

# Arizona Department of Transportation Guidelines for Highways on Bureau of Land Management and U.S. Forest Service Lands 2008



## Chapter Overview Presentations

Twelve Chapter Overview presentations supplement the Guidelines document. Chapters 1-11 each have a Chapter Overview and an additional one summarizes appendices A-O.

These self-paced presentations are designed for individual use or for small group presentations where discussion can be accommodated. It is helpful to have the Guidelines document as a reference when viewing the presentations.

The Chapter Overview presentations are available on the ADOT Roadside Development Section website.

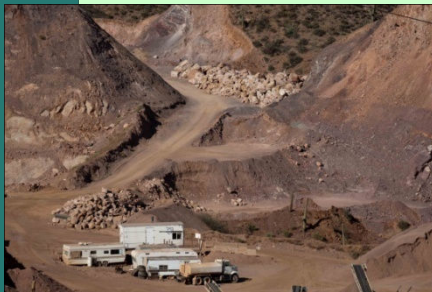
<http://www.azdot.gov/business/engineering-and-construction/roadway-engineering/roadway-design-standards-and-guidelines/guidelines-for-highways-on-bureau-of-land-management-and-us-forest-service-lands>

**Navigate the Chapter Overview by scrolling through the pages.**



# Arizona Department of Transportation Guidelines for Highways on Bureau of Land Management and U.S. Forest Service Lands 2008

## Chapter 9: Material Sites



# Acknowledgments:



Arizona Department of Transportation

## Guidelines for Highways on Bureau of Land Management and U.S. Forest Service Lands



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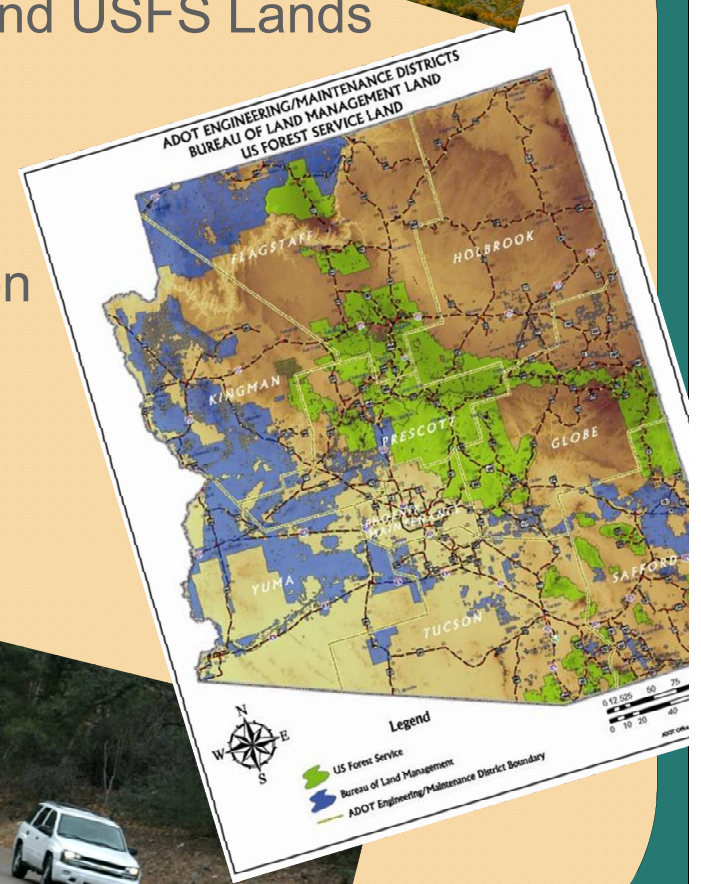
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Prepared by Wheat Scharf Associates and the Guidelines Steering Committee

# Guidelines Contents



- 1 Introduction
- 2 ADOT Development Process on BLM and USFS Lands
- 3 Habitat Connectivity
- 4 Roadway Design and Construction
- 5 Major Structure Design and Construction
- 6 Drainage Design and Construction
- 7 Landscape Restoration
- 8 Stormwater and Pollution Control
- 9 Material Sites**
- 10 Construction
- 11 Maintenance Operations
- Appendices A - O



After reviewing the Chapter 9 Tutorial you should...



- Know the definition of a material site.
- Understand how material sites are developed.
- Have a basic understanding of the authorization process for the development of material sources.
- Know the purpose of a Source Development Plan and a Plan of Operations.
- Be familiar with the different types of material sites.
- Know where to learn about stormwater management procedures for material sites.
- Know the restoration requirements for material sources and waste sites.
- Be able to access the State Mine Inspector's webpage.

# Chapter 9 Contents



9.1 Chapter Goals

9.2 Scoping

9.3 Operation

9.4 Stormwater Management Guidelines for Material Sources  
and Stockpile Sites

9.5 Restoration of Material Sources and Waste Sites

9.6 Additional Resources



# 9.1 Goals



Material Sites are locations outside the highway corridor easement from which rock and soil materials may be mined and processed for new construction or maintenance needs. They may also serve as repositories for excess materials generated by construction or maintenance activities.

- Chapter Goals

- Describe development of material sources and authorization required.
- Discuss types of sites.
  - Material Sources
  - Joint Use Material Sources
  - Waste Sites
- Introduce stormwater management guidelines for material sources and stockpile sites.
- Describe restoration of material sources and waste sites.

# 9.2 Scoping



- Authorization Process
  - Appendix I is a summary chart of BLM/USFS approval issues.
  - The Source Development Plan purpose is to anticipate, direct and document the proper management of the source.
  - Could require months or even years to complete.
  - Fees may be assessed to materials wasted off of USFS lands.
  - Material sources are classified as industrial facilities for the purposes of stormwater management.
  - Preparation of a Stormwater Pollution Prevention Plan (SWPPP) or Erosion and Pollution Control Plan may be required.
- Geotechnical Investigations
  - Usually needed for Material Sources.
  - Require BLM/USFS authorization.



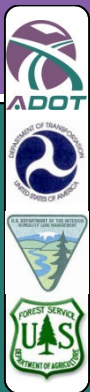
# 9.3 Operation



- Material Sources
  - ADOT operates source sites in accordance with the approved Source Development Plan.
  - Contractor or public agency use of material sources requires preparation of a Plan of Operations.
- Plan of Operations
  - Application to use a material or waste site for which an approved Source Development Plan has been developed.
  - Requires BLM/USFS approval.
  - Must include descriptive information on the specific site including:
    - Permit holder
    - Site location
    - Access
    - Anticipated Use

Refer to page 98 of the Guidelines for a detailed list of Plan of Operations requirements.

# 9.3 Operation



- Joint Use Material Sources
  - Refers to use by more than one agency or party: ADOT, BLM, USFS, city, county.
  - Recommend discrete designated areas for each user.
  - Each user must provide a Plan of Operations.
- Excess Material (Waste)
  - Typically identified during project planning and design.
  - Should be described in the contract documents.
  - Contractor may request additional (unplanned) waste sites.
  - Permit is required from BLM/USFS.



# 9.3 Operation



- Inspections should be done:
  - During Geotechnical Investigation.
  - During Site Development.
  - Regularly during Operation to evaluate compliance with the Source Development Plan, the Plan of Operation and applicable state and/or federal pollutant discharge system programs.



## 9.4 Stormwater Management Guidelines



- The Guidelines for Standard Operating Procedures to Control Stormwater on Forest Service and Bureau of Land Management Material Mining Sources and Stockpile Sites
  - Purpose is to establish a standard operating procedure for stormwater management at material mining sources and stockpile sites.
    - Exclusive ADOT use sites
    - Non-exclusive ADOT use on BLM and FS Lands
  - Appendix P of the *Guidelines for Highways on BLM and USFS Lands* includes:
    - Guidelines for SOP to Control Stormwater on FS and BLM Material Mining Sources and Stockpile Sites
    - Application SF 299
    - Erosion and Pollution Control Plan Template

# 9.5 Restoration of Material Sources and Waste Sites



- Restoration of Material Sources & Waste Sites
  - Final site grading.
  - Distribution of stored topsoil.
    - Erosion control, restoration and revegetation of disturbed soils.
  - Access roads should be regraded to original contour, ripped, drained, blocked to traffic and seeded.



# 9.6 Additional Resources



- ADOT Stormwater Program  
<http://www.azdot.gov/business/environmental-services-and-planning/water-quality>
- Arizona State Mine Inspector  
<http://www.asmi.state.az.us/>



Arizona State Mine Inspector



General Information  
602-542-5971

- ADOT Environmental Planning Group  
<https://www.azdot.gov/business/environmental-services-and-planning/environmental-guidance-documents/material-source-guidance>

# Highlights



- Read Chapter 9.....
  - For an overview of the material sites.
  - To understand how material sites are developed and operated.
  - For an introduction to stormwater management procedures for material sites.
  - For a list of restoration requirements for material and waste sites.



# Knowledge Check: Do you.....

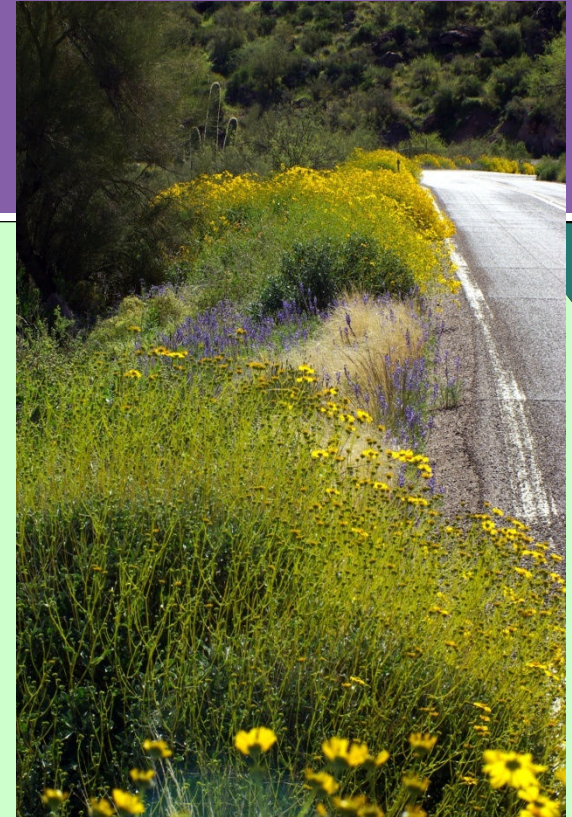


- ✓ Know the definition of a material site?
- ✓ Understand how material sites are developed?
- ✓ Have a basic understanding of the authorization process for the development of material sources?
- ✓ Know the purpose of a Source Development Plan and a Plan of Operations?
- ✓ Know the different types of material sites?
- ✓ Know where to learn about stormwater management procedures for material sites?
- ✓ Know the restoration requirements for material sources and waste sites?
- ✓ Know how to access the State Mine Inspector's webpage?

# Guidelines Appendices



- Acronyms and Abbreviations
- Glossary of Terms
- ADOT-FHWA-USFS MOU
- ADOT-FHWA-BLM MOU
- Slope Design Details
- Easement Development
- Section 106 Process on Forest Service Lands
- Typical Blasting Plan Content
- Comparison of Permit Processes for Material Sites
- Signing
- Project Reference Fact Sheet
- Native Plant Salvage & Replanting Evaluation Guidelines
- References and Photography Credits
- Additional Photos (online appendix)
- Document Revision History



# Document Availability



Purchase from:  
ADOT Engineering Records Section  
1655 W. Jackson Room 175  
Mail Drop 112F  
Phoenix, Arizona 85007-3217  
Telephone: 602-712-8216 or 712-7498  
Fax: 602-712-3235

For availability and cost:  
[http://www.azdot.gov/business/Contracts  
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Download from:  
[http://www.azdot.gov/business/engineering-and-construction/roadway-  
engineering/roadway-design-standards-and-guidelines/guidelines-for-  
highways-on-bureau-of-land-management-and-us-forest-service-lands](http://www.azdot.gov/business/engineering-and-construction/roadway-engineering/roadway-design-standards-and-guidelines/guidelines-for-highways-on-bureau-of-land-management-and-us-forest-service-lands)

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