trench surface shall be a bituminous cold patch material with a minimum thickness of two and one-half inches (2 1/2").

The final pavement cross-section of the restoration area will be consistent with Figure Nos. 6 or 7 contained in Section II of these specifications.

G. SHOULDER RESTORATION

All shoulders which are removed shall be completely rebuilt with a minimum of six inches (6") of 23A dense graded aggregate meeting the gradation requirements listed in Section I, Part U.7.c. of these specifications. If the existing shoulders included a subbase layer, it shall also be restored. If the shoulders are contaminated with excavated material, the contaminated portion shall be removed and replaced with 23A dense graded aggregate. The Permit Holder shall place any additional gravel necessary to restore the shoulders to the proper relative relationship with the road surface. Shoulder restoration shall be done as soon as possible during the first construction season immediately following the installation.

On projects which extend through several construction seasons, the shoulder restoration shall be done on the completed sections during the first available season and shall not be delayed until the entire project is completed.

H. ENCROACHMENTS

Encroachments on road right-of-way removed by the Permit Holder may be re-established on the right-of-way in locations determined by the Board. The Board reserves the right to have any encroachment within the road right-of-way moved or removed at their discretion and at the expense of the Permit Holder.

I. GRADE OF MANHOLE COVERS

Final height of manhole covers shall be determined as follows:

1. If the manhole falls within a paved road, the cover shall be flush with the pavement.
2. If the manhole falls within a gravel road or the shoulder of the paved road, the cover shall be six inches (6") below the surface.
3. If the manhole falls within a ditch, the cover shall be either sufficiently lower than the bottom of the ditch to allow for normal ditch maintenance or the ditch shall be relocated around the manhole and away from the road with a stable earth berm around the manhole or the ditch may be tiled and covered as approved by the Board.
4. Any manhole on the ditch slopes shall not protrude more than six inches (6") above the slope.

The type of manhole cover is at the discretion of the Permit Holder. If at any future time it is determined that the type of cover must be changed due to reconstruction, widening, surfacing, safety concerns, etc., of the road, the owner agrees, by constructing under the permit, to bear all costs of any change to the covers deemed necessary in the future.

J. DUST CONTROL

The Permit Holder shall maintain the work area in a safe, dust-free condition until all the work in a given area is completed, including the hauling of materials. The Permit Holder shall remove mud, dirt and other debris tracked onto the road surface at the end of each working day and whenever it becomes apparent in opinion of the Board that the debris will impede or create a danger to the vehicular traffic. Dust control shall be provided on any unpaved detour, bypass, or shoulder which is to be used by traffic. Chloride shall be used for dust control at a minimum concentration of 38%.

The Permit Holder shall be responsible for controlling dust on any unpaved detour, bypass, or shoulder, which is to be used by traffic. Chloride shall be applied to the unpaved areas used by traffic at a minimum concentration of 38%. Signage in accordance with the Michigan Manual of Traffic Control Devices must be used and maintained during the chloride application process. Detouring of traffic during the application process is not allowed. The Permit Holder must provide the Board with signed certified slips the chloride applied meets the specified concentration levels and conforms to applicable Federal, State and local requirements.

Permit Holder shall obtain a permit from the Board prior to placing dust control product other than chloride on a road. The Permit Holder shall comply with all the requirements outlined in the section above, with the exception of the type of dust control product that may be applied. If the Permit Holder chooses to apply a product other than a 38% chloride solution, they must provide the Board with the documentation necessary to ensure the product is applicable to this use and environmentally safe. This may include the following additional requirements:

1. Obtaining a sample from the source, having the sample analyzed and submitting the results to the Board prior to applying the product on the road.
2. Provide approval from the Department of Environmental Quality that the product is environmentally safe and safe to use for this purpose.
3. The Permit Holder shall maintain past records of the source/manufacturer of the product, where it was applied, copies of any tests, approvals or other documentation related to the product or application process for future reference by the Board.
4. Other requirements as stipulated by the Board, which may vary based on the product or application process being considered. The Board reserves the right to accept or reject the application process or type of dust control product.

K. DITCH CLOSURE

When a ditch is enclosed, other than a driveway, the Permit Holder will be required to install a minimum of one catch basin or manhole by the Board. The actual number of catch basins or manholes required will be determined at the time of the permit request, based on the length of frontage enclosed and the existence of adjoining ditch enclosures. Each catch basin or manhole shall have, at a minimum, an 18" sump and a solid bottom of the same material as the catch basin or manhole with the exception of a catch basin or manhole constructed of CMP which shall have a concrete bottom. All connections to the catch basin or manhole must be watertight.

All culverts and ditch enclosures removed in good condition by the Permit Holder may be re-laid in proper position. All culverts and ditch enclosures or sections thereof which are not in good condition after removal shall be replaced with new pipe meeting current Board standards unless otherwise approved. Culverts and other drainage structures that are damaged but not moved during the Permit Holder's operations must be fully repaired to the satisfaction of the Board.

L. WEIGHT RESTRICTIONS

Normal weight restrictions will be in effect at all times, except during the period when reduced springtime weight restrictions are in effect. If, due to the high volume of trucking, damage occurs to the roads, the Permit Holder must either enter into an agreement with the Board to make appropriate repairs of the road or reduce loads carried on the road sufficiently to eliminate possible damage.

M. MAINTAINING TRAFFIC, TRAFFIC CONTROLS AND DETOUR ROUTES

All applicable conditions of the Manual of Uniform Traffic Control Devices 1994 Edition must be met 24 hours prior to the start of any construction including open cut or roadway closing and are the responsibility of the Permit Holder. The Board, the local emergency agencies (911, fire, police, ambulance, etc.), and school transportation systems must be notified by the Permit Holder before a proposed roadway closing.

If a detour is needed for the proposed work, it must be restricted to the use of county primary roads only. The use of local roads for a detour route will not be allowed.

N. CONDUCT OF OPERATIONS

Any Permit Holder who, as determined by the Board, in its sole discretion, conducts operations in a manner detrimental to the Board's statutory obligation of maintaining roads and streets at all times in a safe and fit condition for the traveling public will be required to cease all operations within the right-of-way. If necessary, additional cash deposits and expense of maintaining a Board inspector (full time) may be required for the Permit Holder before the resumption of work, as determined by the Board, in its sole discretion.

O. DEPTH OF UTILITY COVER

Unless otherwise approved by the Board, all utilities shall have a minimum cover of three feet (3') below the road surface regardless of location within the road right-of-way. Where approved plans require depth greater than three feet (3'), the plan depth shall govern.

P. NUMBER OF ACTIVE CONTRACTS

The Board, in its sole discretion, reserves the right to limit the number of permits issued to a Permit Holder. The number of permits that can be issued to a Permit Holder will be determined by the number of active contracts the Permit Holder has and the available work force.

Failure of a Permit Holder to comply with permit provisions on other active permits shall be just cause to delay and/or limit issuance of additional permits.

Q. STORAGE OF MATERIALS

The Permit Holder shall store all materials far enough away from the road surface that they are not a hazard to the traveling public. The Permit Holder shall maintain sufficient clear areas on the shoulder that a car can park off the road in an emergency. Materials and equipment shall not block the vision of traffic seeking ingress or egress to a road. Only those materials that will be used by the Permit Holder in their immediate operations can be stored in the right-of-way.

R. MATERIALS

All materials used in restoring the roadway and appurtenances shall meet the 2003 MDOT Standard Specifications for Construction.

S. ELECTRICAL SUPPLY AND COMMUNICATION LINES

All installations, repairs, maintenance of electrical supply and/or communication lines are to be in accordance with the applicable Michigan Public Service Commission Rules and Regulations Governing the Construction, Maintenance and Operation of Electrical Supply and Communication Lines and the Installation, Maintenance and Operation of Station and Utilization Equipment.

T. DRIVEWAYS

Construction of a new driveway or reconstruction of a driveway connecting to a county road shall be allowed only after a permit has been obtained from the Board. The construction or reconstruction of a driveway shall conform to the standards and specifications in these rules unless the Board authorizes a change pursuant to the applicable provisions of these rules. The proposed construction or reconstruction shall be as described in the permit and plans or drawings attached.

U. COMMERCIAL DRIVEWAY

The Board has the responsibility of regulating and controlling the location, design and operation of access to roads and streets under its jurisdiction and has established certain policy guidelines concerning driveway design and construction. The Board's objectives are to provide maximum protection and safety for the public through the orderly control of traffic entering and leaving roads or streets at driveways, and also to provide a uniform policy throughout the County in the design and construction of driveways.

1. Permits

Prior to applying for a permit for commercial driveways, the site development plans for the complete project must be submitted to the County Highway Engineer for his approval. Plans shall provide sufficient detail so as to be used as construction plans.

The Permit Holder shall furnish all materials and bear all costs of necessary construction, including tapers, widenings, islands, pavement marking, signing, etc. Further, it shall be the responsibility of the property owner or lessee to maintain all driveways connecting the property to the roadway, as well as those appurtenances set forth in the permit as related requirements.

The Board reserves the right of inspection by its authorized representatives of any driveway construction within the road right-of-way. The Permit Holder shall reimburse the Board for services required for the review and approval of plans and for any on-the-job inspectors which are required. Failure to obtain a permit or to comply with the terms and conditions of an issued permit will cause the Board to take appropriate action as allowed in Act 200 of the Public Acts of 1969. All costs incurred in corrective action to comply with design standards, defective workmanship and/or materials shall be borne by the Permit Holder.

2. Bonds and Insurance

The minimum amount of the performance bond shall be \$5,000. A certified check, cashier's check or money order payable to the Road Commission in the amount established by the County Highway Engineer may be provided in lieu of a performance bond.

Performance bonds issued by an insurance company licensed to issue performance bonds in the State of Michigan on a form acceptable to the Board are required on all commercial

driveways in order to protect the Board against the cost of completing construction or repairing deficiencies. The County Highway Engineer shall set the amount of the bond in an amount that reasonably approximates the cost of the construction or repairs authorized by the permit.

Certificates of Insurance are required to ensure that claims for damage or personal injury can be met. General liability insurance carried by the Permit Holder is acceptable. Insurance amounts shall be as shown in the following chart which also includes acceptable amounts for automobile liability, worker's compensation and employer's liability. The Board, its agents, servants and employees shall be named as additional named insureds.

Type of Insurance	Limits	
Commercial General Liability	\$1,000,000	General Aggregate
	\$1,000,000	Products-Comp/Ops Aggregate
	\$ 500,000	Personal & Advertising Injury
	\$ 500,000	Each Occurrence
	\$ 50,000	Fire Damage (any one fire)
	\$ 5,000	Medical Exp. (any one person)
Automobile Liability	\$ 500,000	Combined Single Limit
Worker's Compensation & Employer's Liability	\$ 100,000	Each Accident
	\$ 500,000	Disease - Policy Limit
	\$ 100,000	Disease - Each Employee

3. Fees

A non-returnable fixed permit fee to cover the cost of processing the permit will be collected at the time the permit is issued based on the Board's current fee schedule.

A plan review fee to recover the cost of plan review may also be collected at the time the permit is issued. The plan review fee will be proportionately higher if deceleration and/or passing lanes are part of the driveway construction.

If the Permit Holder requests driveway replacement or reconstruction utilizing an existing curb opening, he will still be required to pay the fixed permit fee for processing the permit, but will not be liable to a plan review fee.

4. Deposits

A deposit in an amount reasonably estimated to cover all direct inspection costs by Commission personnel must be made before a driveway permit is issued on detailed projects involving road widenings and/or construction of enclosed storm drainage in the road right-of-way.

The Board's objective and intent is to recover actual costs incurred in connection with inspection of projects by the Board's representatives. Should the Board's costs be less than

the deposit amount, the excess will be returned to the owner. Costs in excess of the deposit will be billed to the owner.

5. Plans

Commercial driveways shall be designed and constructed in accordance with the Rules and Regulations of the Bay County Road Commission, the general guidelines contained herein and in accordance with the specific recommendations of the Board's Engineer.

All copies of driveway permit applications must be accompanied by a plan clearly indicating the following:

- a. Street name and address, roadway pavement, right-of-way and property lines, lot or parcel number, roadway appurtenances, medians (if existing) and dimensions of same.
- b. All buildings (proposed or existing) and all appurtenances to any business conducted (gas pumps, signs, canopies, etc.) and dimensions of same.
- c. Driveways to be constructed, proposed surfacing, proposed drainage scheme and dimensions including:
 - Width of driveway
 - Radii of driveway returns, islands and other points of curvature
 - Driveway elevations
 - The approximate angle the driveway makes with the road centerline
 - Proposed culvert or sewer grades with sufficient elevations upstream and downstream to show the extent of flow across the proposed development and to the proposed outlet
 - Typical cross-section thru acceleration-deceleration lane showing proposed subbase, aggregate base, pavement, curb, etc.
 - Location of any proposed landscaping
- d. Drainage plan and outlet for all storm drainage on the site. DRAINAGE FROM ADJACENT PARKING OR STORAGE AREAS ON PRIVATE PROPERTY MAY NOT BE DISCHARGED ONTO THE ROADWAY OR ITS APPURTENANCES.
- e. Location of the driveways including dimensions relating to:
 - Property lines and property lines extended to the pavement
 - Buildings and business appurtenances
 - Reference dimension to nearest cross road or street
 - Driveways on opposite side of roadway & adjacent properties
- f. North directional arrow.

The above requirements, when applicable, should be incorporated with appropriate guidelines from the Typical Drawings to form a complete plan for permit application.

6. Driveway Location

Driveways shall be located so that no undue interference with the free movement of normal traffic will result. Driveways should be located as far from the edge of the intersecting roadway as is possible. The radius of a driveway should not encroach upon the intersection radius of the roadway pavements.

All attempts shall be made to locate commercial driveways, including their radii and any associated acceleration/deceleration tapers & lanes required, entirely within the Permit Holder's roadway frontage, which shall be determined by the extension of the property lines to the pavement edge. Should this prove to be impractical, the Permit Holder shall secure written permission from adjacent property owners for construction of portions of the commercial driveway which will lie within property owned by others.

7. Construction

- a. All approach construction shall have an all-weather paved surface with curb & gutter, or as approved by the Board. **The following material thicknesses are minimums required by the Board.** Additional depth of each or all of the pavement cross-section layers described below may be required, should projected traffic volumes, loadings, or soil conditions warrant an increased pavement cross-section. A geotechnical analysis of the existing soil conditions is recommended to assist in determining a proper pavement cross-section design.
- b. A minimum six inch (6") thick sand subbase shall be placed with the construction of either a bituminous or reinforced concrete surface. The sand subbase shall meet the following gradation requirements for Granular Material Class II as detailed in the 2003 MDOT Standard Specifications for Construction:

100% passing 3"	0-30% passing No. 100
60-100% passing 1"	0- 7% loss by washing

Sand subbase shall be placed as described in the 2003 MDOT Standard Specifications for Construction for Roadway Earthwork, using the controlled density method.

- c. A minimum six inches (6") of compacted 23A Crushed Limestone Aggregate base shall be placed prior to placement of a bituminous surface course, while a six inch (6") reinforced concrete surface may be placed directly on the sand subbase.

The aggregate base material shall meet the following gradation requirements for 23A Dense Graded Aggregate as detailed in the 2003 MDOT Standard Specifications for Construction:

100% passing 1"	25-60% passing No. 8
	9-16% loss by washing
60-85% passing 3/8"	100% Crushed Limestone

- d. The bituminous surface shall meet or exceed the 2003 MDOT Standard Specifications for Construction for Hot Mix Asphalt Construction Practices, and Plant Mixed Hot Mixed Asphalt Mixtures 36A Wearing & 13A Leveling. The minimum rate of application shall be a total of 330 lbs./sq. yd. over a properly cured prime coat. Asphalt-Cement shall be 120-150 pen.
- e. The reinforced concrete surface shall meet or exceed the 2003 MDOT Standard Specifications for Construction for Concrete and Steel Reinforcement. The size and weight of reinforcing shall be approved by the Board prior to the start of construction.
- f. If the proposed commercial drive access abuts to a roadway that has existing curb & gutter, sawcutting and removing the back of curb is NOT allowed. The entire length of existing curb & gutter must be removed and replaced with new curb & gutter that allows for access to the proposed development. If the existing curb & gutter abuts a concrete roadway, the new curb & gutter must be doveled into the concrete roadway in accordance with the 2003 MDOT Standard Specifications for Construction.
- g. Sidewalk, when called for on plans, shall be not less than four inch (4") thickness except at driveways where the thickness shall be six inches (6"). The 2003 MDOT Standard Specifications for Construction will apply. Width shall be five feet (5'). All Americans with Disabilities Act (ADA) requirements for access shall be met.
- h. Other items, such as bituminous curb, not included in these specifications shall be approved by the Board prior to design completion or start of construction.
- i. The pavement section required for road widenings, crossovers or taper sections shall be as directed by the Board and may include submission of soil borings and a pavement design to the County Engineer for approval.
- j. The shoulder area between adjacent commercial driveways serving the same property which are less than two hundred feet (200') apart (centerline to centerline) must be paved as directed by the County Highway Engineer.

8. Drainage

- a. All proposed road approaches shall be provided with facilities for adequate surface and sub-surface drainage which will allow the free flow of existing or additional storm drainage produced from the proposed road approach. Unless the approach is located on a crest, this shall be accomplished by the use of enclosed storm sewers.
- b. In the portion of the approach where storm sewers are not required for surface drainage, and where the Board deems necessary, a six inch (6") perforated pipe with geotextile wrap shall be provided for subsurface drainage. The pipe shall be installed with appropriate fittings and backfilled with Granular Material, Class II to a minimum of twelve inches (12") above and six inches (6") around and below it. The

pipe, geotextile wrap and Granular Material, Class II, shall meet or exceed the 2003 MDOT Standard Specifications for Construction.

Granular Material Class II shall meet the following gradation requirements:

100% passing 3"	0-30% passing No. 100
60-100% passing 1"	0- 7% loss by washing

- c. Where drains or ditches cross private property, the proprietor shall furnish a recorded easement thirty feet (30') wide for ditches or closed drains, to allow for maintenance and/or surface construction. All easements shall be submitted to the Board before the permit will be signed by the Board.
- d. Storm sewers shall be provided with a minimum of twelve inches (12") of ground cover.
- e. Any areas of the development which do not drain into the approach drainage system shall be shown on the plan with a note indicating disposition of water accumulating on such areas.
- f. Sufficient catch basins and manholes shall be installed to adequately provide for surface drainage and for maintenance of the system. Size of structures will vary with diameter and number of pipe entering the structures.
- g. Where drains pass under the approach, the crossing shall be made with pipe which meets 2003 MDOT Standard Specifications for Construction for Class "A" Culverts and shall be a minimum of twelve inches (12") in diameter. End sections and/or concrete bag headwalls shall be constructed at the ends of all culverts according to current Board requirements.
- h. Storm sewers shall be at least twelve inches (12") in diameter and shall meet or exceed 2003 MDOT Standard Specifications for Construction for Reinforced Concrete Circular Pipe.
- i. County road drainage facilities may not be used to drain storm water from private property. Further, no drainage from adjacent parking or storage areas may be discharged onto the roadway.

9. Driveway Dimensions

Driveways must be designed to allow safe and expeditious vehicle movements to and from the roadway. Driveways shall conform to the design and dimensions included in these rules. The Board may, however, in its sole discretion, consider alternate driveway designs which vary from the typical designs consistent with public safety, and based upon traffic volumes, drainage requirements, the character of the use of land adjoining the road, and other requirements in the public interest. Variances issued by the Board may be withdrawn or altered in the interest of safety in the event the conditions that justified the variance no longer exist.

10. Maintenance

The Permit Holder will be responsible for the maintenance of all work constructed or placed in the road or street right-of-way except for widening lanes which are incorporated into the main traveled roadway. This responsibility shall include the driveway, pavement and subsurface base materials, curb and gutter, shoulders, drainage, landscaping, sidewalk or other appurtenances associated with the driveway. Maintenance shall also include snow removal.

11. Inspection

All driveway construction will be subject to inspection by the Board. The executed permit will provide the telephone number to call for this service. Full time inspection for detailed projects involving road widenings and/or the construction of enclosed storm drainage in the right-of-way shall be performed under the supervision of a registered professional engineer. The engineer shall certify (over his professional seal) that the project has been constructed in accordance with the approved plans and specifications.

12. Signing

It is the Permit Holder's responsibility to provide, erect and maintain all necessary signing (Stop, Keep Right, Do Not Enter, Road Work Ahead, etc.) and/or pavement markings as outlined in the Michigan Manual of Uniform Traffic Control Devices, 1994 Edition or as required by the Board. The plans shall indicate the signing and pavement marking required, as specified above. All expenses related to maintaining traffic during construction shall be the responsibility of the Permit Holder.

V. RESIDENTIAL DRIVEWAY

Property owners shall install or replace their driveway providing access to a county road, only under a permit granted by the Board.

1. Construction

Sawcutting the back of an existing curb and gutter to provide access to a residential property is allowed, if the following conditions are met.

- a. The cut must be made with a hydraulic saw that is capable of cutting entirely through the existing curb. The existing curb can be cut from either the back or front side.
- b. If the curb is cut from the backside, the Permit Holder shall excavate behind the curb to a width and depth to comfortably accommodate the saw and worker. The excavation behind the curb shall be a minimum of 4 feet.

- c. The cut shall be straight and true and the gutter flow line maintained. The cut shall also be angled slightly from back to the front of the curb to allow drainage off the sawed section and provide a smooth transition to the abutting driveway (See Figure 3C, Section II).
- d. End taper lengths shall be a minimum of 10” and a maximum of 16”. The cut shall extend from the top of the existing curb to the new, cut gutter flow line and extend entirely through the existing curb.
- e. All rough edges shall be ground with a concrete cup grinder with a diamond disk.
- f. The final top of the new cut curb shall not vary by more than 1/8” from the 1” dimension required as shown in Figure 3C in Section II.
- g. The Permit Holder shall also protect the existing curb and gutter before, during, and after sawcutting from damage. The sawcutting shall not harm or weaken the structural integrity of the remaining curb and gutter. Any damage caused to either the section of curb being cut or abutting sections of curb and gutter shall be repaired to the satisfaction of the Board and all costs associated with the repair will be the responsibility of the Permit Holder.
- h. Partially cutting through the existing curb and “breaking off” the curb is NOT allowed and will require the Permit Holder to fully remove the existing curb and gutter for the entire length of the proposed curb cut and replace it with new curb and gutter for the residential entrance.
- i. In the event a sawed curb cut was not done to the specifications outlined above or a section or sections of the resulting cut curb are damaged to the point the remaining curb and gutters’ structural integrity is compromised, the Board reserves the right to require the Permit Holder to fully remove and replace the cut curb AND gutter.

Concrete driveways constructed on non-curbed roadways may abut the existing road edge. The Board shall establish an elevation at the road edge for the Permit Holder to prevent damage to and from snow removal equipment.

2. Drainage

Culvert pipe, where required, shall be of a new material meeting the present specification for Class “A” culverts as listed in the 2003 MDOT Standard Specifications for Construction. Acceptable materials are reinforced concrete, corrugated spiral ribbed steel, corrugated/spiral ribbed aluminum alloy, and American Association of State Highway and Transportation Officials M-294 smooth lined corrugated Polyethylene Pipe Type S (“CPE”). CPE shall have a minimum cover of twenty-four inches (24”).

The size of the proposed culvert will be determined by the Board. Minimum size is twelve inches (12"). CPE can only be used where culvert size required is twenty-four inches (24") or less in diameter. The Bay County Drain Commissioner will determine the size where the culvert is to be installed in a county drain.

Installation of culvert pipe shall be done in accordance with the 2003 MDOT Standard Specifications for Construction.

a. Culverts twelve inches (12") to thirty inches (30") in diameter

The length of pipe required shall be twenty feet (20') for each driveway, plus six times the difference between the elevation of the edge of the road at the driveway and the elevation of the ditch. This total shall include the length of the required culvert end sections for culverts between twelve inches (12") and thirty inches (30") in diameter. Specific situations where conflicts may arise due to proposed location of a drive in relation to neighboring property lines shall be referred to the County Highway Engineer for recommendations and resolution. These recommendations may result in the steepening of end slopes, allowing the installation of a headwall, a combination of both, or other solutions as necessary consistent with public safety and other requirements in the public interest. To avoid erosion or loss of fill material into the ditch, the slopes shall be seeded and mulched. A gravel surface shall be placed within ten (10) days of installation of the driveway.

b. Culverts greater than thirty inches (30") in diameter

Driveways requiring pipe greater than thirty inches (30") in diameter may be constructed with headwalls instead of end sections, and the pipe length shall be no less than twenty-four feet (24').

Headwalls, where permitted, shall be constructed of poured in place concrete, burlap cloth bags filled two-thirds full with wet concrete consisting of one part cement to six parts aggregate with steel rods driven through or any other approved solid headwall. Others may include treated timbers, concrete blocks, bricks and the like, or other materials that will prevent the fill material to flow through causing the ditch to fill. The type of headwall shall be approved by the Board before installation. Stacking "QuikCrete" bags for driveway headwalls will not be allowed. The top of the headwall shall be level with the road edge. The line and grade will be staked by the Board to insure a proper flow line. This will be done at the location designated by the Permit Holder.

3. Maintenance

Driveways exist only for the use of the property owner or occupant and, if a problem shall develop as a result of any type of failure of the culvert, the owner or occupant, whatever the case may be, shall be directed by the Board to correct the problem to insure uninterrupted flow of storm water. If the owner or occupant fails to correct the problem within fifteen (15) calendar days after notification by the Board or if after a good faith attempt the Board is unable to notify the owner or occupant, the failed culvert shall be removed forthwith by the Board without any further notice and all costs in doing so shall be paid by the property owner.

Removal of a failed culvert may occur immediately in the event of an emergency. The property owner or occupant shall pay all of the costs of any such removal prior to obtaining a permit from the Board for a replacement culvert.

W. CHANGE IN USE

The owner of property served by a driveway connecting to a county road shall obtain a new permit from the Board when a change or expansion of the use of the property abutting a road occurs. A change in use includes, but is not limited to, a change from residential to commercial use; additional access to another commercial property from/through a previously permitted driveway; expansion of an existing use; a change in the type of commercial operation or a proposed use that requires a special use permit from the local land use entity. A change in the use of the property may require a change in the number, design, or location of the driveway or driveways that serve the property.

X. APPEAL PROCEDURE FOR DRIVEWAY PERMITS

The Board shall decide appeals and requests for variances.

A person wishing review of either a denial of a permit application or request a variation from the Revised Permit Rules, Standards and Specifications for Work within Right-of-Way, Overhead and Underground Construction, Driveways, Banners and Parades shall submit a written appeal to the Board, stating with specificity the facts in support of the request within seven (7) days of the transmittal of the denial. A request for variance from permit standards and specifications in these rules may be submitted as an attachment to the permit application and shall include the reasons for the request for a variance and documentation, if any, in support of the request.

The Board will make a final determination within thirty (30) days of submission of an appeal or request for a variance; either granting in full, in part or imposing such conditions as it deems necessary. A copy of the Board's decision setting forth the reasons for its decision shall be sent to the Permit Holder by first class mail within seven (7) days of its decision.

Y. HAUL ROUTE PERMIT REQUIREMENTS

The Permit Holder will provide the Bay County Road Commission with a maintenance bond on the subject road or roads for the entire length of the haul route. The maintenance bond amount will be determined by the Board and will vary for each permit based on the length of the haul route and the type of road surface within the haul route limits. This bond shall remain in effect until the Permit Holder has completed hauling from the site and for a period of 90 days beyond. Any costs incurred by the Bay County Road Commission to maintain the haul route will be charged directly to the Permit Holder. The permit for this route will be rescinded should the Permit Holder fail to reimburse the Board for work completed to maintain the haul route.

The Permit Holder will provide dust control (calcium chloride treatment, 38% solution, double pass) on gravel roads 100' in each direction beyond the front of the inhabited properties along the haul route as needed during the haul period. The Board will arrange for such treatment, as

necessary, depending on received complaints and the district foreman's evaluation. Such treatment shall be charged to the Permit Holder. In the event the Permit Holder is delinquent or refuses to reimburse the Board for provided dust control or maintenance of the haul route, the Board reserves the right to rescind the Permit Holder's haul route permit and charge the outstanding or unpaid amount against the Permit Holder's maintenance bond.

It is also agreed that the Permit Holder shall keep and maintain vehicle speeds at a safe level, which will help alleviate excessive dust and wheel impact force upon the road.

The Board's Engineer will videotape subject road prior to issuing a Haul Route permit and keep the tape on file for future reference as necessary.

The Permit Holder will supply the necessary gravel to repair any sand breaks, rutting, or damaged areas, etc., which are created as a result of the trucking operation. The gravel roads along the haul shall have a minimum of 3" aggregate surface remaining at the end of the haul period. Gravel will be provided by the Permit Holder throughout the duration of the haul as deemed necessary by the Board. The Board will work with the Permit Holder to grade or shape the road when new gravel is added. The Permit Holder will supply and haul the gravel and will coordinate grading operations with the Board. In addition, the Board will provide routine grading as necessary.

Should any deficiencies or conditions that cause concern for either party arise, a meeting between both parties will be scheduled immediately to reevaluate this understanding and discuss the actions necessary to address the concern.

Z. BANNER PERMITS

The Board's authority and adoption of the rules and requirements herein are outlined in Act 200 of 1969, MCL 247.321 through 247.329 attached as Appendix 1. Any conflict between Act 200 and the Board's Revised Permit Rules, Standards and Specifications for Work within Right-of-Way, Overhead and Underground Construction, Driveways, Banners and Parades, the rules contained herein shall govern.

"Banner" means an arrangement of words, lettering or symbols or a decorative device, including a Christmas decoration, suspended over any portion of a highway or adjacent to a travel lane.

A person, organization or governmental unit shall not erect or suspend a banner, decoration or similar object over a road unless a permit has been obtained from the Board.

If Applicant or Permit Holder fails to comply with any provisions of a permit or fails to obtain an appropriate permit, the Board may halt the activity for which a permit is required until adequate corrections have been made. Costs incurred by the Board in correcting failure to comply with the terms and conditions of a permit, failure to obtain a permit or defective workmanship or materials shall be borne by the Applicant or Permit Holder undertaking the activity.

The Applicant shall perform all work and pay all costs in connection with permitted activities.

A permit for the installation of banners to be placed within or over a road right-of-way may be issued by the Board only to the governing body of a city, village, township, civic group or organization.

An application for a permit for the installation of a banner shall be in the manner as prescribed by the Board.

An application shall include the following information:

1. Activity in connection with which the banners are to be placed.
2. Location of the proposed installation including distance to overhead traffic control devices.
3. Description of the banners, including any legend or symbol thereon.
4. Height of an overhead banner at its lowest point above the pavement.
5. Date on which the banner will be installed and removed. This period shall not exceed a time period specified by the Board. An acceptable period of time for banners, other than Christmas decorations, to be in place is 3 weeks, and an acceptable duration for Christmas decorations to be in place is 6 weeks.
6. Such other information as the Board may require.

An application shall be accompanied by a copy of a resolution of support from the local governing body unless a blanket resolution which has the same effect and authorizes the same conditions as an individual resolution but covers issuance of permits for a specified period of time is on file with the Board.

The design, method of installation and location of banners shall not endanger persons using the road or unduly interfere with the free movement of traffic.

An overhead banner shall have a minimum bottom height of 18 feet above the pavement, shall not be placed closer than 100 feet on either side of traffic signals, and shall not be placed so as to obstruct a clear view of traffic signals or other traffic control devices.

A banner shall not have displayed there on any legend or symbol which may be construed to advertise, promote the sale of or publicize any merchandise or commodity, or to be political in nature.

A banner shall not have displayed thereon any legend or symbol which is or purports to be an imitation of or resembles, or which may be mistaken for, a traffic control device, or which attempts to direct the movement of traffic.

Decorations shall not include flashing lights that may be distracting to motorists.

A city, village, township, civic group or organization receiving a permit shall faithfully fulfill permit requirements and shall indemnify and save harmless the Board from claims of every kind arising out of the use of an issued permit.

A permit for the installation of a banner may be canceled by the Board if the installation becomes dangerous to motorists or unduly interferes with the free movement of traffic.

AA. PARADES AND CELEBRATIONS

A permit granting permission for the temporary closure of a road for a reasonable length of time for a parade, celebration or festival may be issued by the Board only to the governing body of a city, village, township, civic group or organization.

An application for a permit to close or partially close a road for a parade, celebration or festival shall be in the manner as prescribed by the Board.

An application shall state the nature of the activity for which the permit is requested, the dates and times it is proposed to close and reopen the road to traffic and such other information as the Board may require. The reasonable period of time shall be approved by the Board. An application shall be accompanied by a copy of a resolution of support from the city, village or township where the road is requested for closure or partial closure.

A permit shall be issued subject to the following conditions:

1. The closure or partial closure and the use of a detour route shall not unduly interfere with the safe and free movement of traffic.
2. A detour route must be restricted to the use of county primary roads only. The use of local roads for a detour route will not be allowed.
3. A suitable alternate location is not available for the parade, celebration or festival which is more acceptable for traffic safety and causes less interruption of traffic.
4. A closure or partial closure normally shall be allowed during daylight hours only. When temporary nighttime closure is permitted points of potential hazard, barricades and warning traffic signs shall be lighted at the permittee's expense. The lighting shall be in accordance with requirements and specifications of the Board.

Traffic control devices installed in conjunction with a closure, partial closure or detour route shall conform to the provisions of the 1994 Michigan Manual of Uniform Traffic Control Devices, as amended.

Required traffic control devices may be furnished and installed either by the local governing body, civic group or organization or by the Board. Costs arising from the installation, maintenance and removal of such devices shall be borne by the Permit Holder.

The local governing body, civic group or organization shall provide necessary police supervision, establish and post necessary detour signs and assume liability for damage claims which may arise as a result of the closure or partial closure.

The closure or partial closure shall not be for the purpose of allowing private commercial activities, such as advertising or sale of goods, wares or produce.

Insurance and Indemnity – All Applicants and Permit Holders shall be required to execute a written indemnity agreement in favor of the Board. This coverage is primary to the Board and not contributing or pro rata with any other insurance or similar protection (e.g., risk management association) which is or may be available to or carried by the Board. The certificates and policies of the required comprehensive general liability insurance shall provide and be endorsed as follows:

The Board of County Road Commissioners, County of Bay (Board), its officers, employees, and duly appointed agents are additional insureds.

The insurance policy cannot be cancelled without providing a thirty (30) day written notice to the Board. The amount of coverage required is listed below. Prior to the issuance of any permit, the Applicant shall immediately provide the Board with a certificate or other evidence that all required insurance coverages have been obtained. The Board will not issue a permit if the Applicant fails to provide this insurance and indemnity agreement.

General Liability with broad form general liability endorsement or equivalent. Limits of liability shall not be less than \$1,000,000 per occurrence and aggregate combined single limit for personal injury, bodily injury and property damage.

BB. ENFORCEMENT

If, upon inspection, a driveway constructed or reconstructed after the effective date of these rules is found to be in violation of these rules, the owner shall correct any deficiencies within a period of time not more than thirty (30) days, specified in a notice of violation sent by certified mail to the owner. Dangerous or hazardous conditions shall be corrected immediately. If the owner fails to make the necessary corrections within the period of time stated in the notice, the Board may perform the necessary corrections, with the costs incurred to be reimbursed to the Board by the owner.

In the event of failure to comply with the terms and conditions of any permit issued in accordance with these rules or failure to obtain an appropriate permit, the Board shall have the right to halt access to the site until such time as adequate corrections have been made. All costs incurred by the Board in correcting any failure to comply with standards and specifications for driveways, failure to obtain a permit or defective workmanship or materials shall be borne by the Permit Holder or person undertaking the activity and taken from any required bond.

CC. RESTORATION OF RIGHT-OF-WAY

All road drainage shall be restored as soon as possible upon completion of the proposed construction. Ditches, ditch slopes and other areas within the right-of-way shall be restored to their original conditions, as ascertained by the Board, prior to construction.

All areas within the right-of-way outside the traveled portions of the road which are disturbed as a result of the Permit Holder's operations must be restored with topsoil, seed and mulch, or sod as directed by the Board. The area shall be maintained until final settlement has taken place and ground cover has been re-established. The Permit Holder shall hold all mulch in place by a spray coating of asphalt emulsion unless hydroseeding methods are used. It is the intent of this specification that in all areas where an effective ground cover existed prior to construction, an effective ground cover shall be fully re-established as soon as possible and prior to permit release. Seeding and sodding shall be done during the first landscaping season immediately following the installation. On projects which extend through several landscaping seasons, seeding and sodding shall be done on the completed sections during the first available season and shall not be delayed until the entire project is completed. Failure to comply with this specification shall be just cause for the Board to stop the remaining construction work on the project until the required seeding and/or sodding is completed. Sodding may be advisable and/or necessary in areas where topsoiling, seeding and mulching cannot reasonably be expected to provide the effective ground cover required because of steep slopes or grades, volumes of water or other conditions. This work shall be per 2003 MDOT Standard Specifications for Construction, Sections 815 & 816.

DD. AUTHORITY

None of the provisions contained in Sections I and II shall be construed so as to limit the authority of the Board, in its sole discretion, to refuse to issue permits when:

1. The conditions of the roads, streets, alleys and driveways are such that the Permit Holder's operations would cause harm or injury to the highway and/or the traveling public.
2. In the opinion of the Board, after considering public safety based upon traffic volumes, drainage requirements, the character of the use of land adjoining the highway, and other requirements in the public interest, the proposed roads, streets, alleys and driveways would cause harm or injury to the highway and/or the traveling public.
3. Any of the requirements of these rules, standards and specifications are not met.

The Board reserves the right, in its sole discretion, to add to or to delete from the rules, standards and specifications contained in Sections I and II, in specific instances, so long as any such additions or deletions are consistent with public safety and based upon traffic volumes, drainage requirements and the character of the use of land adjoining the highways, proposed streets, roads, alleys and driveways and other requirements in the public interest.

Permits

SCHEDULE OF PERMIT FEES & BOND REQUIREMENTS CONSTRUCTION PERMITS

Effective: December 22, 2004

PERMIT CATEGORY	PERMIT FEES
Yearly Blanket Permit (To work within the right-of-way) *	\$100
Yearly Survey Work Blanket Permit (To work within the right-of-way)	\$100
Ditching (Requires minimum \$5,000 bond)	\$20
General Permit to work within or occupy R.O.W. (Single use only)	\$20
Commercial Driveway - First Approach (Requires minimum \$5,000 bond)	\$100
Commercial Driveway - Each Additional Approach (May require additional bonding)	\$50
Ditch Enclosure	\$25
Residential Driveway w/Culvert - Construct new or repair/replace an existing	\$20
Residential Driveway Concrete Approach - Construct new or repair/replace an existing	\$20
Residential Driveway Curb Cut	\$20
Residential Driveway – Asphalt Paving (Under Yearly Blanket Permit per Drive)	\$10
Pole and/or Anchor Replacement and New Pole and Anchor (Under Yearly Blanket Permit per Pole)	\$10
Underground installations (lineal construction) \$.10/ft. (MIN)	\$40
(MAX)	\$300
Public Water Main and Sanitary Sewer Projects Bond for 5% of the As-Bid Construction Cost or \$5000, whichever is larger.	TBD
Road Crossing - Open Cut - Paved Road (Includes utility services)**	\$100
Road Crossing - Open Cut - Gravel Road (Includes utility services)**	\$50
Road Crossing – Bore (4” or larger requires minimum \$5,000 bond)	\$25
Haul Route (Bond to be determined by Board)	\$25

TBD – To be Determined (by Board at time of Application)

*Utility Company crews, as well as, Utility Company Sub-Contractors must apply for a Yearly Blanket Permit. Utility Company Sub-Contractor’s cannot operate under the Utility Companies Yearly Blanket Permit. The Contractor shall provide Proof of Insurance per the requirements in the Boards’ “**Revised Permit Rules, Standards and Specification for Work within the Right-Of-Way, Overhead and Underground Construction and Driveways**”.

**Open cuts not part of public utility work will require \$5,000.00 Cash Bond per cut or a minimum \$5,000 Performance Bond.

**ABANDONMENT, DISCONTINUANCE AND RELINQUISHMENT OF
JURISDICTION OF ROADWAYS**

Effective: December 22, 2004

Petition with signatures of all owners of record and abutting occupants	\$100
Petition, all other cases	\$300

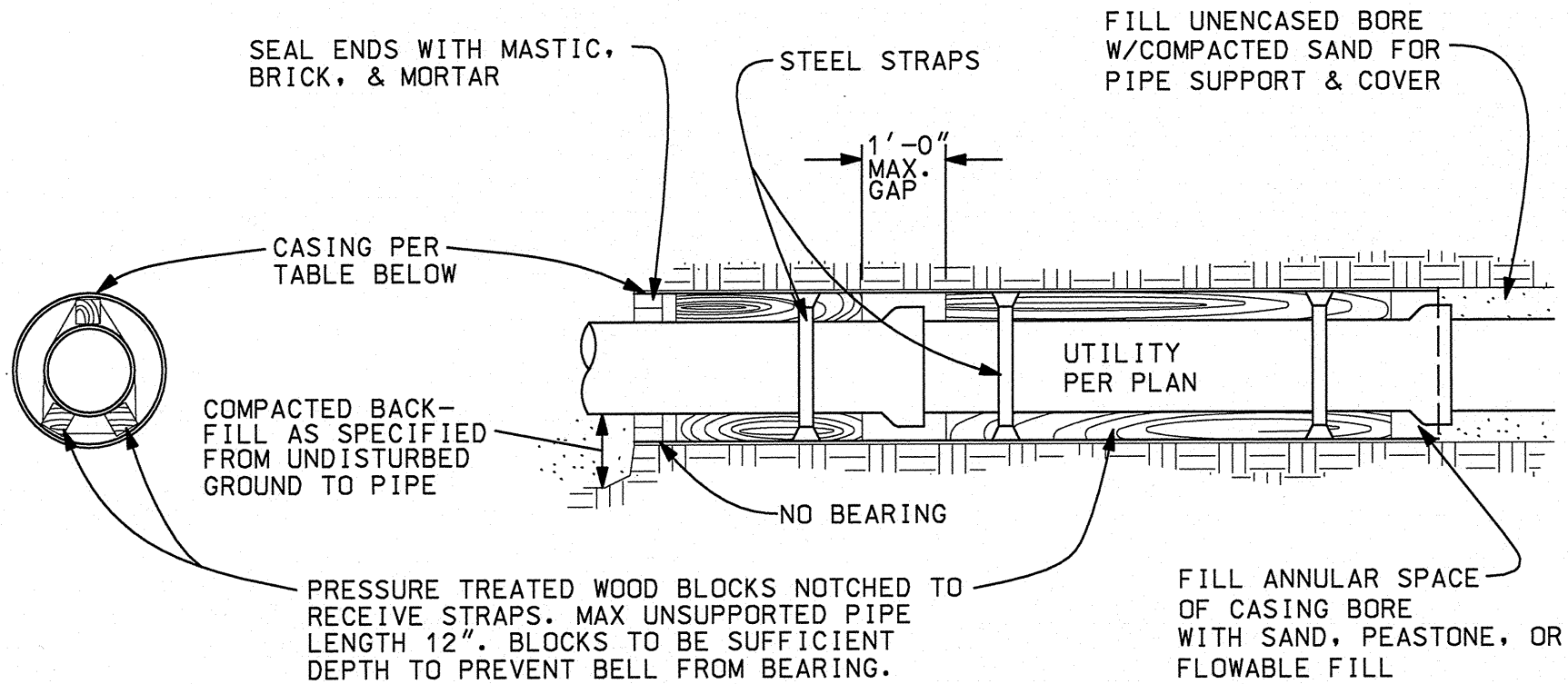
BANNERS, PARADES, CELEBRATIONS

Effective: December 22, 2004

Parades, Celebration and Festival Permit (Includes Block Parties) Requires \$1,000,000 Insurance Liability Policy	\$25
Banner	\$25

Act No. 212, Public Acts of 1980 (MCLA 224.196) and Section 5 of Michigan Public Act 200 of 1969 (Driveway Act), MCL 247.325, establishes the right of Road Commissions to require permits and to charge fees to recoup costs actually incurred. Therefore, the above schedule is not meant to be inclusive in recouping costs or scope of fees covered and may be increased to cover actual costs incurred.

Bonds may be held by the Board for a period of 1 year or more depending on the nature of the permitted activity.

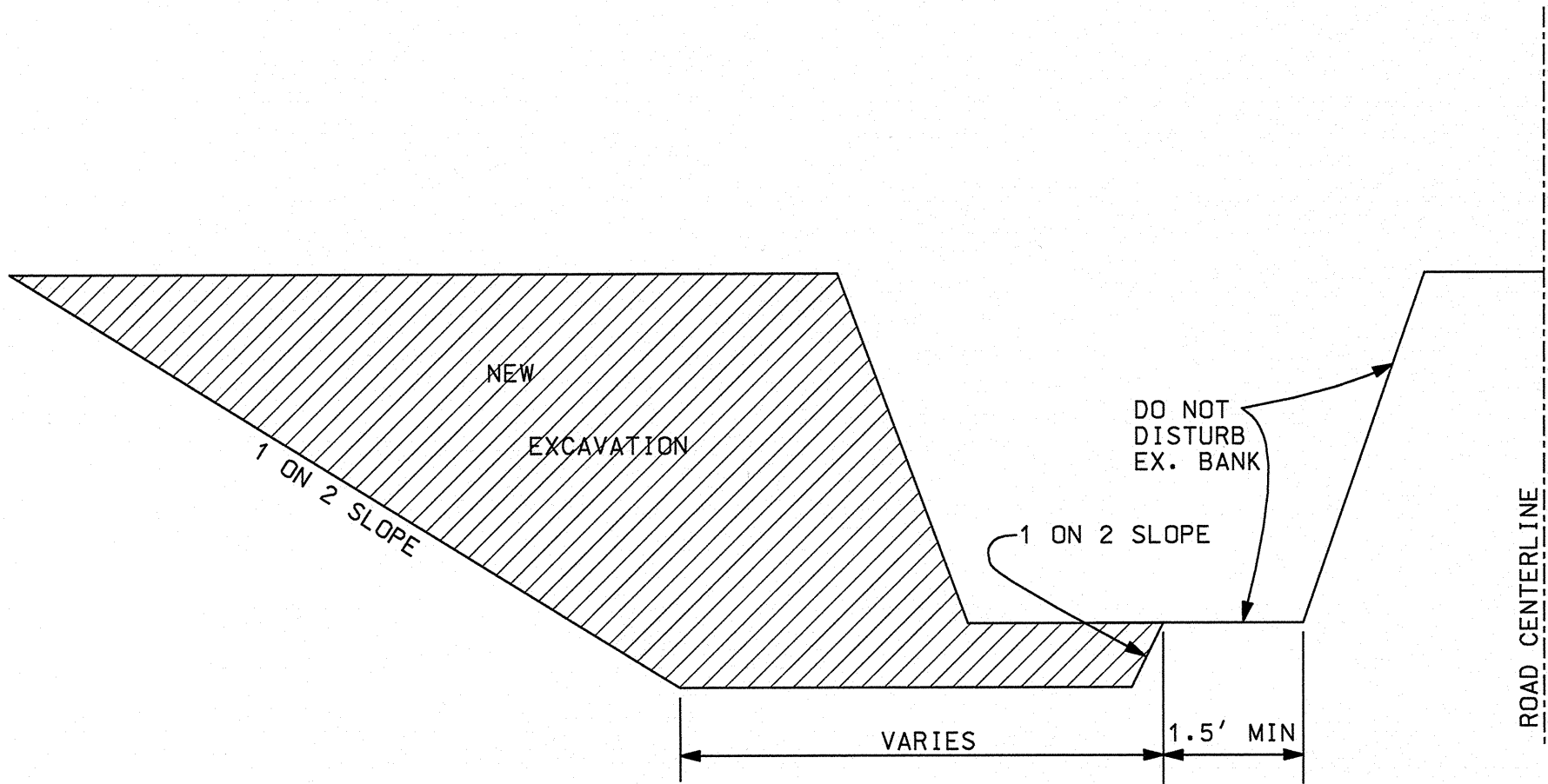


ROAD CASING SIZES		
PIPE DIA. (IN.)	(MIN.) CASING DIA. (IN.)	(MIN.) CASING WALL THICK (IN.)
6	16	0.25
8	18	0.25
10	20	0.25
12	22	0.25
15	26	0.312
18	30	0.312
21	26	0.312
24	40	0.438

BORING DETAIL

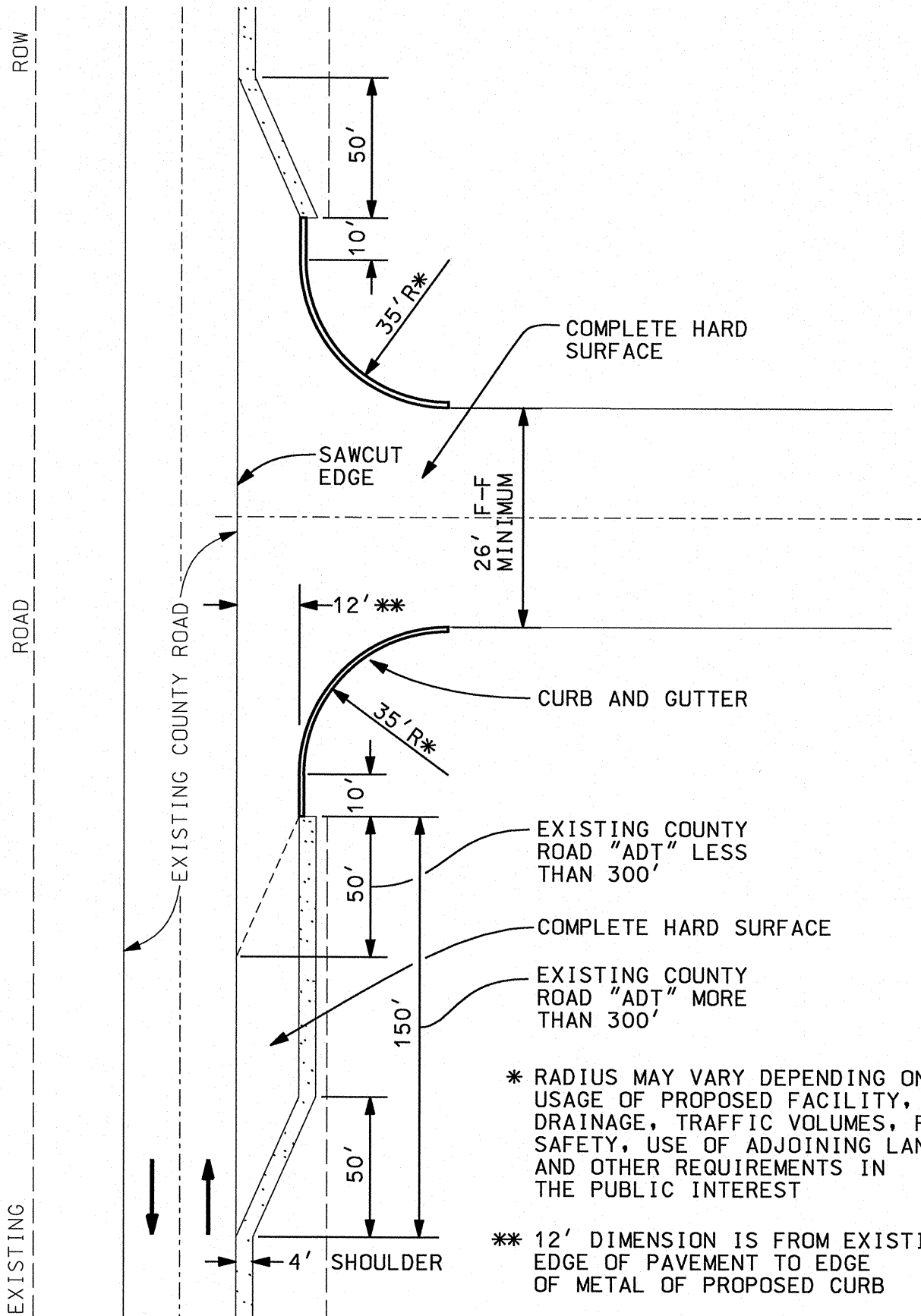
NO SCALE

EXISTING ROAD ROW



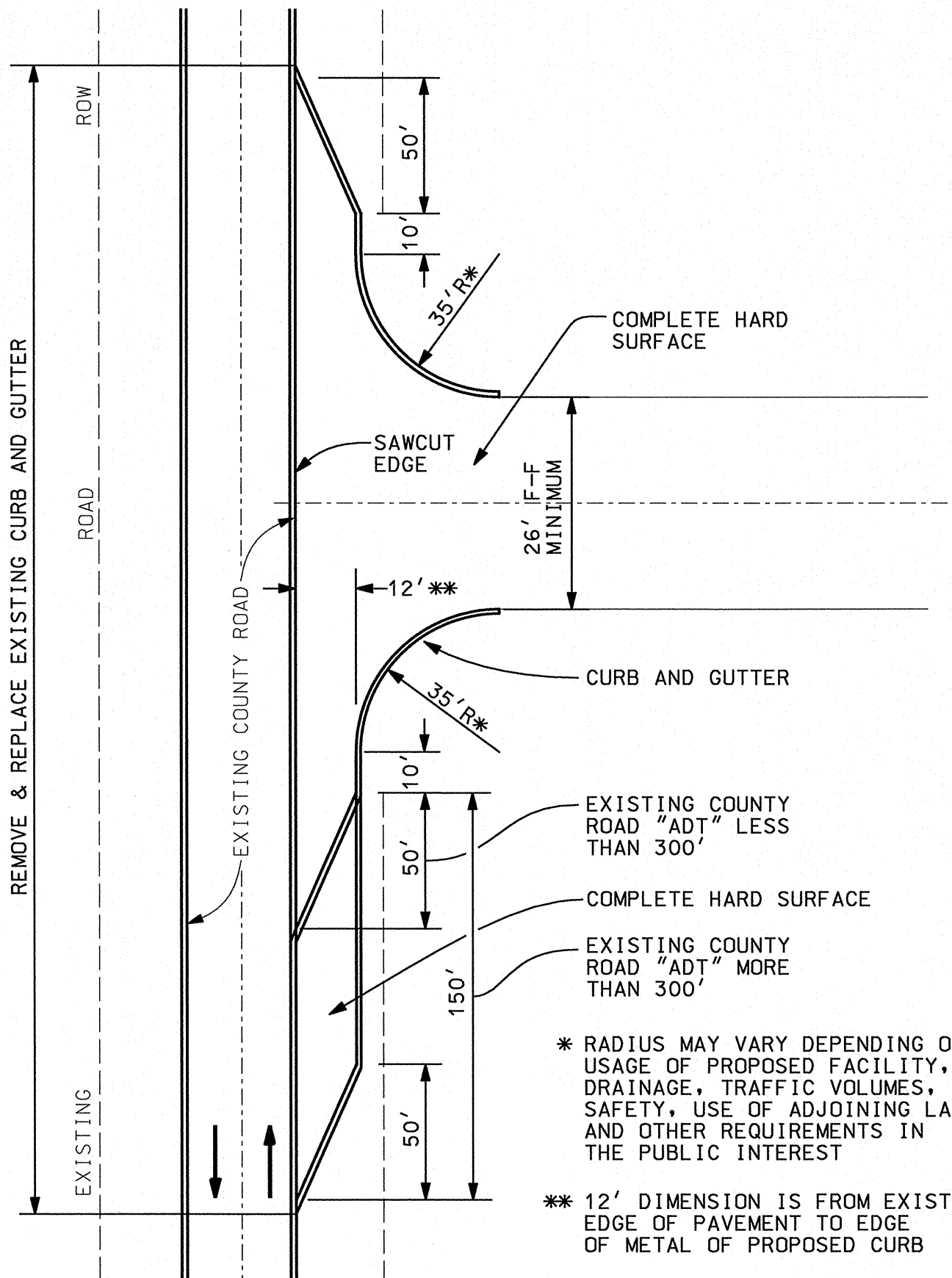
DITCH CLEANOUT DETAIL

NO SCALE



TYPICAL DETAIL FOR TWO WAY COUNTY ROAD COMMERCIAL DRIVE APPROACH ON UNCURBED ROADWAY

NO SCALE

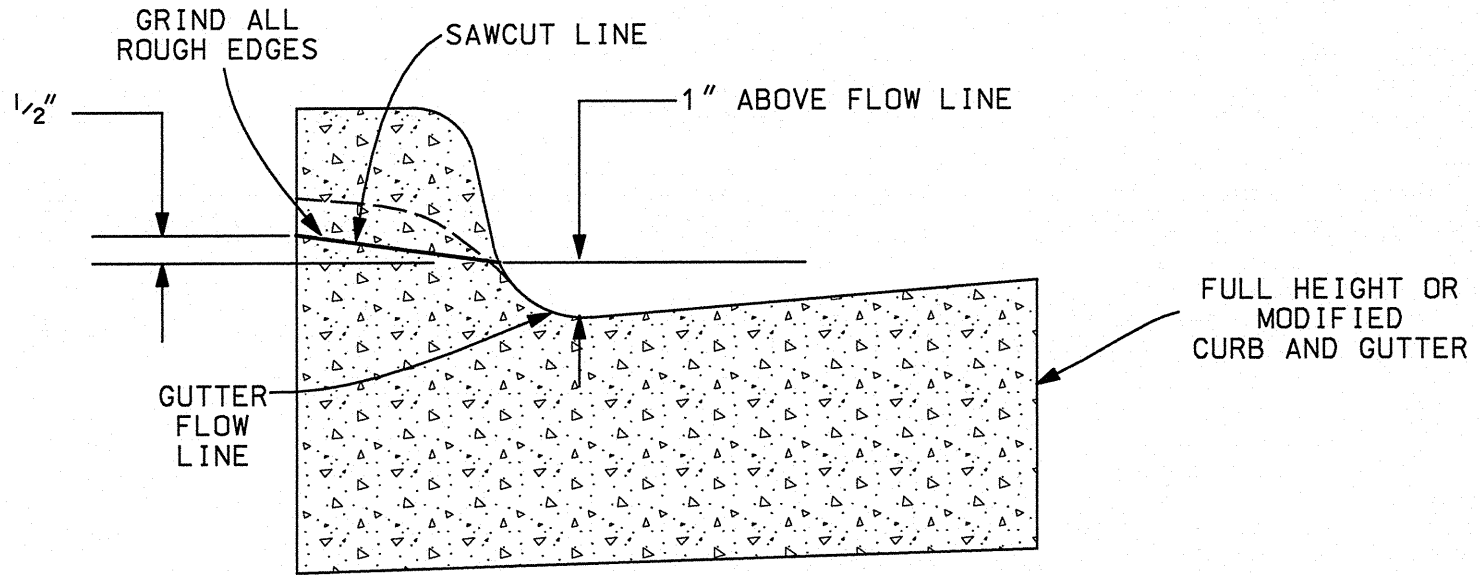


TYPICAL DETAIL FOR TWO WAY COUNTY ROAD COMMERCIAL DRIVE APPROACH ON CURBED ROADWAY

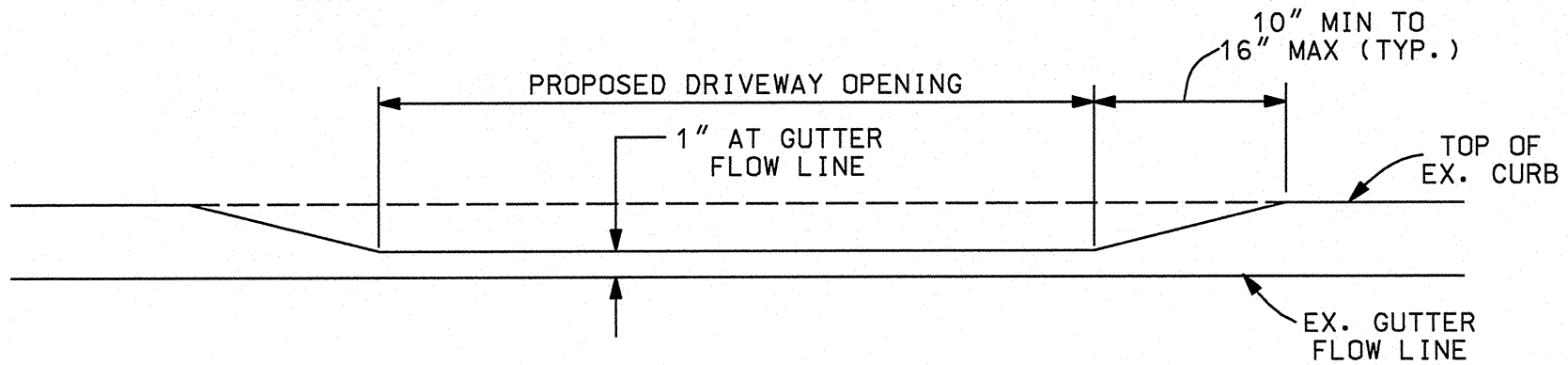
NO SCALE

NOTE:

SAWCUT ENTIRELY
THROUGH EX. CURB



SIDE VIEW

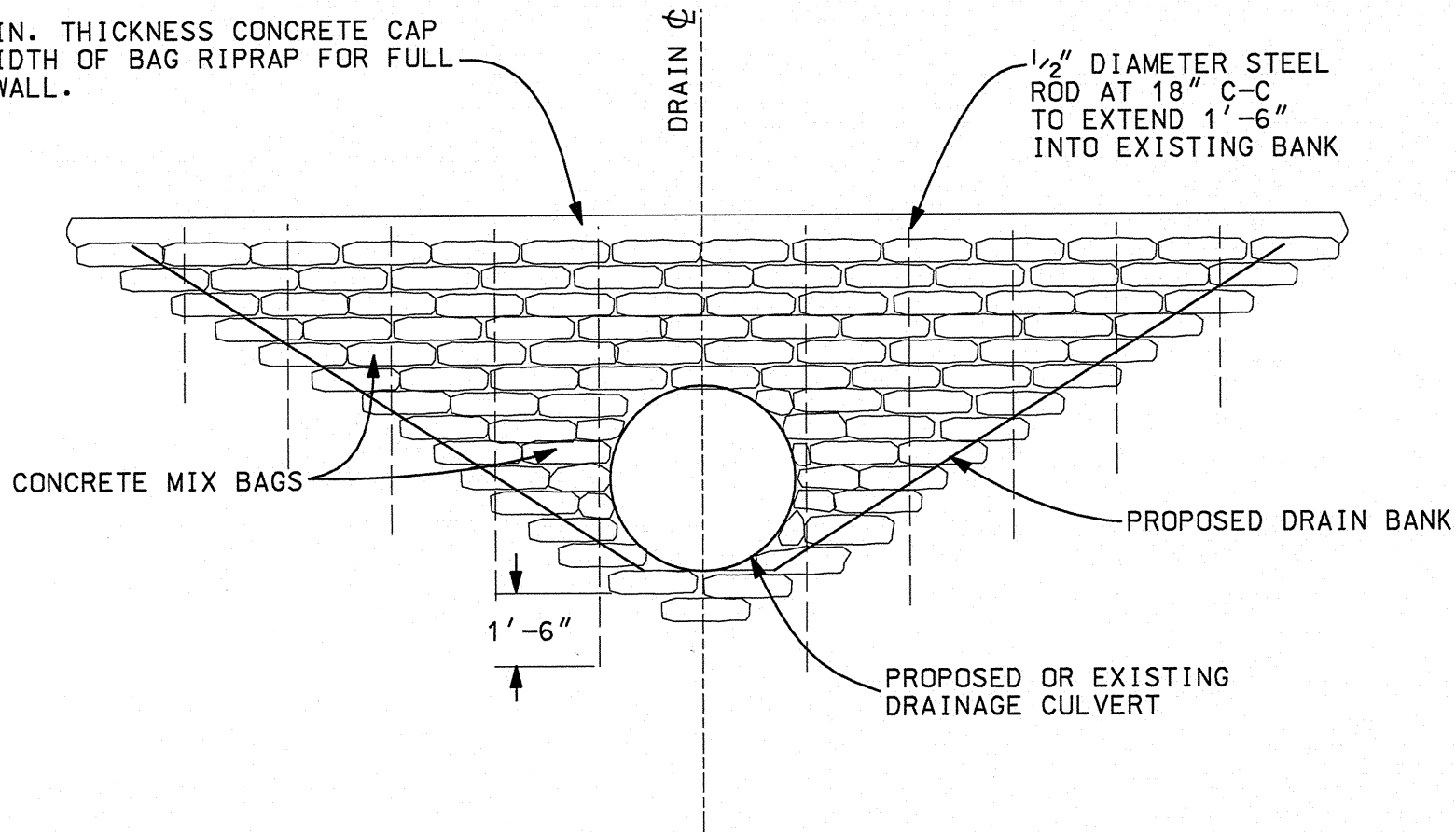


FRONT VIEW

TYPICAL DETAIL FOR
SAWCUTTING EX. CURB AND GUTTER
RESIDENTIAL DRIVEWAYS ONLY

NO SCALE

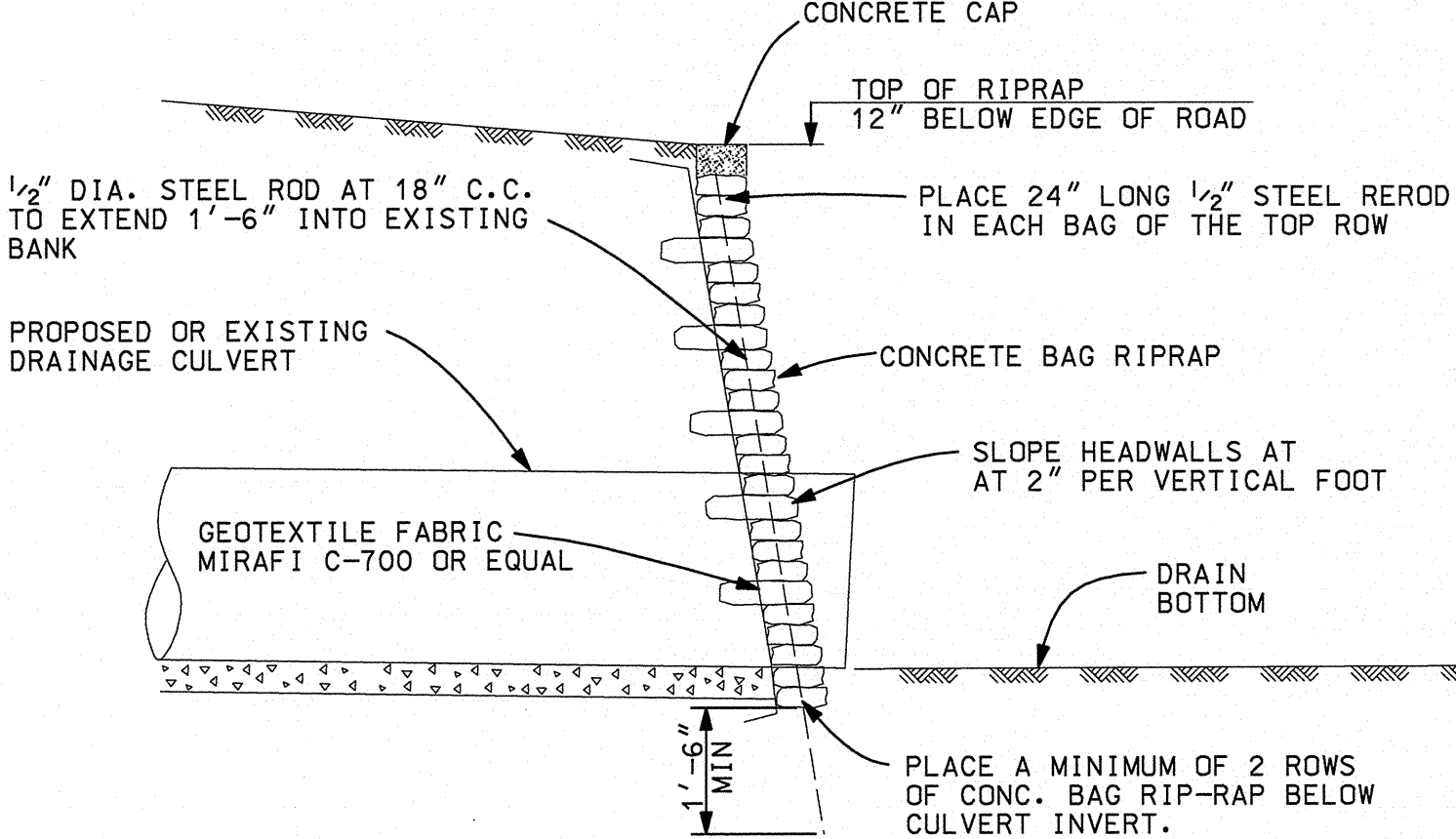
PLACE 4" MIN. THICKNESS CONCRETE CAP
FOR FULL WIDTH OF BAG RIPRAP FOR FULL
LENGTH OF WALL.



CONCRETE MIX BAG HEADWALL
FOR STREETS AND DRIVEWAYS

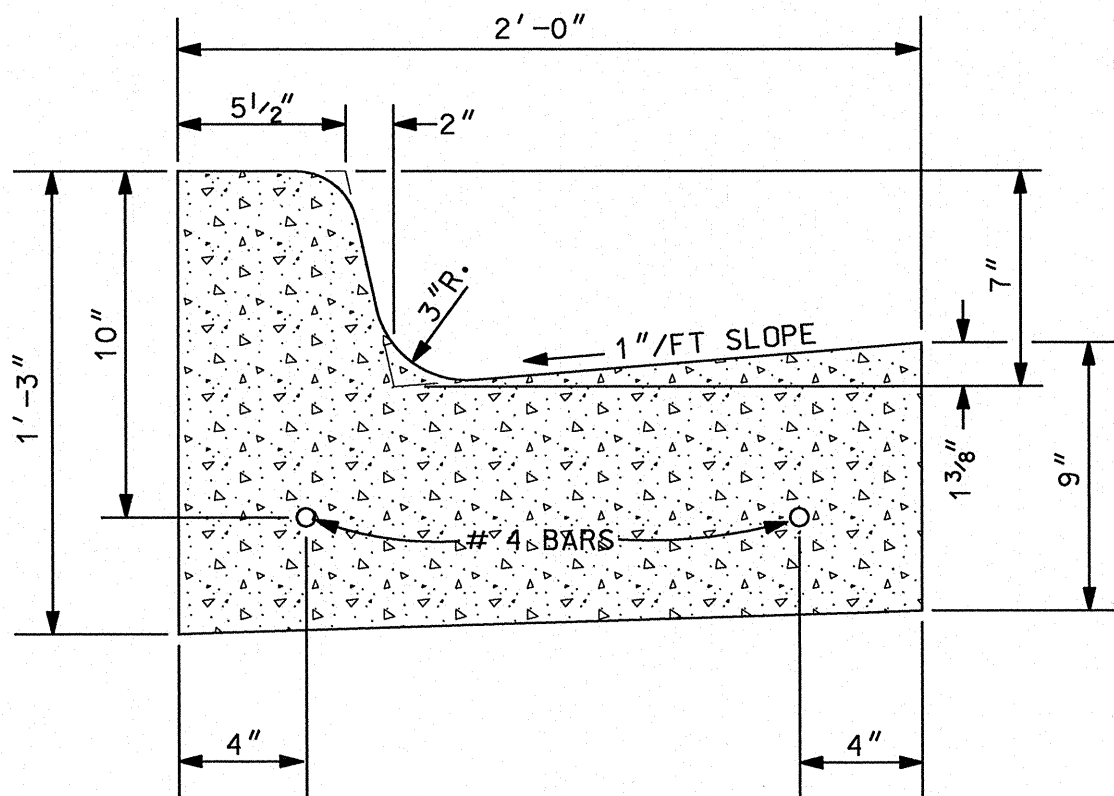
NO SCALE

NOTE: CONCRETE MIX BAGS SHALL BE PLACED WITH THE LONG WAY AT RIGHT ANGLE TO THE CULVERT. EVERY 4th ROW OF BAGS SHALL BE PLACED WITH THE LONG WAY PARALLEL TO CULVERT.



**CONCRETE MIX BAG HEADWALL
FOR STREETS AND DRIVEWAYS**

NO SCALE



TYPICAL DETAIL FOR
 CONCRETE CURB AND GUTTER
 (M.D.O.T. DETAIL C-4)

NO SCALE

ALL ROADWAYS (MINIMUM)
 LEVELING - BIT. MIXTURE 13A, 165 LBS/SYD
 WEARING - BIT. MIXTURE 36A, 165 LBS/SYD
 OR MATCH EXISTING PAVEMENT THICKNESS

SAW CUT STRAIGHT LINES
 FULL DEPTH

EXISTING
 PAVEMENT



12" CRUSHED LIMESTONE
 M.D.O.T. 23A COMPACTED TO
 95% MAXIMUM DENSITY

M.D.O.T 6A AGGREGATE COMPACTED
 TO 95% OF MAXIMUM DENSITY,
 IN 12" MAX LIFTS, OR MIXED
 BACKFILL AS DIRECTED BY THE
 BOARD

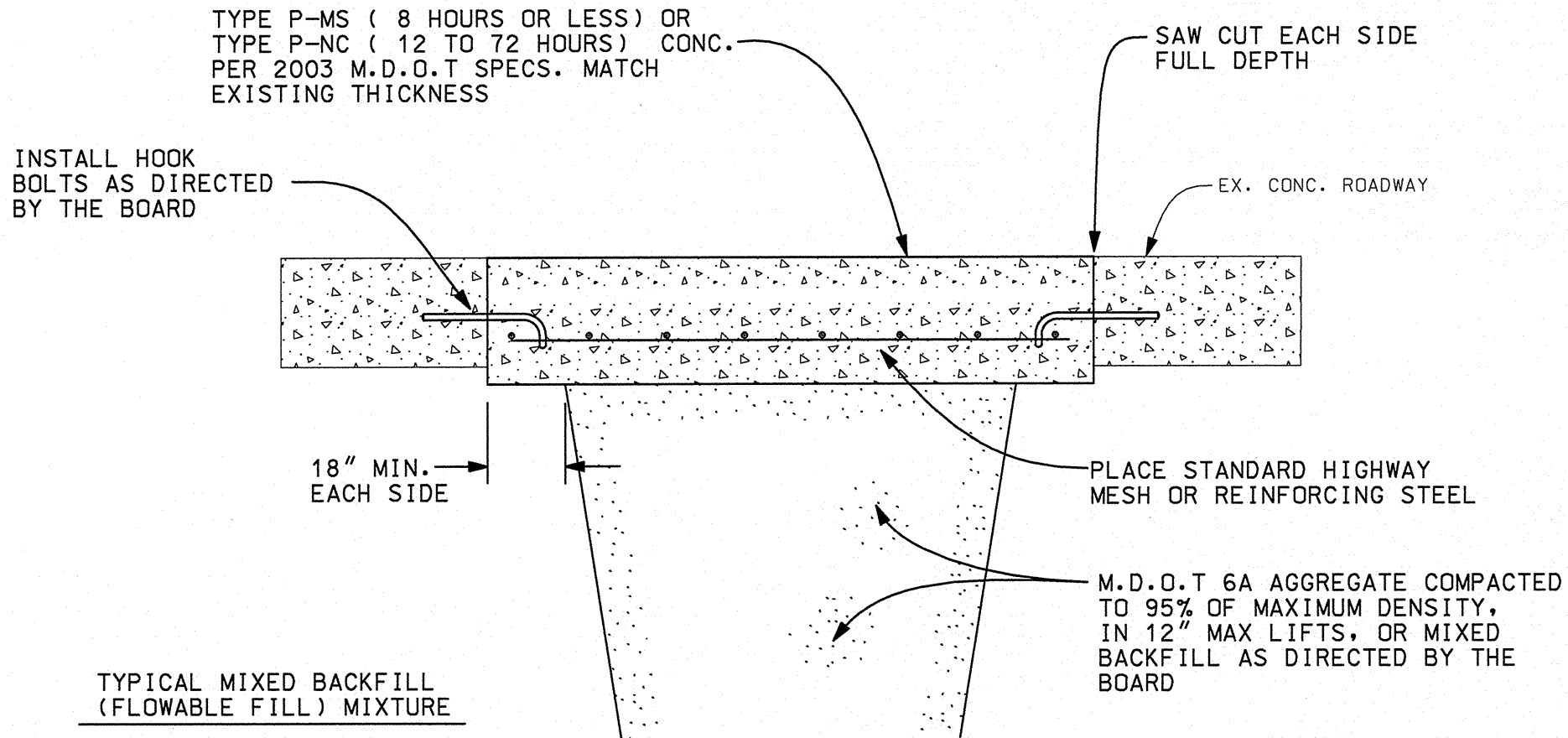
PAVEMENT & AGGREGATE BASE
 REPLACEMENT TO EXTEND A
 MINIMUM OF 18" BEYOND LIMITS
 OF TRENCH

TYPICAL MIXED BACKFILL
 (FLOWABLE FILL) MIXTURE

FLY ASH	-	300 LBS
CEMENT	-	40-50 LBS
SAND	-	2500 LBS

**BITUMINOUS PAVEMENT
 RESTORATION DETAIL**

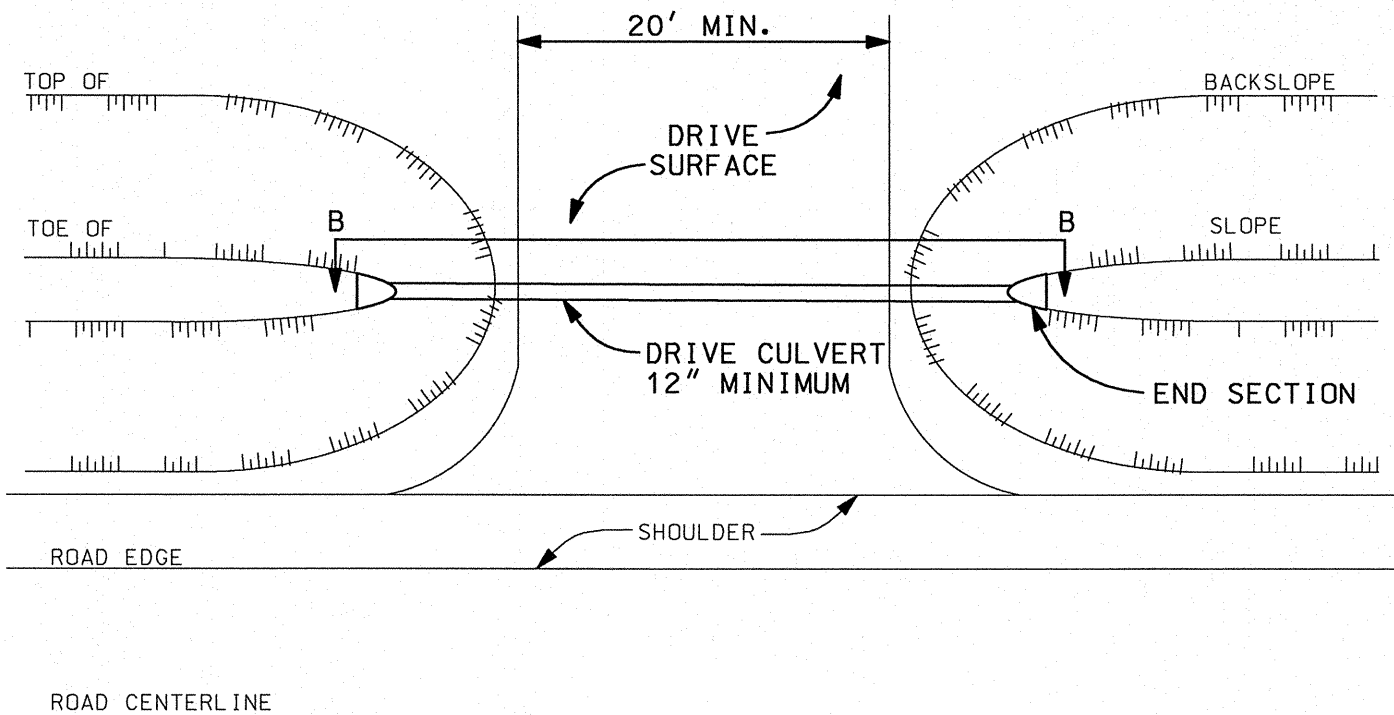
NO SCALE



TYPICAL MIXED BACKFILL
(FLOWABLE FILL) MIXTURE

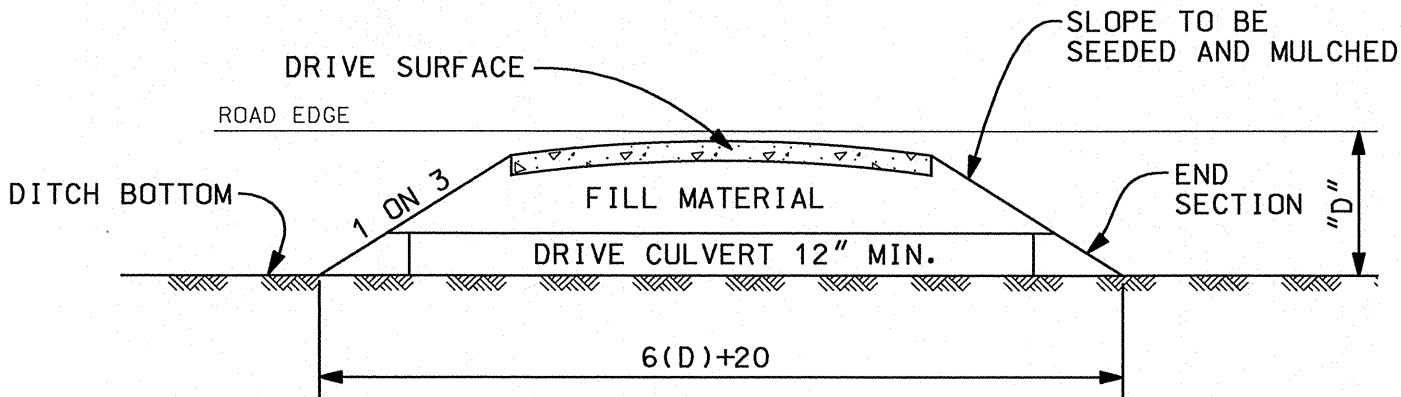
- FLY ASH - 300 LBS
- CEMENT - 40-50 LBS
- SAND - 2500 LBS

**CONCRETE PAVEMENT
RESTORATION DETAIL**
NO SCALE



PLAN VIEW

NOTE: CONCRETE BAG HEADWALLS MAY BE USED FOR ALL DRIVE CULVERTS LARGER THAN 30" DIAMETER. THE USE OF STACKED "QUIKCRETE" WALLS WILL NOT BE ALLOWED

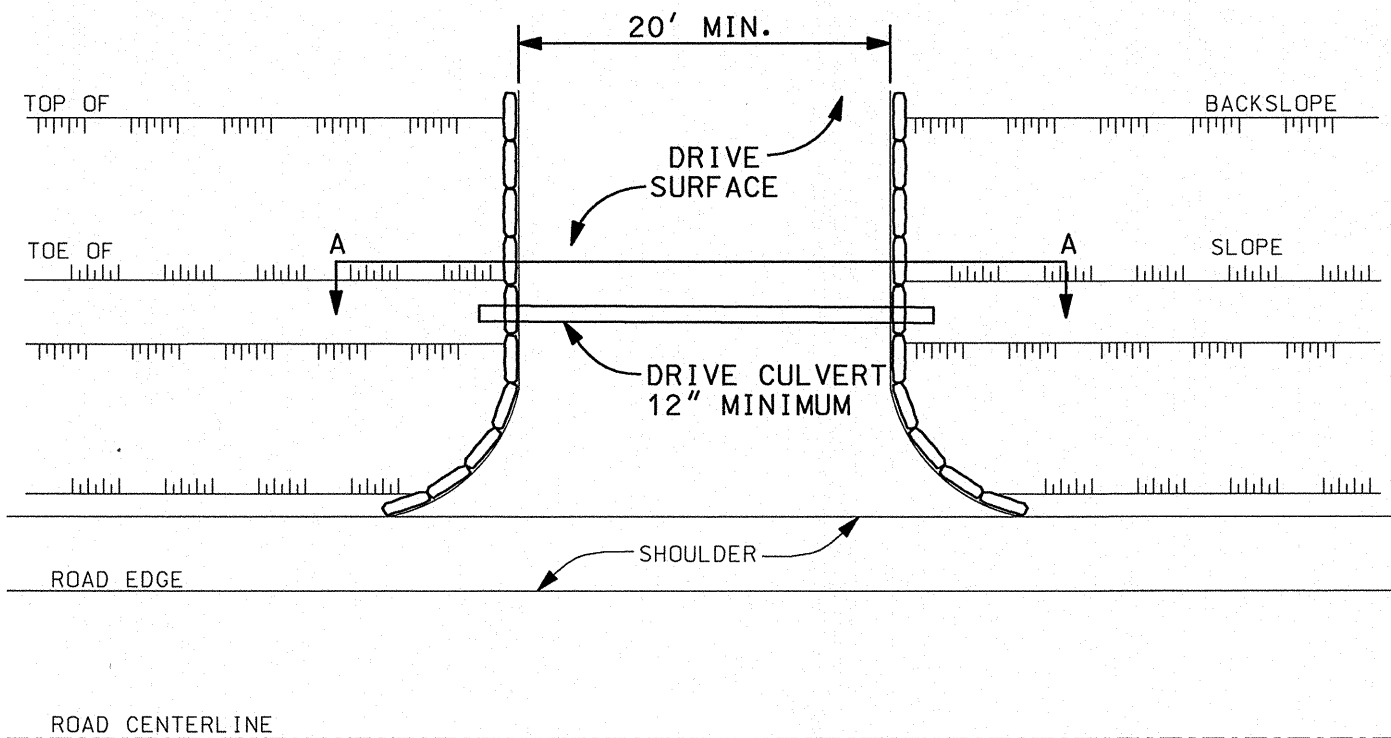


EXAMPLE
 DITCH DEPTH (D) = 3.5'
 $6(3.5)+20 = 41'$ MINIMUM LENGTH OF CULVERT & END SECTIONS

SECTION B-B

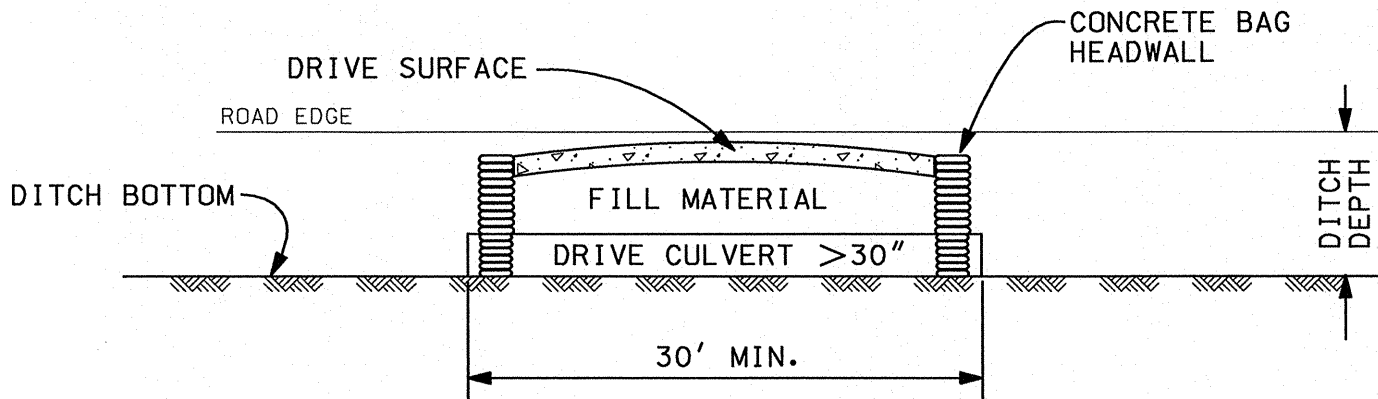
DRIVEWAY CULVERT W/O HEADWALLS
MINIMUM REQUIREMENTS

NO SCALE



PLAN VIEW

NOTE: HEADWALLS MAY ONLY BE CONSTRUCTED WHERE DRIVE CULVERTS EXCEED 30" IN DIAMETER, OR UNDER SPECIAL CIRCUMSTANCES AS PERMITTED BY THE COUNTY ENGINEER



SECTION A-A

DRIVEWAY CULVERT W/ HEADWALLS
MINIMUM REQUIREMENTS

NO SCALE

APPENDIX 1
Act 200 of 1969

DRIVEWAYS, BANNERS, AND PARADES (EXCERPT)
Act 200 of 1969

247.321 Driveways, banners and parades on highways; definitions.

Sec. 1.

As used in this act:

(a) "Driveway" means a driveway, lane, road or any other way providing vehicular access to or from the highway from or to property adjoining the highway but does not mean a city or village street or other highway covered by the provisions of Act No. 288 of the Public Acts of 1967, being sections 560.101 to 560.293 of the Compiled Laws of 1948.

(b) "Highway" means a state trunk line highway or a county road including the entire right of way.

(c) "Highway authority" means the department of state highways in the case of state trunk line highways, and the board of county road commissioners in the case of county roads.

247.322 Permit; requirement, local ordinances.

Sec. 2.

No driveway, banner or parade is lawful except pursuant to a permit issued in accordance with this act unless otherwise provided. Nothing in this act shall be construed to prevent the application of the provisions of any other statute of this state or any local ordinance which is more restrictive than this act nor to preclude any city or village from requiring city or village permits with respect to any street or highway within its corporate limits. No permit shall be issued pursuant to this act unless there is compliance with other provisions of law or ordinances.

247.323 Permits to temporarily close highway and for banners, decorations, or similar objects; issuance; requests; arrangements for handling highway traffic; section inapplicable to racing event.

Sec. 3.

A permit to temporarily close a highway, or a portion of the highway, for a parade, celebration, festival, or similar activity, and a permit for banners, decorations, or similar objects to overhang the traveled way of a highway, may be issued by the highway authority only if requested by an authorized official designated by resolution of the governing body of a city, incorporated village, or township. Requests for temporary closing of highways shall indicate the time and date the highway is to be closed to traffic, the date and time the highway is to be reopened to traffic, and other information as the highway authority may require. A permit shall not be issued for the partial or complete closing of a highway unless the highway authority is satisfied that adequate arrangements have been made for the handling of highway traffic during such closure. Permits for banners, decorations, or similar objects over the traveled way of a highway

shall require that they be securely fastened and be at least 18 feet above the surface of the traveled way. This section does not apply to a racing event for which a permit has been issued under the city motor vehicle racing act of 1981.

247.324 Permit; driveways; rules.

Sec. 4.

Permits for driveways shall be granted in conformity with rules promulgated by the highway authority which shall be consistent with the public safety and based upon the traffic volumes, drainage requirements and the character of the use of land adjoining the highway and other requirements in the public interest. Rules shall prescribe reasonable standards for the design and the location of driveways and may require that driveways shall be hard-surfaced. The provisions of this section shall not be deemed to deny reasonable access to a nonlimited access highway.

247.325 Rules; local adoption.

Sec. 5.

The department of state highways shall make rules necessary for the administration of this act in accordance with the provisions of Act No. 88 of the Public Acts of 1943, as amended, being sections 24.71 to 24.80 of the Compiled Laws of 1948, and subject to Act No. 197 of the Public Acts of 1952, as amended, being sections 24.101 to 24.110 of the Compiled Laws of 1948. The boards of county road commissioners may adopt by reference the rules, in whole or in part, of the department of state highways or may adopt its own rules after a public hearing of which notice has been given by publication at least twice in a newspaper circulated in the county not more than 30 days nor less than 7 days prior to the hearing.

247.326 Permit; issuance requirements; revocation.

Sec. 6.

A permit shall not be issued unless all the requirements of this act, and of rules made pursuant to section 5, are met. A permit may be revoked by the highway authority issuing it if at any time the permitted object, use, or activity fails to meet the requirements of this act or rules made in accordance with section 5. This section does not apply to a permit issued by a city under the city motor vehicle racing act of 1981.

247.327 Existing driveways; correction of driveway in violation of rules; notice; failure to correct; reimbursement.

Sec. 7.

This act shall not apply to driveways in existence on August 6, 1969, except that if the use of the land served by the driveway is changed or expanded, and the change or expansion causes the existing driveway to be a safety hazard, the driveway shall be considered a new driveway subject to this act. A driveway which is constructed or reconstructed after the effective date of the rules issued pursuant to this act and which is in violation of the rules shall be corrected by the owner within a period of time, not less than 30 days, specified in the notice

of violation sent by certified mail to the owner. If not corrected within the period required by the notice, the highway authority or its agents may perform the necessary correction and the owner shall reimburse the highway authority for the reasonable cost of correction.

247.328 Construction of act.

Sec. 8.

Nothing in this act shall limit the right of the highway authority in the exercise of its authority to acquire property for highway purposes or to widen, relocate, reconstruct, improve or maintain any highways.

247.329 Authorization of city or village to issue permits with respect to state trunk line highways; conditions; permit issued by city pursuant to § 257.1701 et seq.

Sec. 9.

(1) Except as provided in subsection (2), the state transportation commission by resolution may authorize any city or village to issue on behalf of the state the permits required by this act with respect to state trunk line highways within the corporate limits of the city or village provided the permits are issued pursuant to this act and rules promulgated under this act, subject to conditions as the commission may prescribe and subject to acceptance of that authority by the governing body of the city or village.

(2) A permit issued by a city under the city motor vehicle racing act of 1981 shall be considered to be a permit issued for all purposes under this act regarding any highway located within the limits of the city.