

Application Rec'd \_\_\_\_\_

Fee: \$85.00 (new)  
\$40.00 (culvert replacement w/ changes)  
No charge (culvert replacement same length)

**TOWN OF WESTFORD APPLICATION FOR ACCESS PERMIT**

Applicant \_\_\_\_\_ Phone # \_\_\_\_\_

Mailing Address \_\_\_\_\_

Location of Property: \_\_\_\_\_ Parcel # \_\_\_\_\_

Intended use of access: \_\_\_\_\_ Driveway (single family dwelling)  
(Please check one) \_\_\_\_\_ Private Road to serve \_\_\_\_\_ homes  
\_\_\_\_\_ Commercial Establishment

The undersigned requests an Access Permit to allow \_\_\_\_\_ to construct an access in accordance with Vermont Department of Highways Standards to serve the applicant's property, located on the \_\_\_\_\_ side of Town Highway No. \_\_\_\_\_ (The local name for this road being \_\_\_\_\_.) The proposed access will be located approximately \_\_\_\_\_ (feet or miles) from the intersection of this road with \_\_\_\_\_.

The applicant agrees to maintain said access and culvert, if needed, adhere to the directions, restrictions and conditions forming a part of this permit.

Dated at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature of Applicant \_\_\_\_\_

**ACCESS PERMIT**

**NOTICE:**

This permit is issued in accordance with Title 19, Section 1111(b), V.S.A. relative to all highways within the control and jurisdiction of the Town of Westford. The issuance of this permit does not release the applicant from any requirements of statutes, ordinances, rules and regulations administered by other governmental agencies. The permit will be effective upon compliance with such of these requirements as are applicable and continue in effect for as long as the present land use continues. Any change from the present land use will require a new permit. This permit is issued subject to the directions, restrictions and conditions contained herein and on the reverse of this form and any attachments hereto, and covers only the work described in this application, and then only when the work is performed as directed. Violations are subject to the penalties set forth in Title 19, Section 1111(b), V.S.A. of fines of not less than \$100 nor more than \$10,000 for each violation.

**DIRECTIONS, RESTRICTIONS AND CONDITIONS:**

- Suitable culvert to be furnished and installed by applicant. Galvanized or plastic pipe at least eighteen (18") diameter, thirty feet (30') long, unless other wise instructed by Town Road Foreman. Conformance to the enclosed sketch required.
- Road must be installed according to the *Standards for Development Roads* and at a 90 degree angle to \_\_\_\_\_ Road and level for 20'.
- Additional conditions: \_\_\_\_\_
- Approval of this permit does not relieve the applicant from obtaining any other required State or local permits.

Culvert: Required \_\_\_\_\_ Not required \_\_\_\_\_ Initials \_\_\_\_\_ Date \_\_\_\_\_

Dated at Westford, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Town Selectboard Chair \_\_\_\_\_

Inspected By \_\_\_\_\_ (Road Foreman) Date: \_\_\_\_\_

### **5.13 AGRICULTURAL STRUCTURES**

Agricultural structures shall conform with Title 24, §4413 (d) of the Vermont State Statutes.

### **5.14 DRIVEWAY STANDARDS**

The driveway for any single or two family dwelling that exceeds 150 feet in length must comply with the following standards:

- The driveway entrance intersection must be at least 18 feet wide for the first 20 feet of driveway length from the road, and may then taper to no less than 14 feet in width for the remaining length.
- Driveways must have a turn out capable of accommodating one fire truck at no less than every 600 feet of driveway length.
- Driveways must be constructed with a minimum of 15 inches of gravel with 3 inches of crusher run wearing surface over Mirafi fabric.
- The maximum grade shall not be more than 10% or no more than 12% over a distance greater than 200 feet.
- All intersections shall be as nearly at right angles as possible and in no case shall be less than 75 degrees.

# Things to consider when constructing or repairing your driveway

## *(Guidance)*

A major problem associated with living in the country is building and maintaining an adequate, all weather access route to your house, barn or other areas of your property. In most urban areas, where home sites are small and houses are located close to paved streets the driveways are short and generally paved with a durable concrete or asphalt surface. However, in rural settings, driveway distances may be very long, and paving with concrete or asphalt is cost prohibitive.

Often, more thought needs to be given to the proper siting and design of unpaved driveways which can lead to serious problems during periods of wet weather.

### **1. Assess Your Needs:**

As a landowner, you will need to make an evaluation of your needs and future use of the property with respect to the number and size of vehicles that will be using the driveway. Will immediate family members be the only ones using the driveway or will you be receiving regular deliveries and pickups by large vehicles or semi-trucks? What financial commitment are you willing to make for the construction or repair of your driveway?

Avoid having vehicles drive over sewer lines or near septic tanks to prevent crushing of the lines or a cave-in of tanks. Keeping the driveway free of vegetation helps keep the driveway well defined and avoids the problem of trying to mow grass on a stony surface. This clean surface also allows for easy re-grading of the driveway surface when needed. However, a good stand of Bermuda grass or other non-bunch grass along the shoulder may help bind the soil together and remove excess water.

### **2. Project Design and Layout:**

Selection of a suitable driveway location is paramount to having a successful project. A residential driveway should be a minimum of 10-12' wide and may range up to 20' across if it will be occasionally traveled by large trucks. Try to route your driveway through well-drained areas of your property. Since the driveway will have to support the weight of the vehicles that travel it, locate the driveway on high ground and avoid going through "marshy" or "boggy" areas of the property. These areas which stay wet much of the time have a lower weight bearing capacity and have a greater probability of becoming future problem areas. When laying out the route for your driveway, keep in mind the direction of water flow and plan for a means of removing excess runoff water from the road surface and from adjacent areas.

### **3. Drainage:**

When soils become excessively wet, they lose much of their strength and load bearing capacity. Driveways should be slightly elevated above the surroundings and crowned to promote good surface drainage for optimal performance. Generally, the centerline of the driveway should be the highest point with a uniform slope of 0.5 inch per foot to either side. This will promote rapid runoff of excess water and minimize the amount of water which infiltrates into the driveway soil.

Driveways which are elevated above the surrounding soil will form barriers to the surface runoff from uphill areas and design considerations need to be made in order to

remove this water. Small drainage ditches should be used along the driveway as needed, particularly on the uphill side, to drain away excess runoff water which accumulates at the edges of the driveway. This will prevent the ponded water from weakening the driveway base, and possibly either flowing over the driveway or backing up onto adjacent property. It is recommended drainage ditches be lined with stone or vegetation in order to help prevent erosion.

There will likely be times when it may be necessary to cross an area such as a natural drainage way or the drainage ditch along a public highway that occasionally carries water. The most common way to handle this situation is to install a culvert to allow the water to flow beneath the driveway. Culverts come in a variety of sizes starting at about 8 inches in diameter and ranging up to several feet in diameter. They are most commonly made of corrugated steel, heavy gauge plastic, or reinforced concrete. The culvert needs to be sized properly so that it can carry the needed amount of water during periods of peak flow. The use of an undersized culvert will result in water ponding near the entrance and increase the potential for a washout of the driveway. Assistance in size selection and installation techniques can be obtained from the Natural Resources Conservation Service (NRCS), the local state highway engineer or a private reputable engineer. In Vermont, driveway culverts must be a minimum of 15" in diameter.

To prevent sedimentation from silting in and blocking the culvert, a minimum water flow rate of 2.5 feet per second is necessary. Slopes of 2-4% are ideal and a slope of 0.5% is the absolute minimum that is considered acceptable. Care must be taken to install the culvert on a smooth surface having a uniform slope to prevent the formation of low spots. Low spots will collect sediment and eventually plug up. The culvert should be long enough to extend past the backfill on the exit end so that the turbulent water exiting the pipe will not erode the edge of the driveway. Soil surrounding the culvert should be backfilled carefully in small amounts with tamping to prevent future settlement of this area. The area around the inlet and outlet of the culvert as well as side slopes of the driveway should be covered with vegetation or lined with stone to resist erosion. The top of the culvert should be covered with a minimum of 6-18 inches of soil to prevent damage to the pipe from passing vehicles.

#### **4. Driveway Soil Materials:**

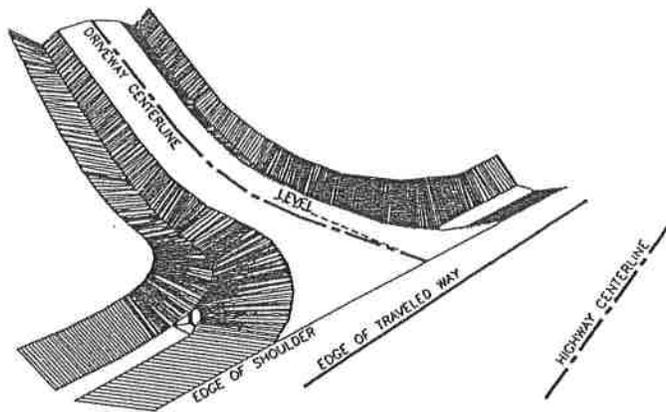
The first choice is to use the on-site soil for driveway construction. While this is obviously the most economical solution, in many cases the on-site soils may not be well suited for this use. Clay soils tend to get very slippery when wet while sands may become very soft. If your native soils are not well suited for use as a base material, they may be improved by the addition of an additive such as a liming material. It may be necessary to purchase suitable material to construct or repair your driveway. Your local NRCS representative, local state highway engineer or community road foreman should be able to help you locate suitable materials which are available locally.

After placement, the material should be compacted as firmly as possible. If possible, use a roller or just compact it by traveling over it numerous times with a heavy farm tractor. Try to compact all areas of the driveway equally rather than just compacting the areas where the wheels will normally travel. After some additional compaction by vehicle traffic, the material will make a firm, solid driveway topping.

#### **5. Design Standards:**

The Vermont Agency of Transportation (also known as VAOT or VTrans) has produced a design standard for residential and commercial driveways (Standard B-71). A copy of Standard B-71 is located on the backside of this brochure. Further information may be obtained from the VTrans web site at: [www.aot.state.vt.us](http://www.aot.state.vt.us)

# DRIVEWAY ACCESS ONTO TOWN HIGHWAYS



PERSPECTIVE SKETCH OF DRIVE INTERSECTION  
SHOWING DEPRESSED RAMP

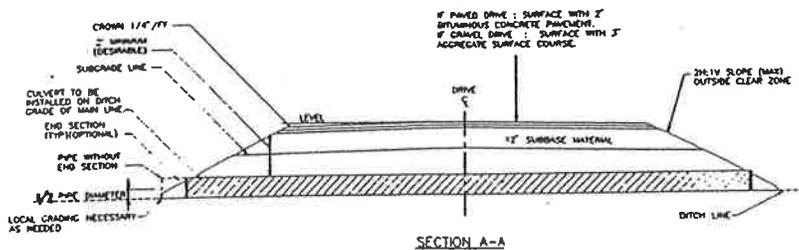
According to the Federal Emergency Management Agency (FEMA), driveway culverts are a major contributor to road damage during floods. Vermont has experienced millions of dollars of road damage in recent years.

Culverts under driveways and side roads leading onto town roads are often too small and poorly installed. Because maintenance of driveway culverts is sometimes left to the landowner, it doesn't get done. When flash floods occur, culverts don't function and the road gets washed out.

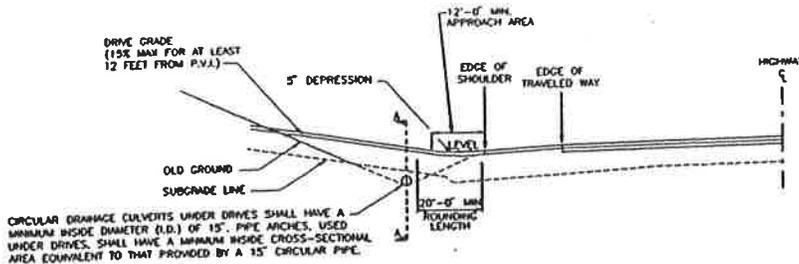
Culverts aren't the only problem. Often the driveway or road is steep and poorly crowned. Road and driveway material is loose sand instead of compacted gravel. Side slopes can be unstable with bare soil. Driveway ditches are exposed and are not lined with rip rap. Water comes off the driveway, carrying gravel and silt onto the road or plugging the culvert and ditch.

Vermont Local Roads is drafting a model driveway policy for towns to use in developing their own. With such a policy towns can set uniform standards for driveways, driveway culverts and ditches. If properly applied, a driveway policy or access policy can mean less road maintenance, less damage, and tremendous savings. To be effective, towns need to coordinate this policy with zoning and planning boards and the road commissioner.

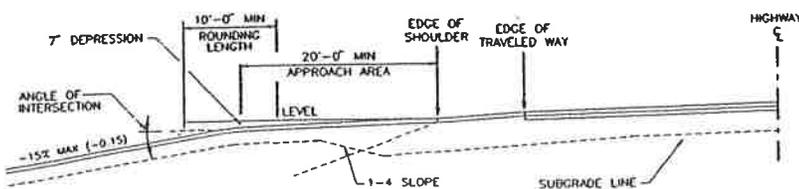
A good standard is the VAOT's Standard B-71 -- Residential Driveway. Parts are reproduced here. For the complete sheet, call Vermont Local Roads at 800-462-6555 and we will mail it to you.



SECTION A-A

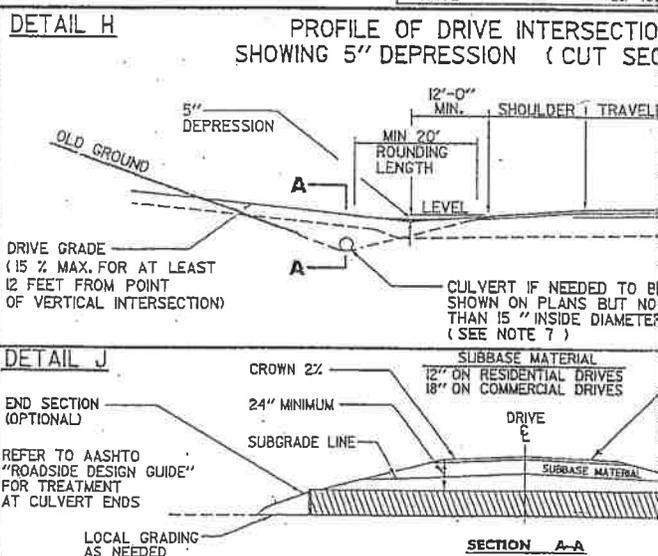
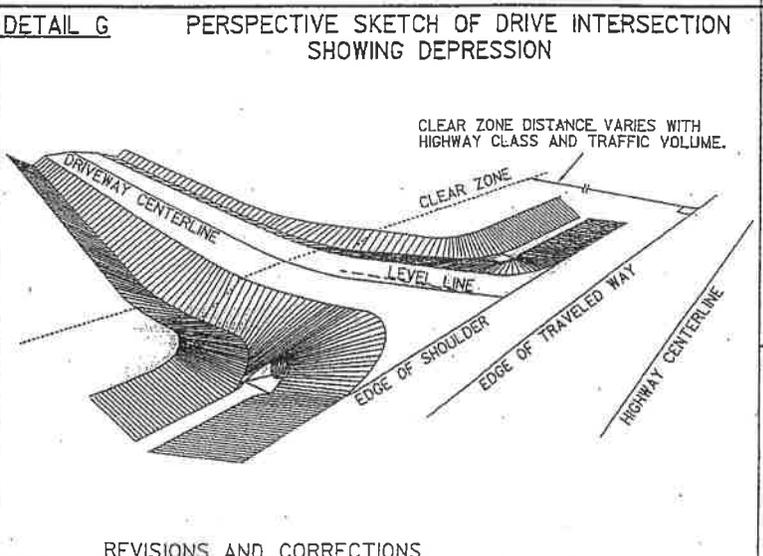
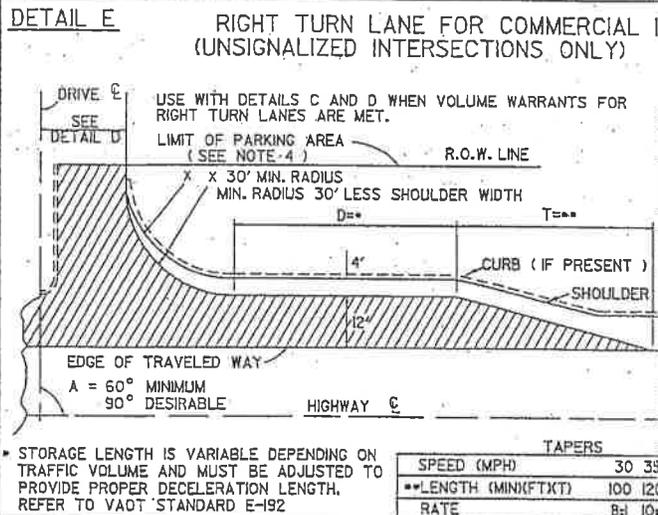
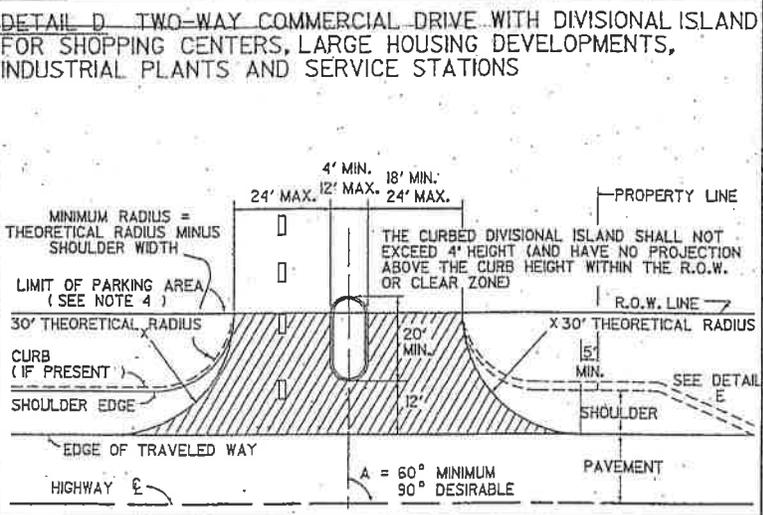
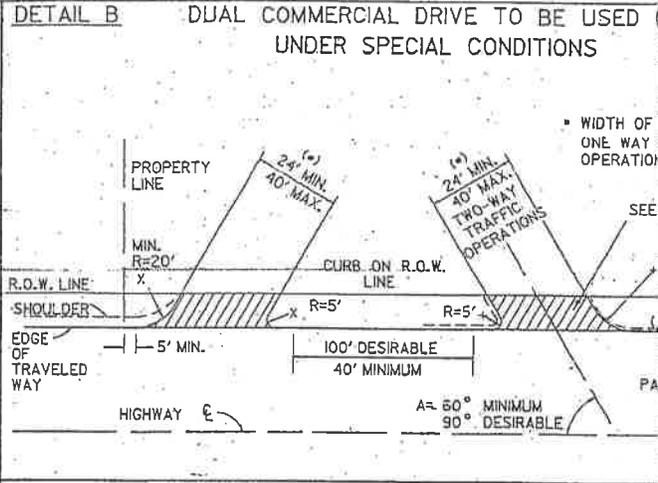
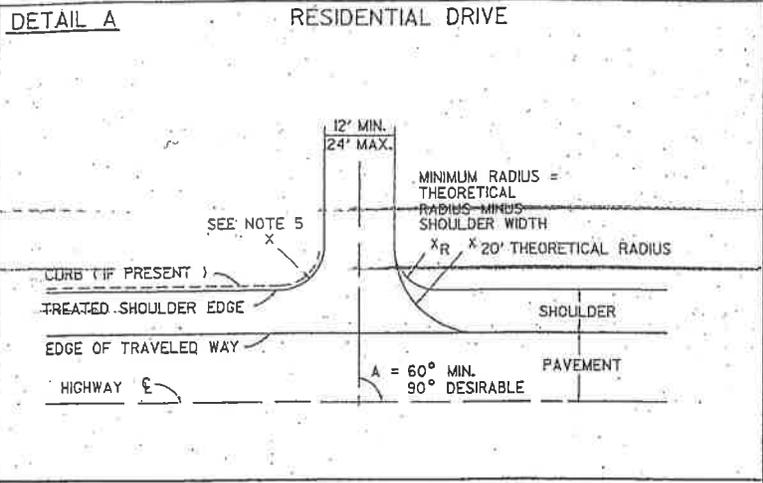


PROFILE OF DRIVEWAY INTERSECTION  
(CUT SECTION)



PROFILE OF DRIVEWAY INTERSECTION  
(FULL SECTION)





### REVISIONS AND CORRECTIONS

DEC. 11, 1992 - THIS STANDARD SUPERCEDES B-71 (7/23/80R), B-71A (3/12/90), AND B-13 (12/14/71).

JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.

MAR. 10, 1995 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.

NOV. 16, 2000 - CHANGES MADE TO CONFORM WITH LANGUAGE AND DIMENSIONS IN ACCESS MANAGEMENT PROGRAM GUIDELINES.

FEB 1, 2004 - CHANGES MADE TO SIGHT DISTANCE CHART TO CONFORM WITH NEWEST AASHTO CRITERIA.

JULY 8, 2005 - CHANGE MADE TO OBJECT HEIGHT TO CONFORM WITH NEWEST AASHTO CRITERIA.

APPROVED

*Richard F. ...*  
DIRECTOR OF PROGRAM DEVELOPMENT

*Lang S. Keller*  
CHIEF OF UTILITIES AND PERMITS

*Michael ...*  
FEDERAL HIGHWAY ADMINISTRATION

### DETAIL J SUBBASE MATERIAL

CROWN 2%

24" MINIMUM

SUBGRADE LINE

12" ON RESIDENTIAL DRIVES 18" ON COMMERCIAL DRIVES

DRIVE

SUBBASE MATERIAL

REFER TO AASHTO "ROADSIDE DESIGN GUIDE" FOR TREATMENT AT CULVERT ENDS

LOCAL GRADING AS NEEDED

SECTION A-A

STANDARD  
COMM