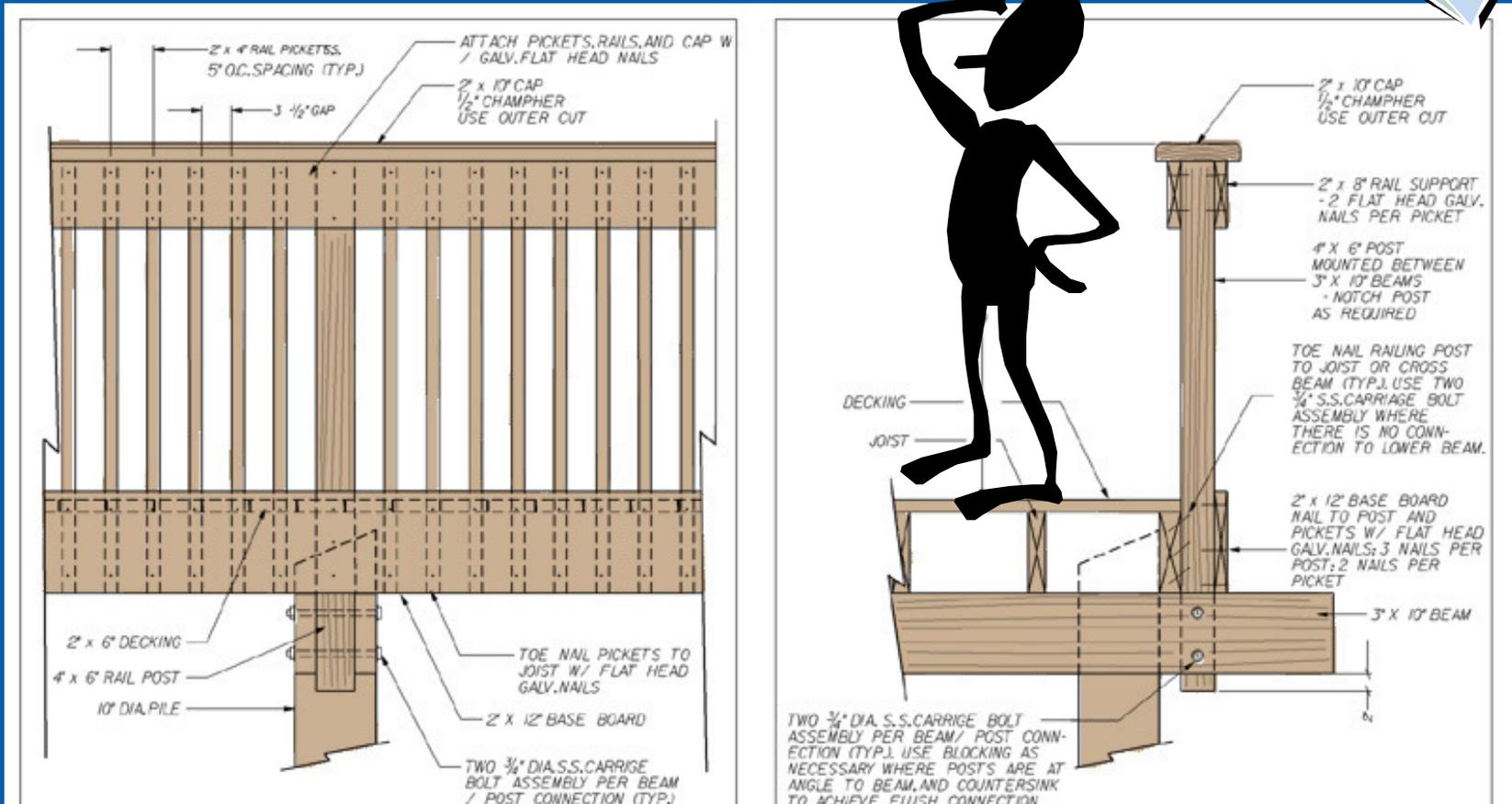
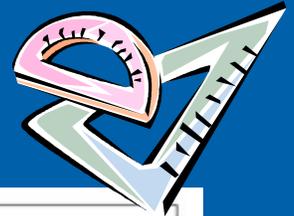
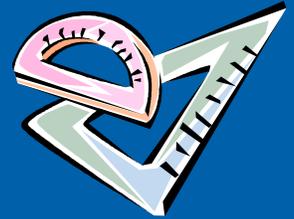


Design Standards...



- Please include Non-Std' Site Details

Design Standards... Sidewalks



- 5' minimum width Sidewalk with Buffer Strip
- 4' width Buffer Strip / 72" with Trees
- 4' width for clear accessible route
- 7' minimum width from BOC without buffer strip

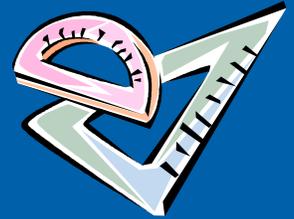


PRELIMINARY ENGINEERING Plan Design

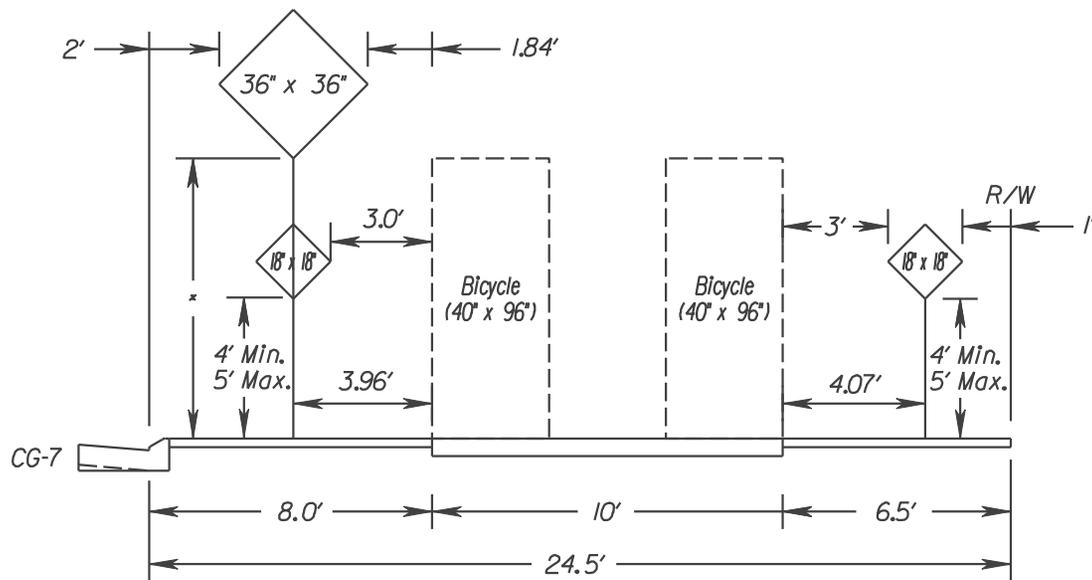


Design Standards...

Shared Use Paths & Trails (Hike, Bike, Equestrian)

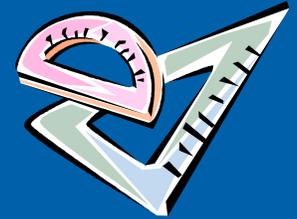


Typical section with roadway sign and trail sign.



Notes:

- * For roadway signs 30" in width or less, use 7' minimum mounting height.
- * For roadway signs greater than 30", use 8' minimum mounting height.

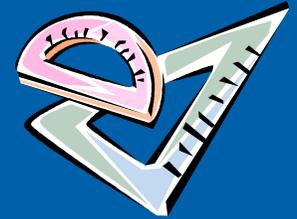


Design Standards...

Shared Use Paths & Trails (Hike, Bike, Equestrian)



- 10' minimum width, 2' shoulder, 3' clear zone, 5% grade, 2% cross slope
- See Workshop handout for other details



Design Standards...

Suggested Alternative Construction Materials to Asphalt Paving:

Crushed Aggregate Surface

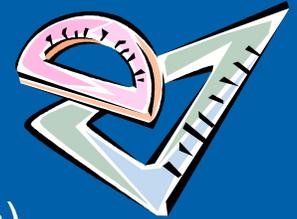
- 4 Inches of base course No. 21A's, topped with 2" of finely crushed limestone aggregate using 3/8" minus crushed fines or "VDOT No. 10's"





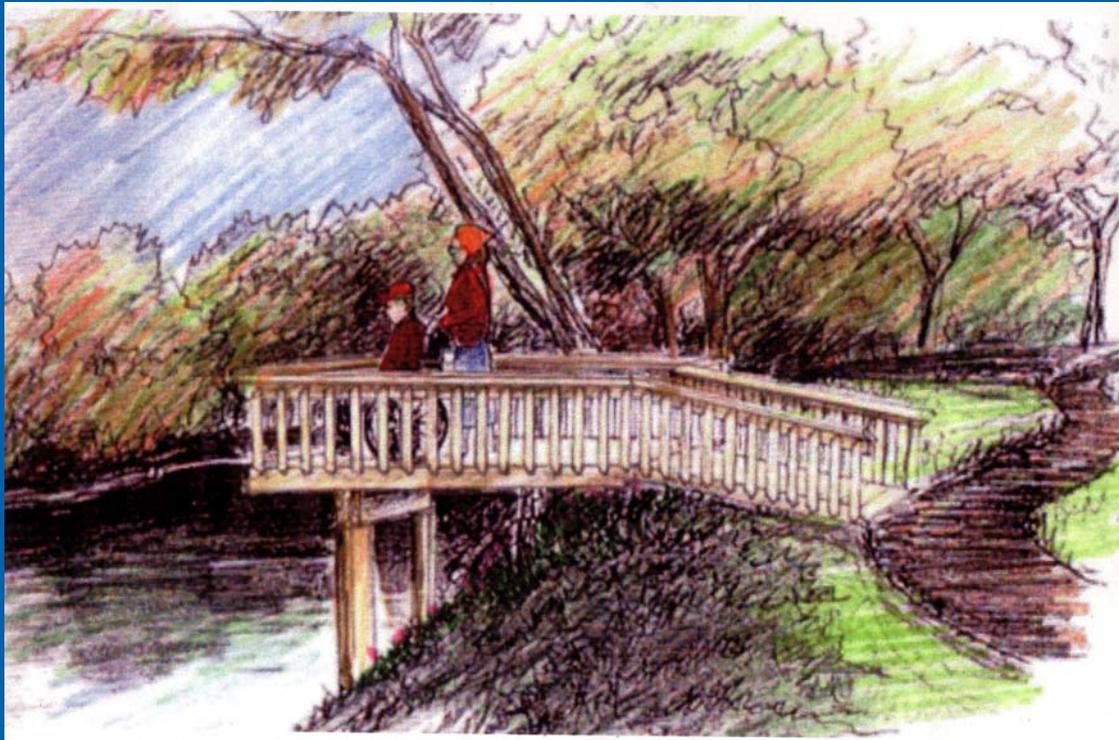
PRELIMINARY ENGINEERING Plan Design



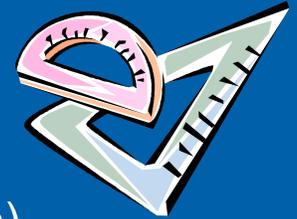


ADA and ADAAG

(Americans with Disabilities Act Accessibility Guidelines)

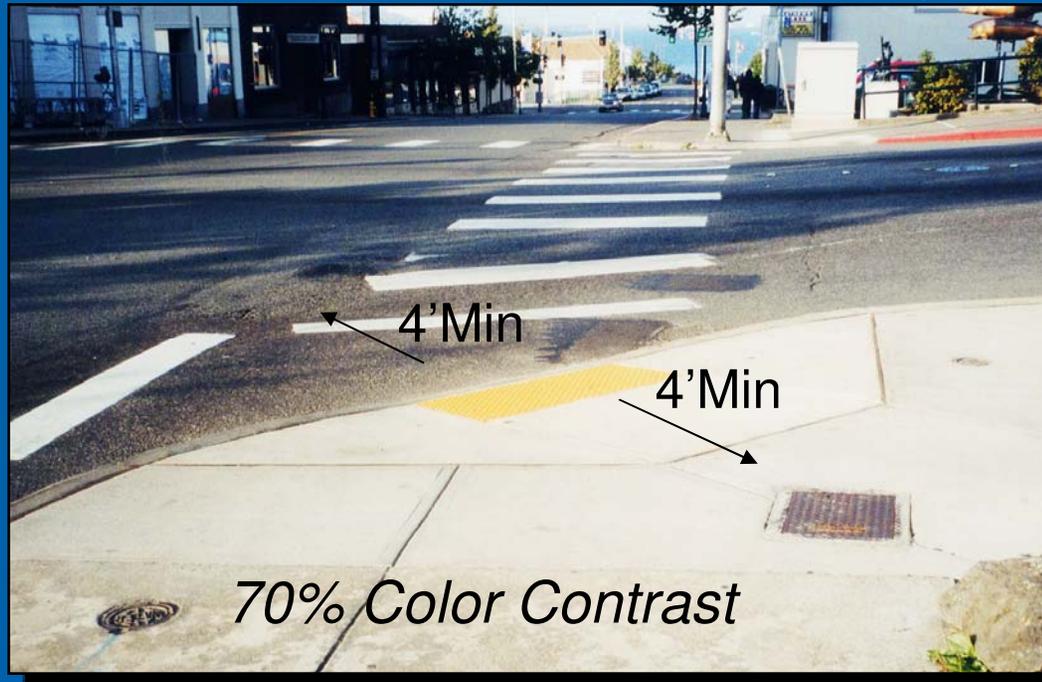


- Provide a Defined Accessible Experience

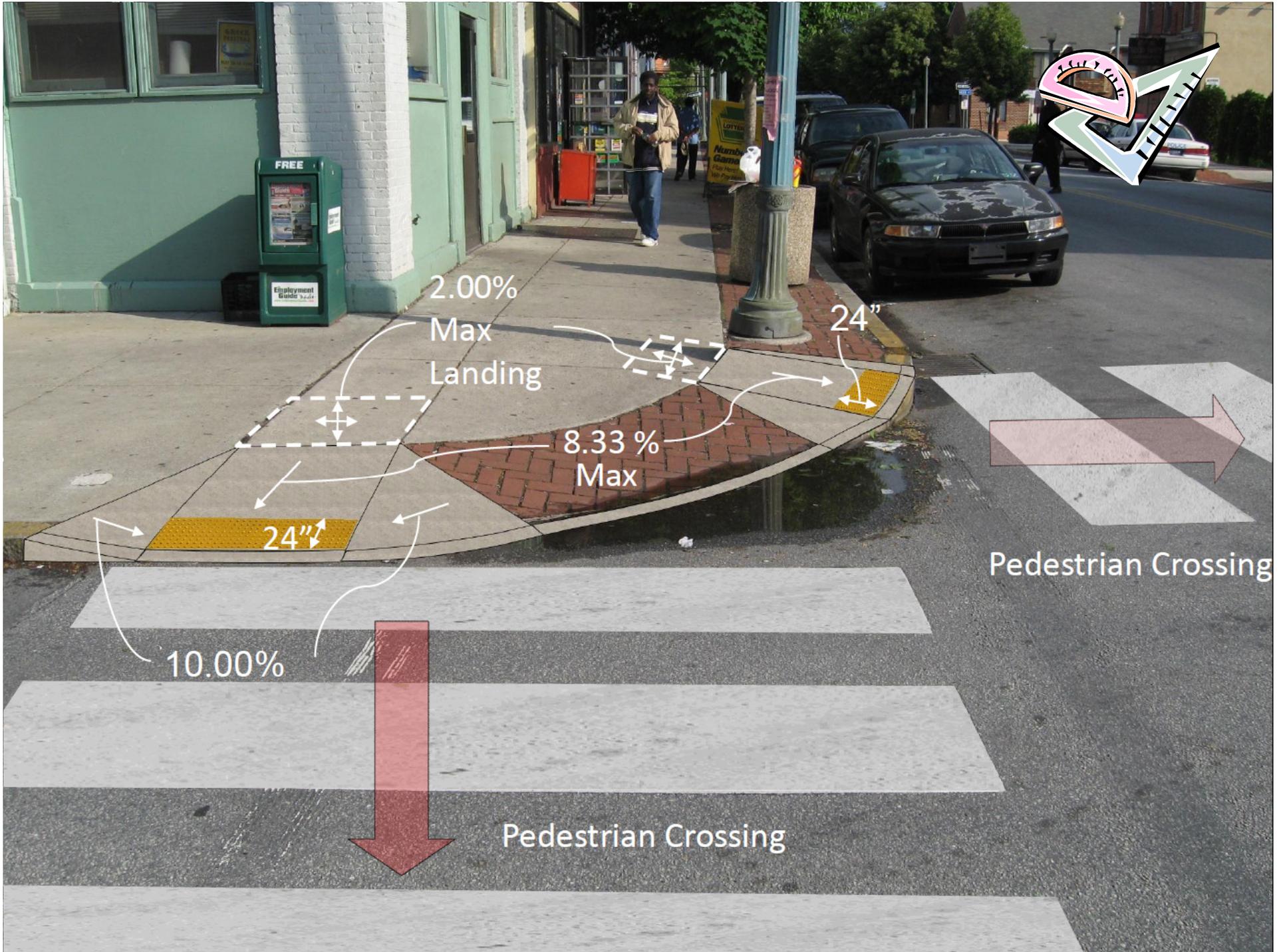


ADA and ADAAG

(Americans with Disabilities Act Accessibility Guidelines)



- 4' wide Curb Cut Ramps with Landings
- 4' x 2' Min. Tactile (Truncated Dome) Surface
- Grade at 5% and within accepted variances



2.00%
Max
Landing

24"

8.33%
Max

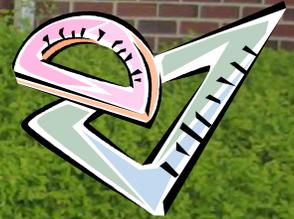
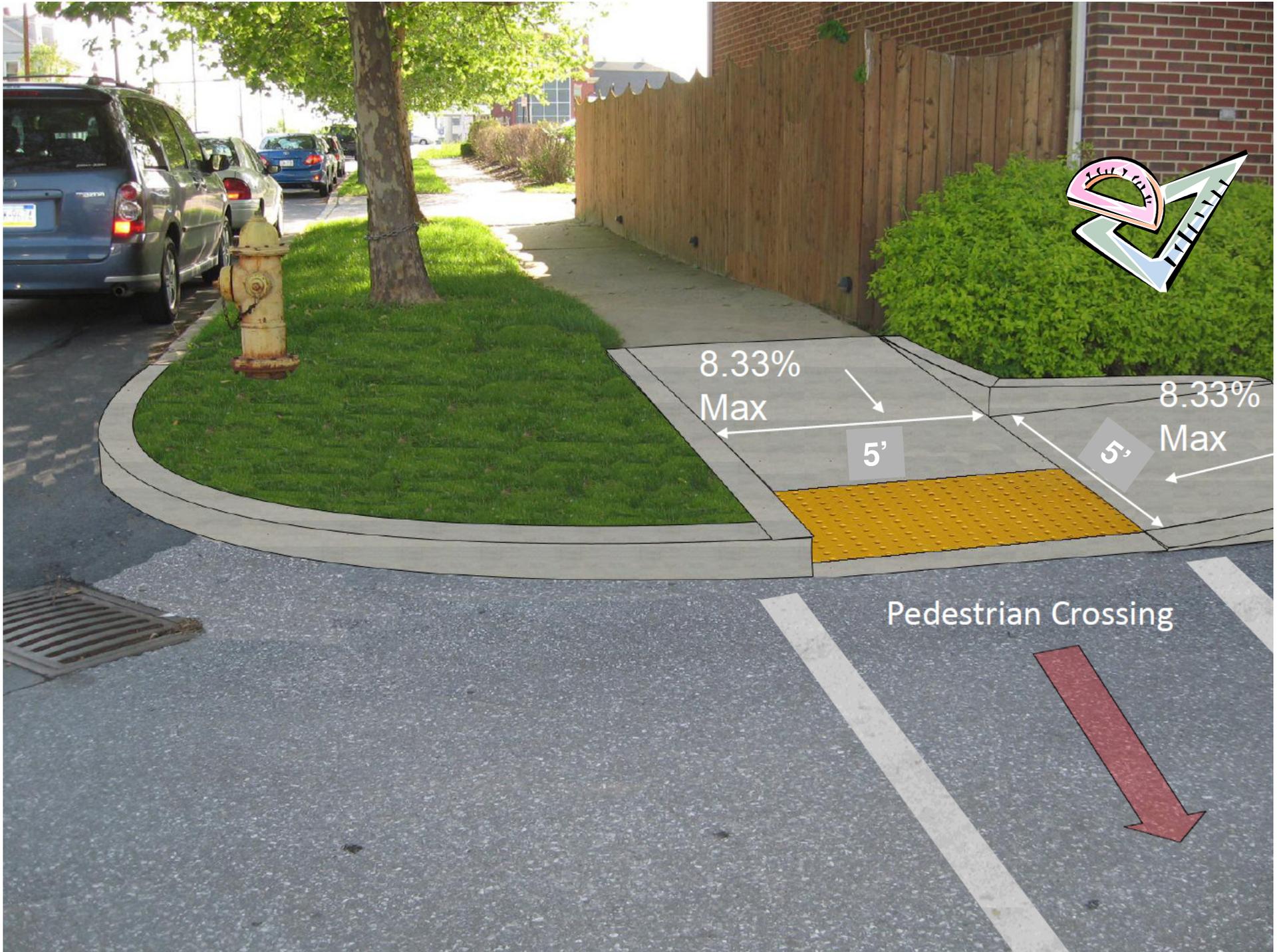
24"

10.00%

Pedestrian Crossing

Pedestrian Crossing





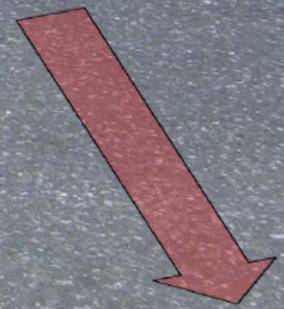
8.33%
Max

8.33%
Max

5'

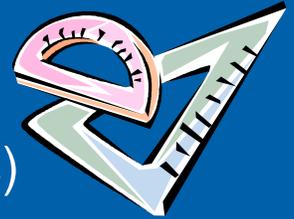
5'

Pedestrian Crossing



ADA and ADAAG

(Americans with Disabilities Act Accessibility Guidelines)



- What is “technically Infeasible”



ADA and ADAAG

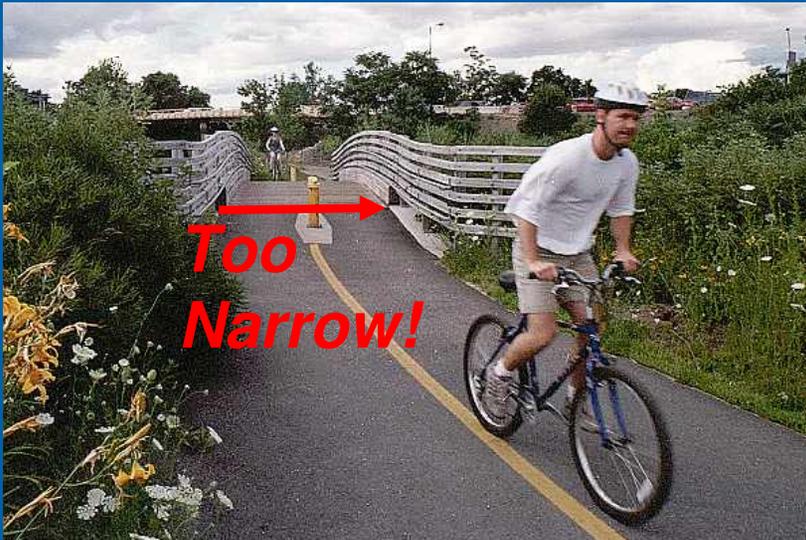
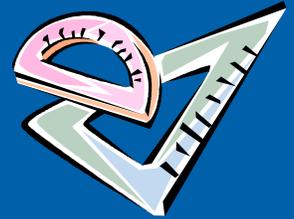
(Americans with Disabilities Act Accessibility Guidelines)



- Consider alternative approaches to design
- Consider accessibility during construction

ADA and ADAAG

(Americans with Disabilities Act Accessibility Guidelines)



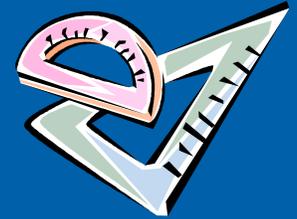
- Bikeway bridges must be 4' wider than the trail with a 54" Desirable Railing Height – Vertical Pickets on Bridges.
- A 10' wide trail = 14' wide bridge in order to maintain a 2' "shy line" on each side.



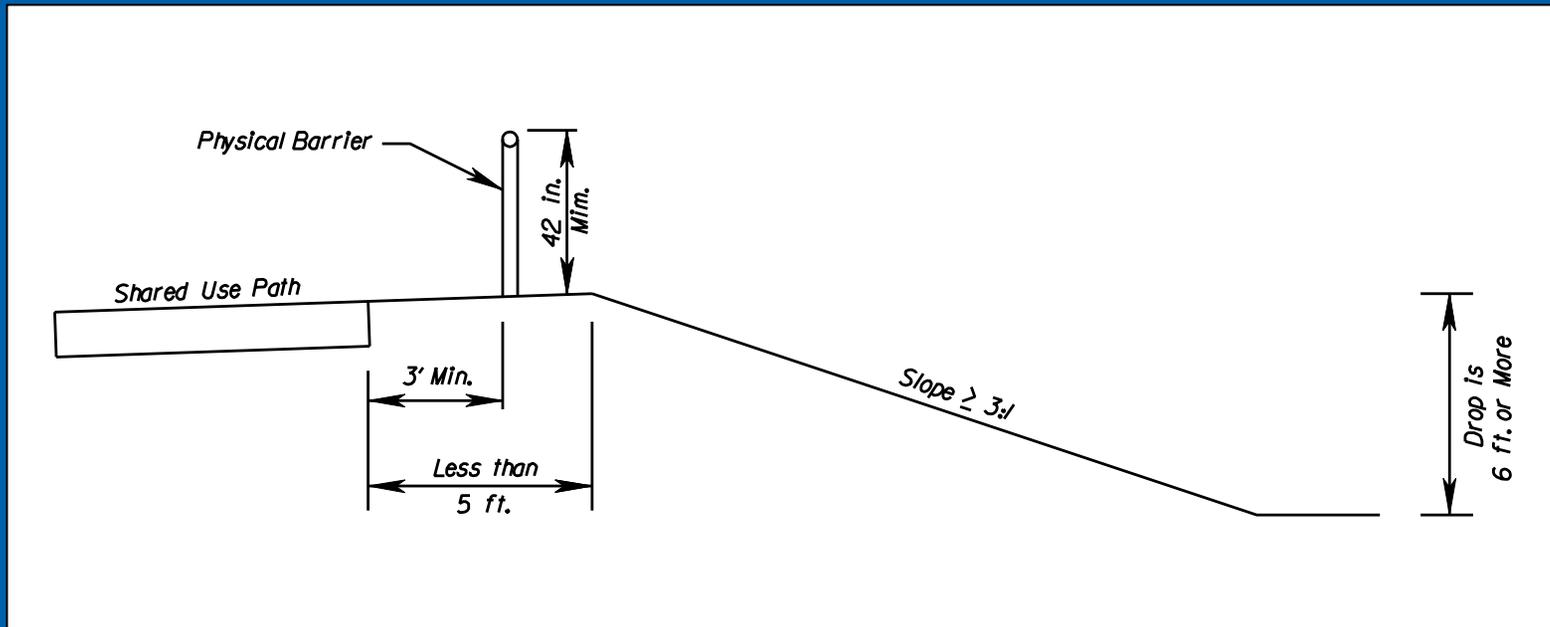
PRELIMINARY ENGINEERING Plan Design





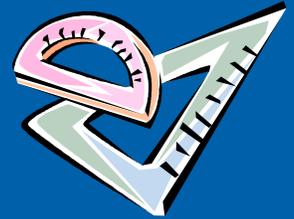


AASHTO Safety Railing Criteria

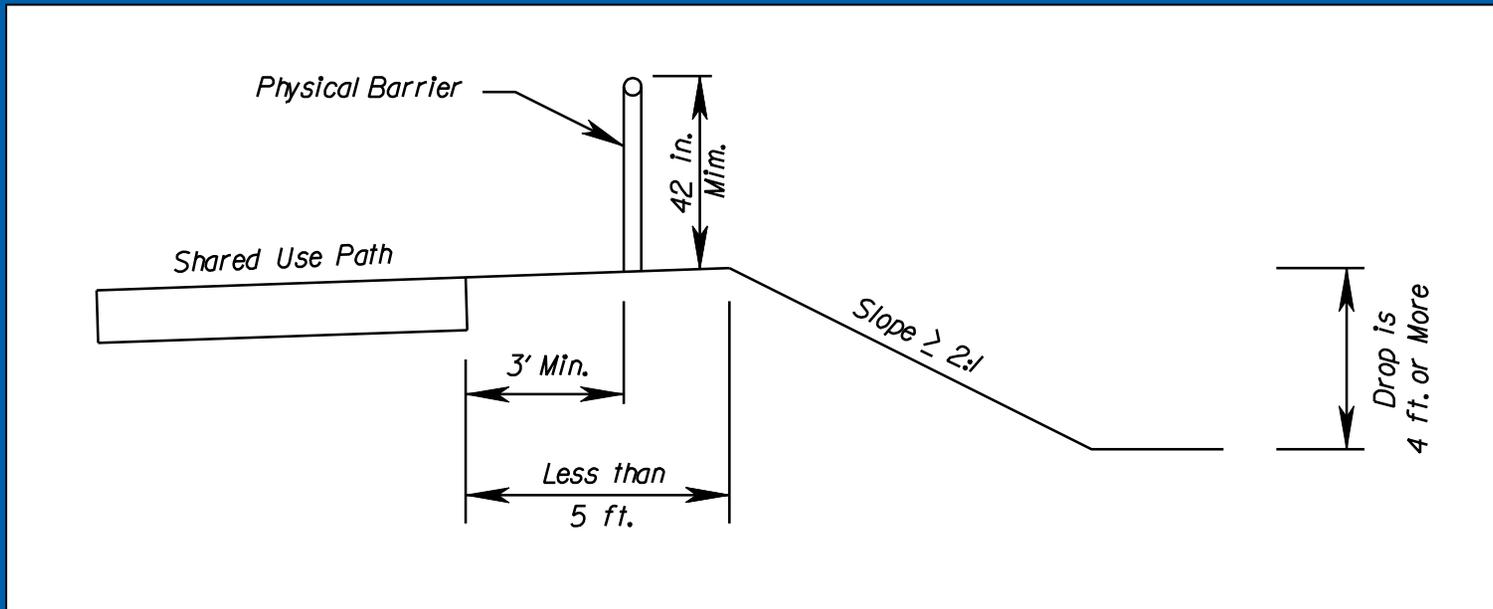


Slopes 3:1 or steeper, with a drop of 6 feet or greater

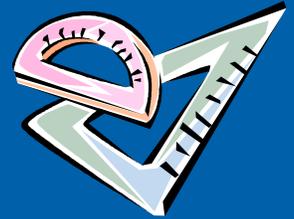
Slopes 3:1 or steeper, adjacent to a parallel water hazard or other obvious hazard



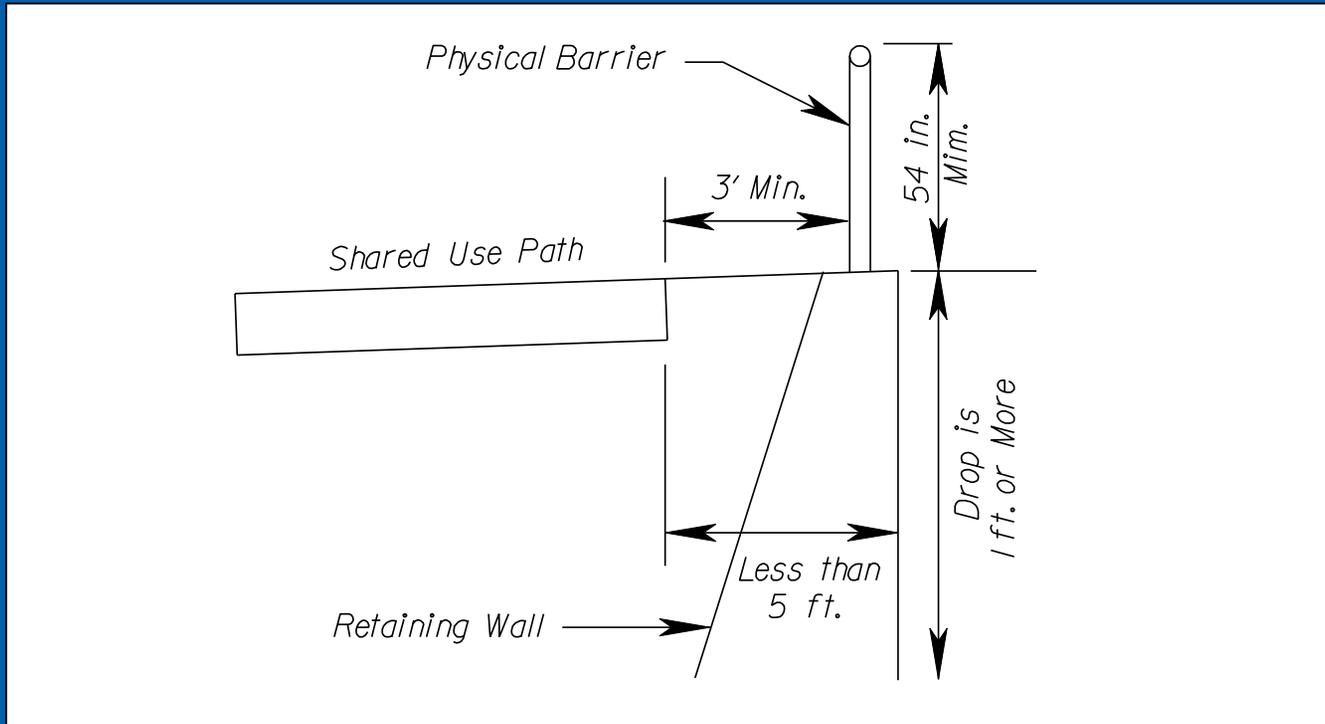
AASHTO Safety Railing Criteria



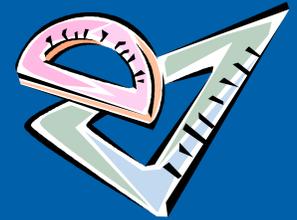
Slopes 2:1 or steeper, with a drop of 4 feet or greater



AASHTO Safety Railing Criteria



Slopes 1:1 or steeper, with a drop of 1 foot or greater.



Preliminary Plan Review – 50% Stage

- Send Plans to Residency for Review
- Send Plans to your Project Manager
- Early Coordination with VDOT for potential roadway conflicts at the construction stage
- Don't be afraid to ask questions!

Thanks!
QUESTIONS