

Overlay and Rehabilitation

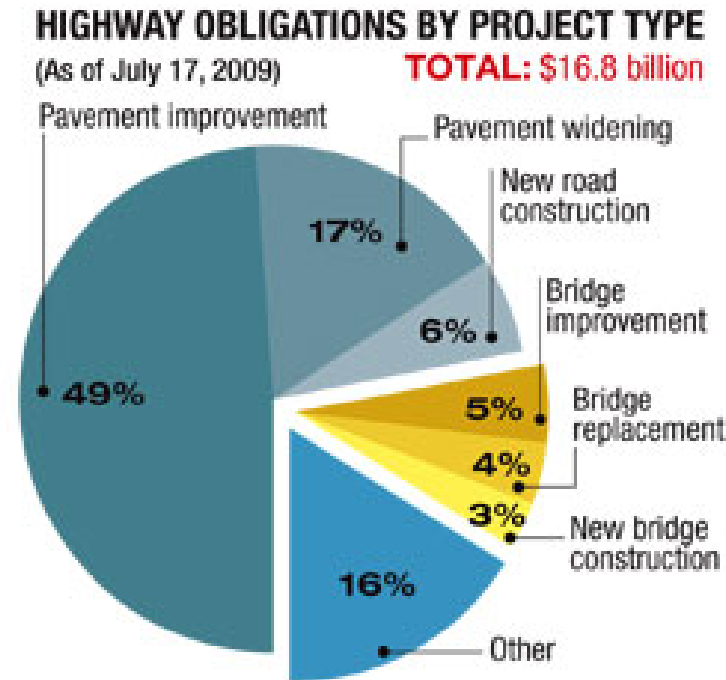


While there is still new construction to be done, a bulk of our transportation work today is centered around overlays and rehabilitation. With the 3D modeling tools of the past, how hard was it to determine the right amount of overlay, to maintain the correct cross slope, to determine where and when to grind? Doable but challenging for sure. This session will focus on new technologies to make these tasks much easier and faster. New technologies will greatly speed your work process plus provide the analysis tools to assure your next overlay project is the best and most cost effective it can be.

Overlay and Rehabilitation



- Makes up approximately 81% of projects currently undertaken by DOTs.



Source: GAO analysis of FHWA data
Source: Engineering News Record

Overlay and Rehabilitation



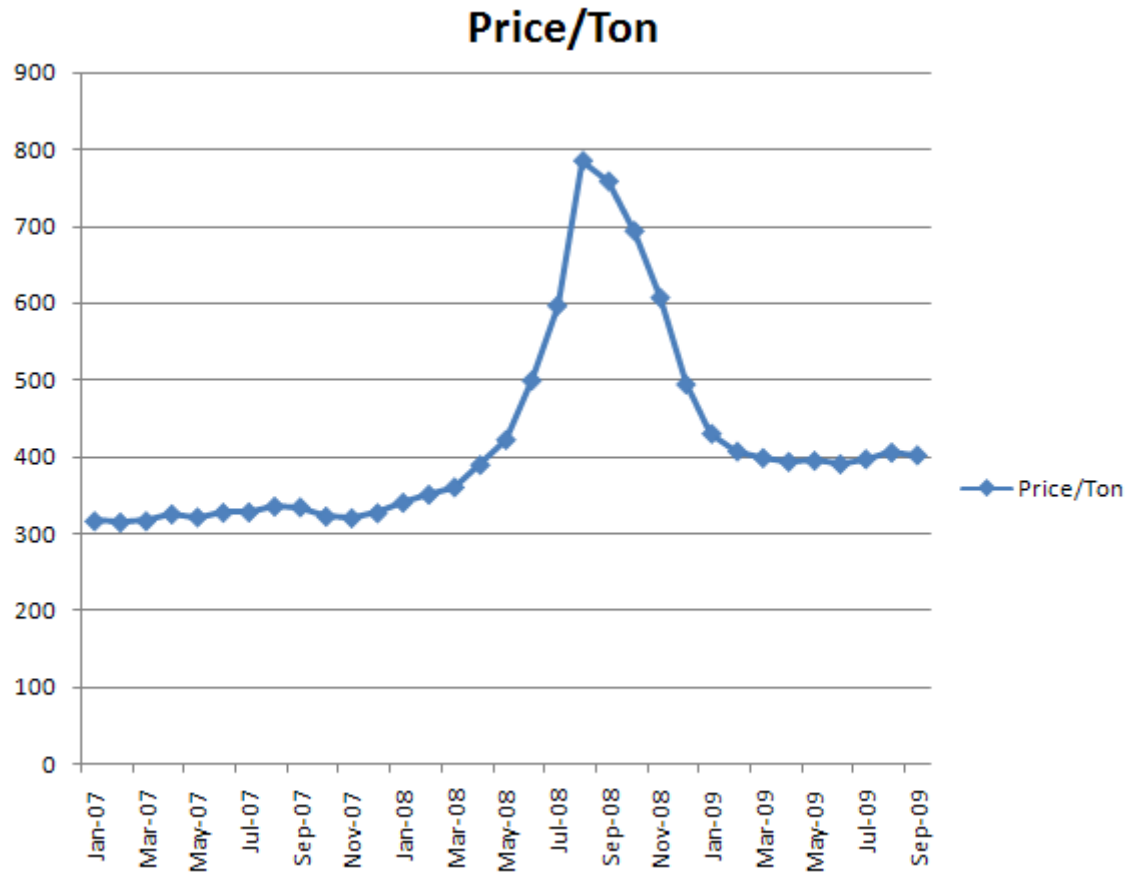
“State highway agencies have taken the term “shovel-ready” to heart, so far devoting nearly half of the American Recovery and Reinvestment Act dollars to pavement improvements, according to a recent report from the U.S Government Accountability Office.”

Source: Engineering News Record
Article: **Repaving Projects Dominate ARRA Highway Funding**
08/12/2009
By [Tom Ichniowski](#)

Overlay and Rehabilitation



Price of Asphalt



Overlay and Rehabilitation



Questions

- Is it time consuming to figure quantities correctly?
- Do you have serious overruns on quantities?
- How is the milling computed?
- How is grinding computed?
- How is leveling computed?
- Do you match cross slope?
- Is there widening involved?

Overlay and Rehabilitation



Overlay and Rehabilitation



- What you need to get started
 - Good existing data!
 - Laser scanned
 - Surveyed
 - Photogrammetry
 - Existing pavement features
 - Existing edges of pavement
 - Crown lines
 - Lane lines
 - Data in between the above (i.e. rutting, pumping)
 - Enough data outside edges of pavement to tie into
 - Geometry
 - Curves need to calc super of rehab

Overlay and Rehabilitation

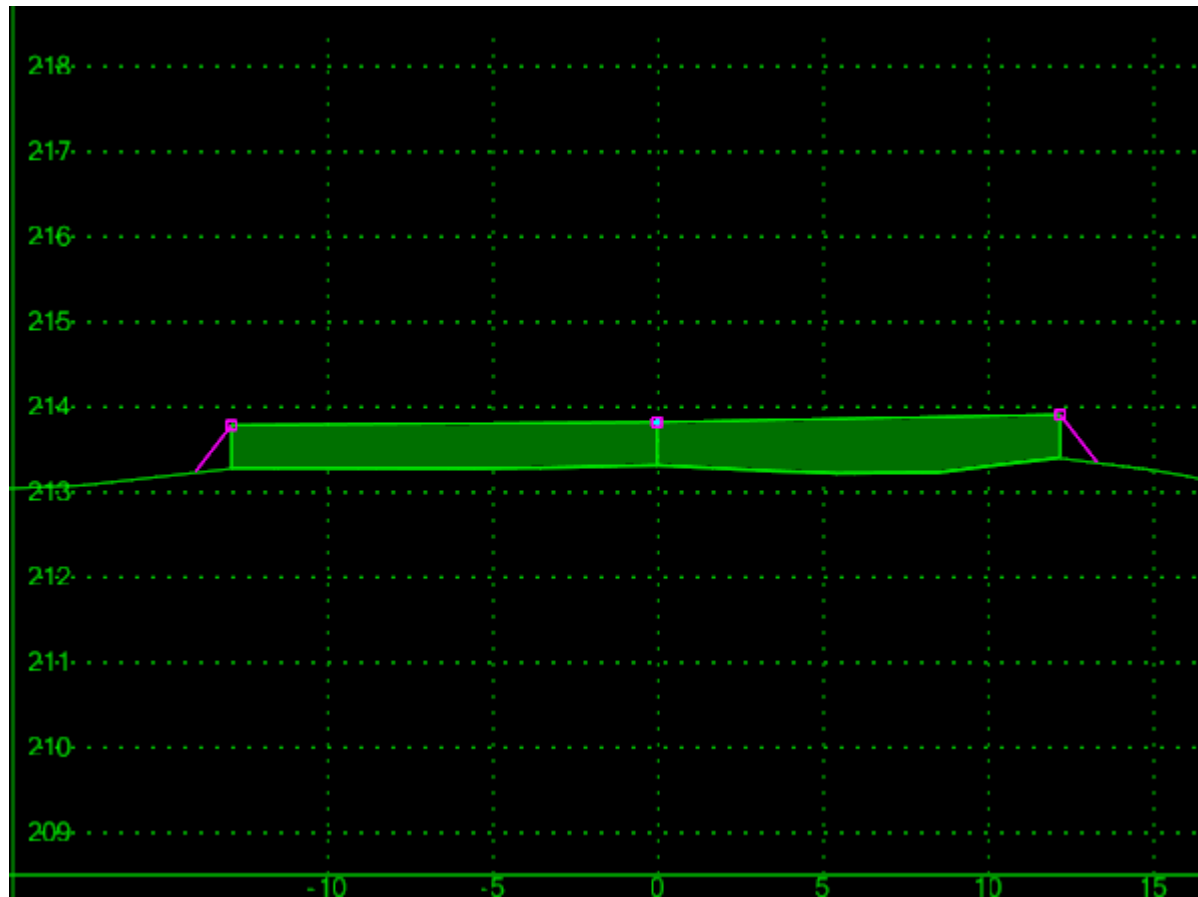


- Types of Overlay Rehabilitation
 - Simple overlay (Painting)
 - Simple overlay (Painting) and widening
 - Cross slope correction with leveling
 - Cross slope correction with grinding
 - Cross slope correction with grinding and leveling
 - Cross slope correction with grinding, leveling and widening
 - Etc.....

Overlay and Rehabilitation



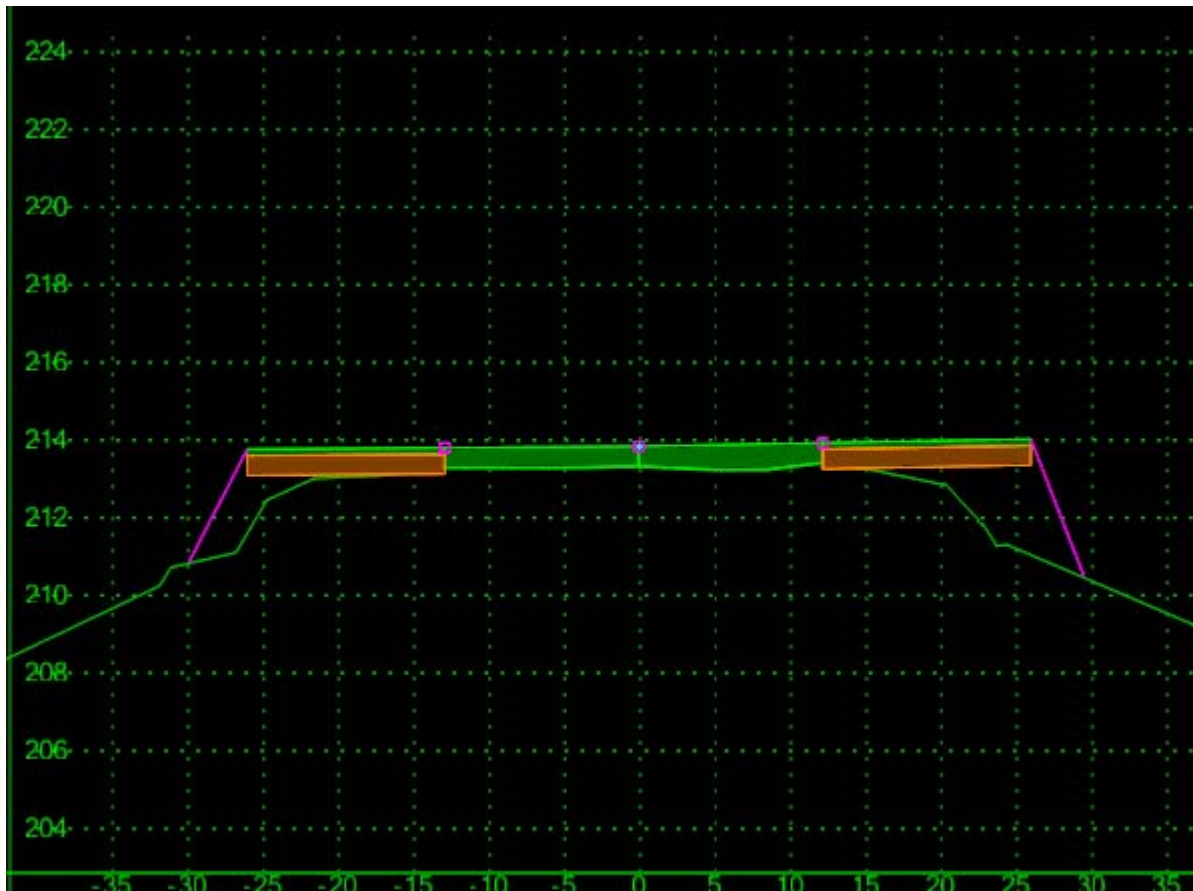
- Simple overlay (Painting)



Overlay and Rehabilitation



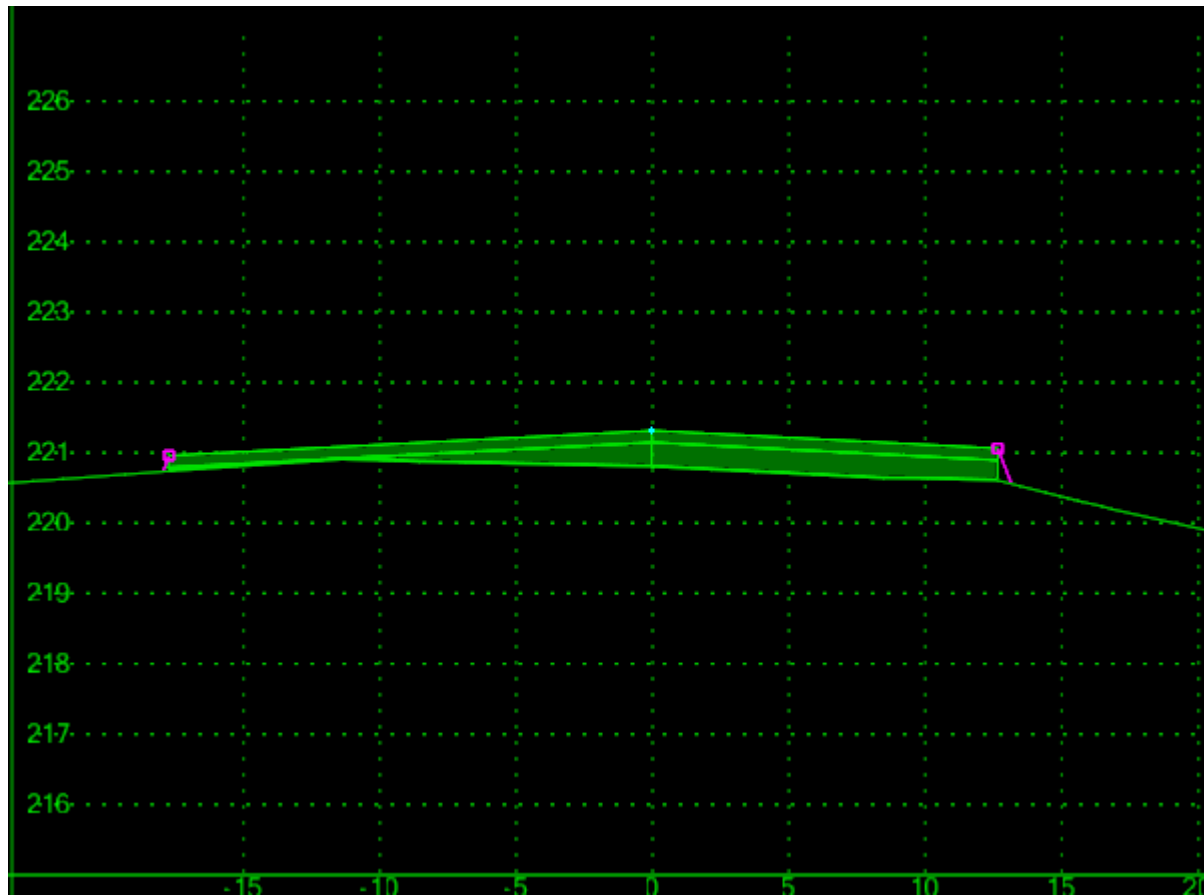
- Simple overlay (Painting) and widening



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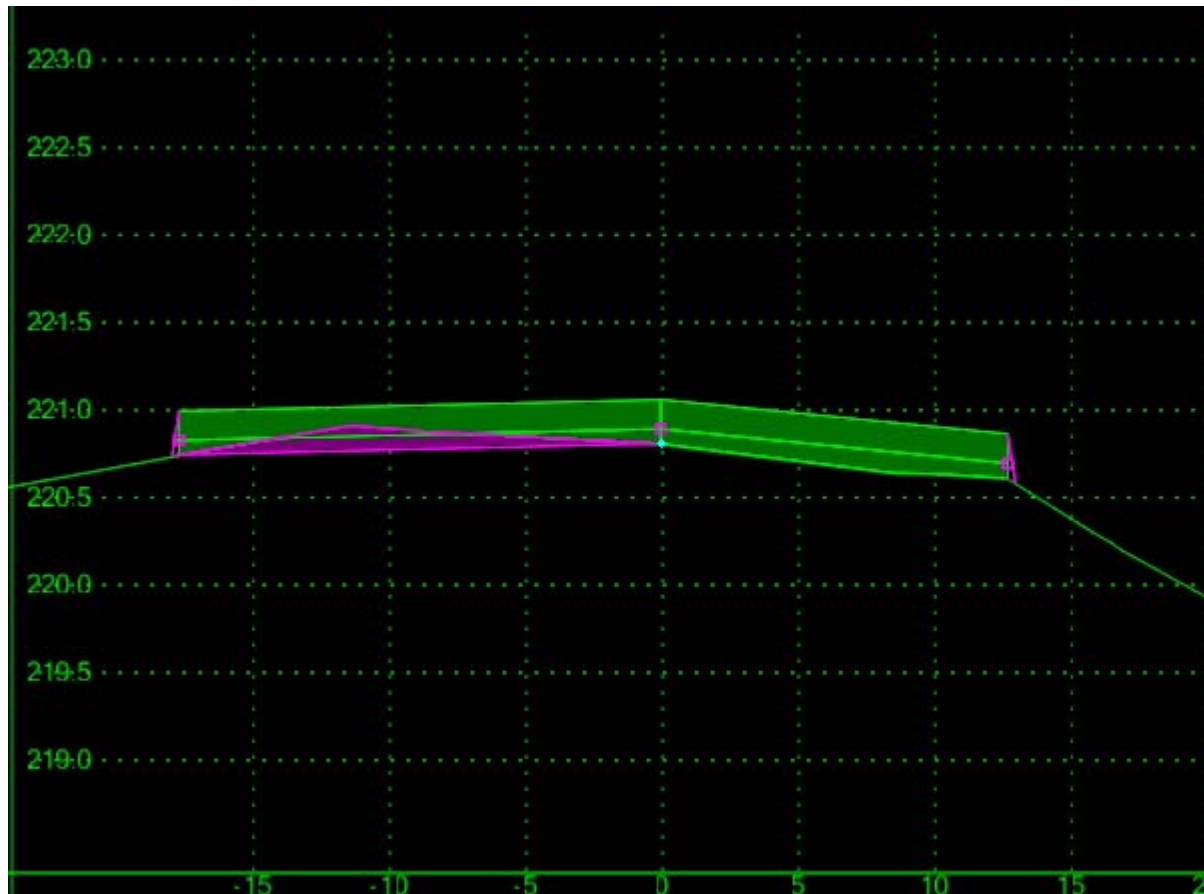
- Cross slope correction with leveling



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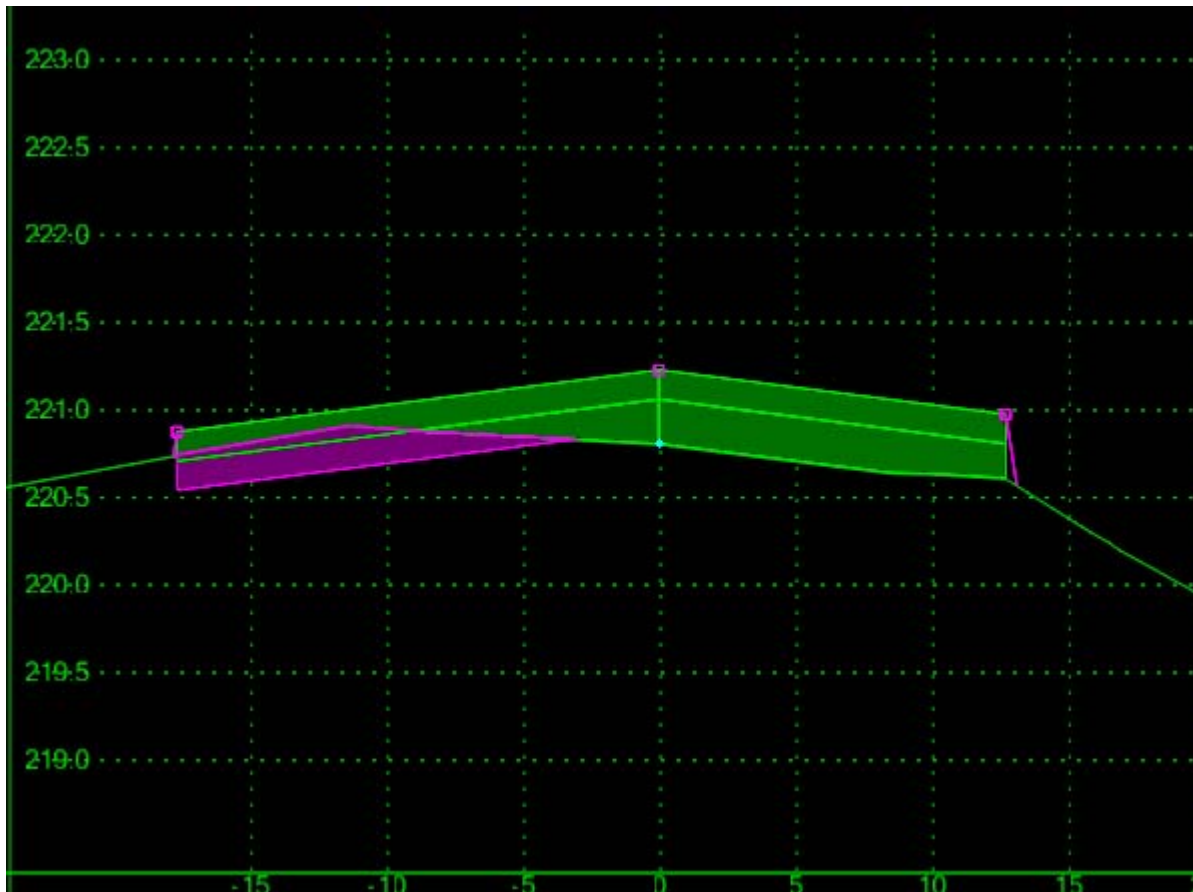
- Cross slope correction with grinding



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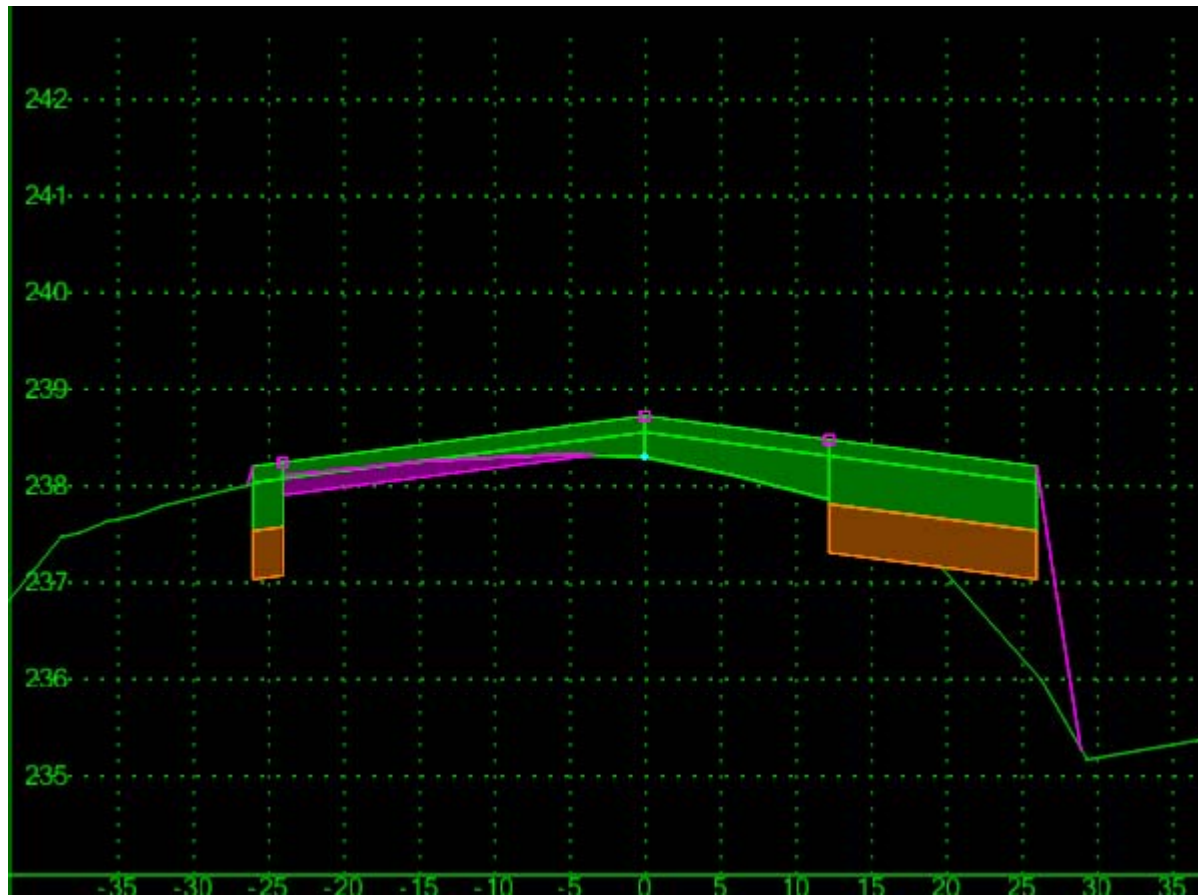
- Cross slope correction with grinding and leveling



Overlay and Rehabilitation



- Cross slope correction with grinding, leveling and widening



Overlay and Rehabilitation



- Since you have components (shapes) the software can compute quantities via end area volumes.
- Volumes can give you tons via Quantity Manager

Overlay and Rehabilitation



- Demo



Thank you!

Kevin Jackson, Technical Director
Transportation and Local Infrastructure

