# Erosion Control Planning Strategy

## ODOT Erosion Control Manual

Chapter 5: Erosion Control Planning

Discusses planning issues relevant to inspectors, designers and contractors.

## Erosion Control Planning

Planning issues relative to inspectors, designers and contractors:

1) Site information
2) Data Collection
3) Types of construction
4) Prevention versus sediment control
5) Assessing the project site

## Erosion Control Planning, continued

Planning issues, continued

6) 5 basic rules
7) Project scheduling
8) Site characteristics
9) Grading plan

## Site Information

An ESCP must contain sufficient information to describe the site development and the system intended to control erosion and prevent off-site damage from sedimentation

## Data Collection

- Base map
- Soil types
- Natural drainage patterns
- Unstable stream reaches and flood marks
- Watershed areas
- Existing vegetation
- Critical areas (i.e., steep slopes)
- Highly erodible soils

## Data Analysis to Identify:

- Buffer zones
- Suitable stream crossing areas
- Access routes for construction and maintenance
- Borrow and waste disposal areas
- The most practical sites for erosion control

## Types of Construction

- New roadway alignments
- Shoulders & lanes
- Drainage improvements
- Retaining walls
- Soundwalls
- Structure widening
- Paving

## Prevention versus Sediment Control

- Driving consideration is providing erosion prevention measures rather than sediment control
- Temporary ground covers (i.e., mulches)

## Assessing the Erosion Control Needs for the Project Site

- Regulatory Requirements
- Existing Conditions
- Construction Conditions

## 5 Basic Rules

1. Timing
2. Stage Work
3. Minimize Disturbances
4. Pre-Construction Planning
5. Documentation

## Project Scheduling

- Construction projects should be sequenced
- ESCP should indicate BMPs appropriate for each phase of scheduled work

## Site Characteristics

- Design to integrate existing land contours
- Existing site vegetation should be inventoried and evaluated
- Whenever possible, slopes should be inclined 1:2 or flatter

## Grading Plan

- Used to establish drainage areas, drainage patterns and runoff velocities
- Should identify disturbed areas, cuts, fills and finished project elevations
- Include all temporary and permanent practices necessary for controlling erosion and minimizing sedimentation downstream