WASHINGTON COUNTY DIRT AND GRAVEL ROADS PROGRAM

Did you know that...

One car making one pass on one mile of dirt or gravel road one time each day for one year creates one ton of dust !!!

What is the Dirt & Gravel Roads Program?

Pennsylvania's Dirt & Gravel Road Program is an innovative effort to fund "environmentally sound" maintenance of unpaved roadways that have been identified as sources of dust and sediment pollution. Signed into law in April 1997 as Section 9106 of the PA Vehicle Code (§9106), the program is based on the principle that informed *local control* is the most effective way to stop pollution.

Who is eligible for the Dirt and Gravel Roads Program?

Local municipalities and state agencies that maintain public dirt or gravel roads are eligible to receive the grant funds provided:

a. **worksites have been verified in their jurisdiction;**

b. **officials have attended the required two day training; and**

c. **the municipality or agency contractually agrees to perform corrective work.**

How can you obtain a Dirt & Gravel Roads Pollution Prevention Grant?

- Contact Conservation District (CD) to learn if any worksite have been verified in your municipality.
- Visit the site with the CD to discuss the problem.
- Complete the grant application and submit it to the CD.
- The Quality Assurance Board (QAB) evaluates the grant applications in light of available funds. The application remains under active consideration by the QAB until it is funded, rejected or withdrawn in writing.
- When approved, a contract will be signed between the municipality and the CD.
- When the project is complete and satisfactory to the QAB, payment will be made in full to the municipality.

Road Preparation

- Prepare Drainage such as cross pipes.
- Address surface drainage structures, such as the crown of the road, side slopes, grade breaks, etc.
- Address area drains, including diversion or collection swales, parallel ditches, turnouts and discharge ditches.
- Install separation fabric before Driving Surface Aggregate is applied.

Drainage Installation

Cross Pipes are added to help stop erosion in the road side ditches and to keep the concentrated flow off of the road. They are added approximately every 100 feet depending on the grade of the road. The inlet side and outlet side are then stabilized with rip rap and vegetation.

Road Side Ditches

- Carries water away from the road
- Shaped to prevent standing water :
  1% grade minimum
- Must have an outlet
- Must be stabilized with vegetation
  or protective lining
- Should not discharge directly into a stream

Examples of Road Side Ditches

Advantages of Vegetative Turnouts

- Reduces the water volume and flow in road side ditches
- Reduces water velocity and erosion problems
- Filters out sediment, slower water flow allows sediment to settle out
- May decrease the size of road side ditch needed
- Does not discharge directly to stream – discharges into vegetative filter strips

Vegetative Turnouts

Separation Fabrics - Advantages

- Stabilization
- Drainage Improvement
- Excavation Reduction
- Rutting and Pothole Reduction
- Dust Reduction
- Reduced Maintenance and Costs

Separation Fabric Installation

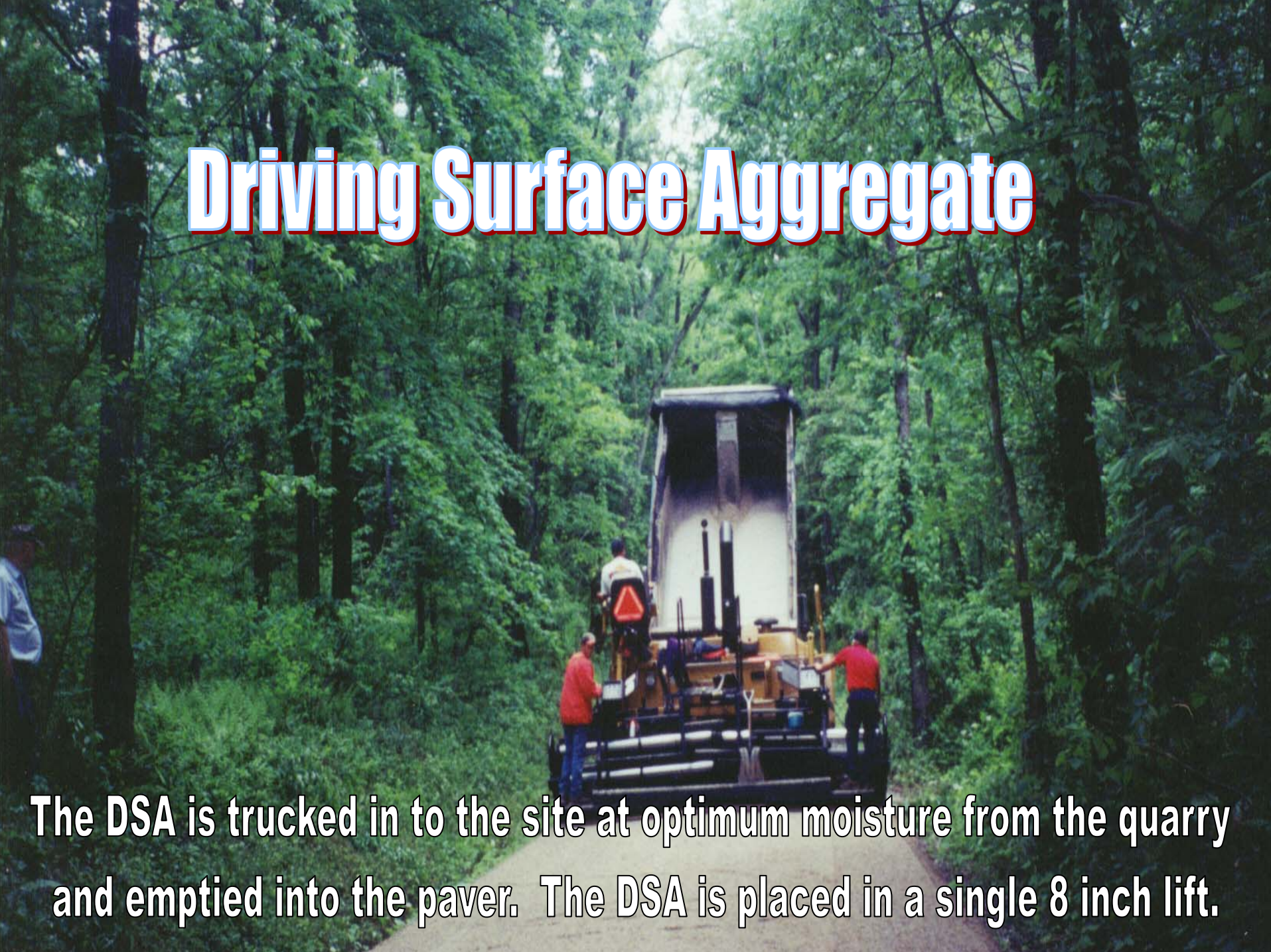
Class four separation fabric is placed on the surface of the road before the driving surface aggregate (DSA) is applied.

Driving Surface Aggregate

- Driving Surface Aggregate (DSA) must be derived from natural stone formations.
- The required amounts and allowed ranges, determined by weight, for various size particles are listed in the table below:
- All components of the DSA are to be derived from crushed parent rock material that meets program specifications for abrasion resistance, pH, and freedom from contaminants.

Passing Sieve	Lower %	High %
1 ½ inches	100	
¾ inches	65	90
#4	30	65
#16	15	30
#200	10	20

Driving Surface Aggregate



The DSA is trucked in to the site at optimum moisture from the quarry and emptied into the paver. The DSA is placed in a single 8 inch lift.


Vibratory Roller


The roller compacts the DSA to a final thickness of approximately 6 inches.


GERSOLL-RAND

Dague Hollow Road

Before

After

Pump Station Road

Before

After

Streambank Stabilization

This process is to restore and/or protect the bank of a stream against erosion or scouring by utilizing any of the following: slope protection, rip-rap, gabion baskets, walls, deflectors or vegetative stabilization techniques.

For more information, please contact the WCCD @ (724)228-6774