

EROSION CONTROL ISSUES & LESSONS LEARNED

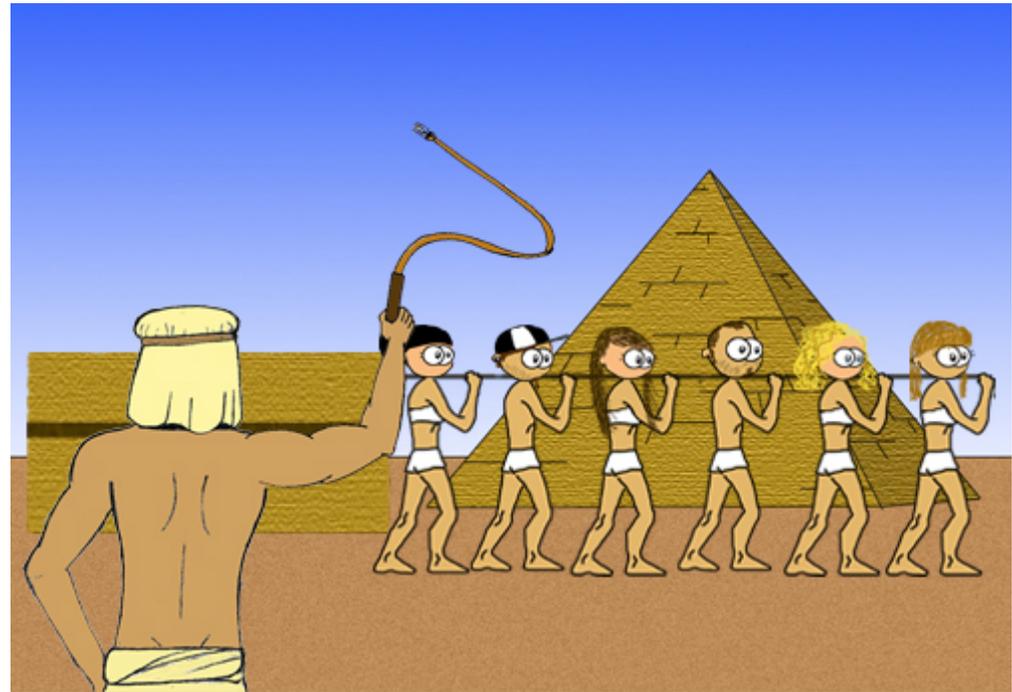
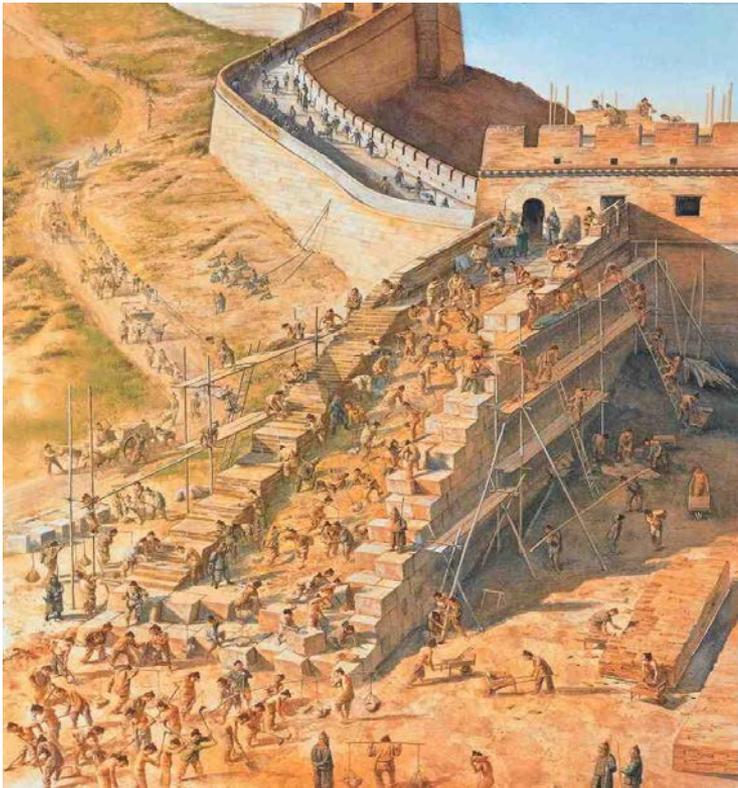
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Erosion Control: Common Issues & Lessons Learned

- History of Construction Site Erosion Control...Where were we?



Erosion Control: Common Issues & Lessons Learned

- History of Construction Site Erosion Control...Where were we?
 - 50's, 60's,70's



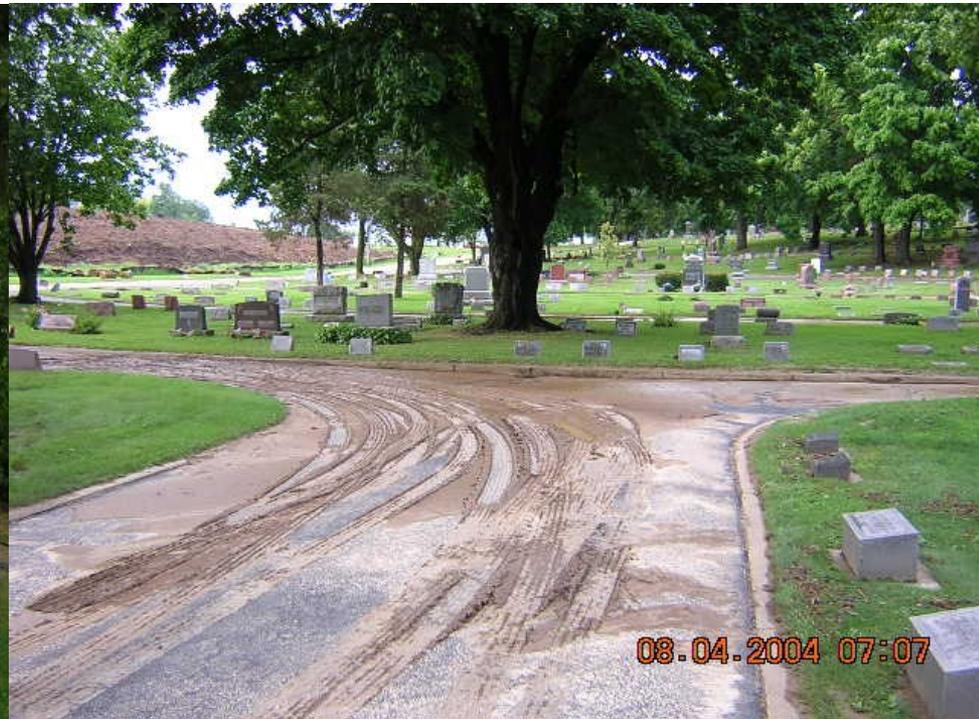
Erosion Control: Common Issues & Lessons Learned

- History of Construction Site Erosion Control...Where were we?
 - 90's /early 2000
 - Fat dumb & happy?



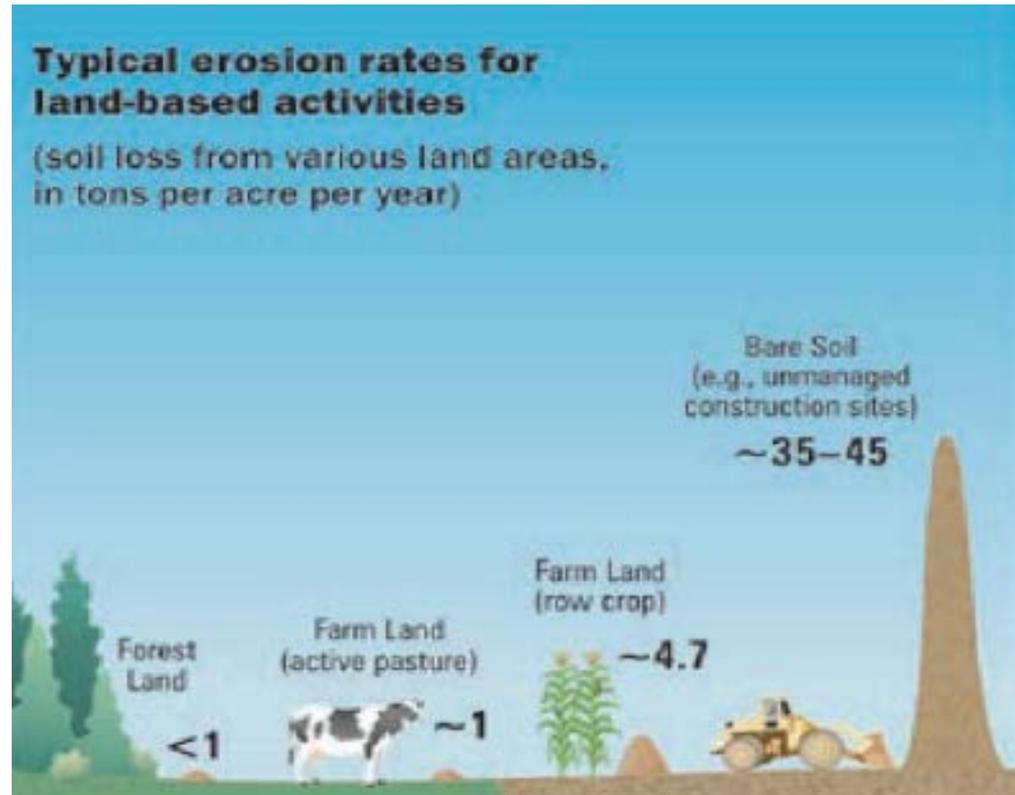
Erosion Control: Common Issues & Lessons Learned

- History of Construction Site Erosion Control...Where were we?
 - August 4, 2004



Erosion Control: Common Issues & Lessons Learned

- The Here & Now.
 - Erosion rate can occur at rates up to **35 to 45 tons** per Acre/year



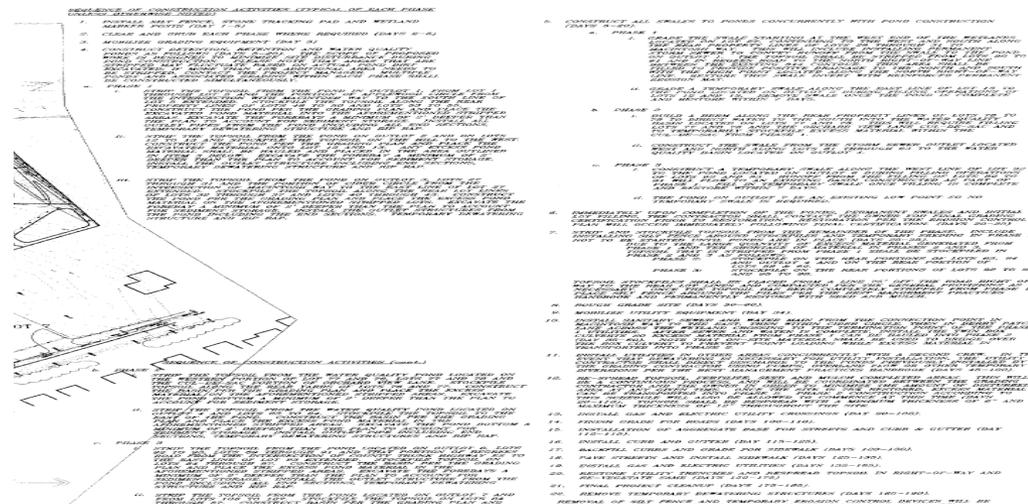
Erosion Control: Common Issues & Lessons Learned

- The Here & Now.
 - The importance of a Sequence
 - Proper installation & Limitations of certain measures
 - Temporary Stabilization
 - Dewatering
 - Good Engineering and construction over-site matters!!



Erosion Control: Common Issues & Lessons Learned

- The Importance of a Sequence
 - Minimize areas of disturbance
 - Control runoff during each stage of construction
 - Guide the Construction team/inspectors
 - Requiring temp. Stabilization
 - Part of your permit.



Common Issues & Lessons Learned

- The Importance of a Sequence
 - Restoration
 - 7 days versus 30 days
 - “But, NO sediment left the site.”
 - The Sequence doesn’t make sense or the plan doesn’t make sense.



Erosion Control: Common Issues & Lessons Learned

- Engineer a good sequence.

Existing Low spot ☹



Erosion Control: Common Issues & Lessons Learned

- Proper Installation & Limitations of Measures
 - DNR Tech Standards/DOT Standard Details
 - Silt Fence
 - Ditch Checks
 - Dewatering



Common Issues & Lessons Learned



Silt Fence

- ❑ Not as good as you think.
- ❑ Good for perimeter control
- ❑ Good for small drainage areas
- ❑ Place on the contour
- ❑ ITS NO GOOD IN CHANNELS!!!
- ❑ Follow DNR Technical Standard 1056

Erosion Control: Common Issues & Lessons Learned



Silt Fence Limitations



Erosion Control: Common Issues & Lessons Learned

- Ditch Checks
 - ▣ Erosion Bales, stone, manufactured (PAL)
- Height of check vs height of ditch
- Middle is lower than the bottom of the outside edge
- [Follow DNR Technical Standard 1062](#)



Erosion Control: Common Issues & Lessons Learned

Ditch Check Limitations



Erosion Control: Common Issues & Lessons Learned

- Temporary Stabilization
 - Areas left inactive for 7 days need to be stabilized.
 - [Follow DNR Tech Standard \(1059\)](#)



Erosion Control: Common Issues & Lessons Learned

Dewatering

- **ALWAYS** dewater into something.
 - Stone box, pond, silt bag, sediment trap
- Types
 - Geotextile Bag,
 - Gravity Settling,
 - Filtration devices.
- Should be sized based upon types of soils and pumping rate.
- [Follow DNR Tech Standard \(1061\)](#)

Erosion Control: Common Issues & Lessons Learned

Dewatering



Erosion Control: Common Issues & Lessons Learned

Dewatering

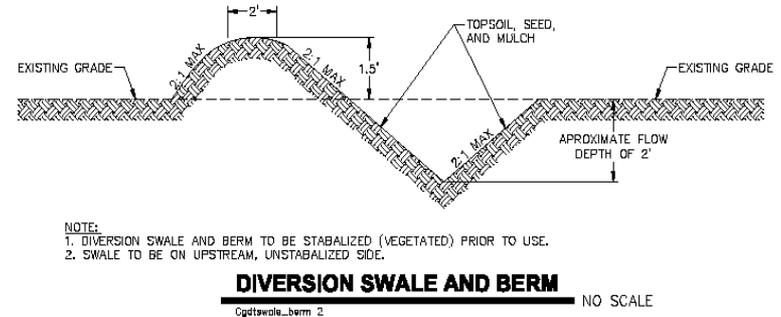


Erosion Control: Common Issues & Lessons Learned

Dewatering



Other Erosion Control Tips



- Cut/Fill Transition
 - Area most susceptible to erosion
 - Often move during grading operations
- Divert offsite (clean) water around construction site
- Beware drainage during grading!!!!

QUESTIONS?

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