

The attached typical sections and typical unit costs are drawn from the New Hampshire Statewide Bicycle and Pedestrian Plan, and NHDOT's TE/CMAQ Program Handbook for Project Development. They are provided to assist towns in developing bicycle and pedestrian projects and estimating costs. These typical unit costs reflect the average costs of Transportation Enhancement and Congestion Mitigation Air Quality projects constructed by NHDOT to date. The actual cost of a project, especially projects for bicycle and pedestrian facilities is a very individual thing.

Project costs vary widely, depending on the specific conditions for the projects. Some variables to consider as you estimate the cost are:

- ◆ How well defined is the project scope? (This has an impact on the design costs)
- ◆ Is the right of way already owned by the sponsor?
- ◆ Are there environmental impacts by the project that will need to be quantified, minimized, documented, and perhaps avoided and/or mitigated? (This included wetlands, but also historic and archaeological, among others)
- ◆ Is there drainage that needs to be constructed and or improved, and treated?
- ◆ Will there be landscaping or other amenities included such as special lighting, or furniture?
- ◆ Will there be any roadway work necessary?
- ◆ Do any utilities need special accommodation or relocation?
- ◆ There can be cost savings in large quantities. You may want to consider increasing the estimated costs for projects requiring small quantities.

More detailed guidelines for bicycle and pedestrian facilities are available in the 1999 *Guide for the Development of Bicycle Facilities*, published by the American Association of State Highway and Transportation Officials (AASHTO), and endorsed by the Salem-Plaistow -Windham MPO. At present the NH Department of Transportation does not have a comprehensive manual on bicycle and pedestrian facility design that is specific to the state, as many other states have developed, and similarly uses the AASHTO guidelines.

# TRANSPORTATION ENHANCEMENT PROJECTS

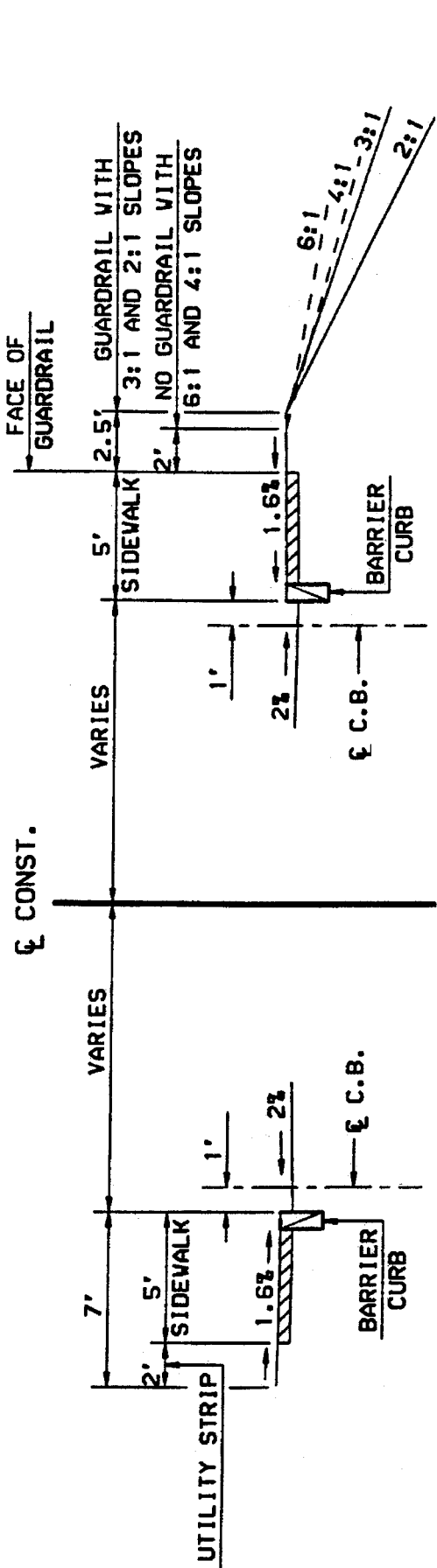
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## Typical Unit Costs For Pedestrian And Bicycle Facilities

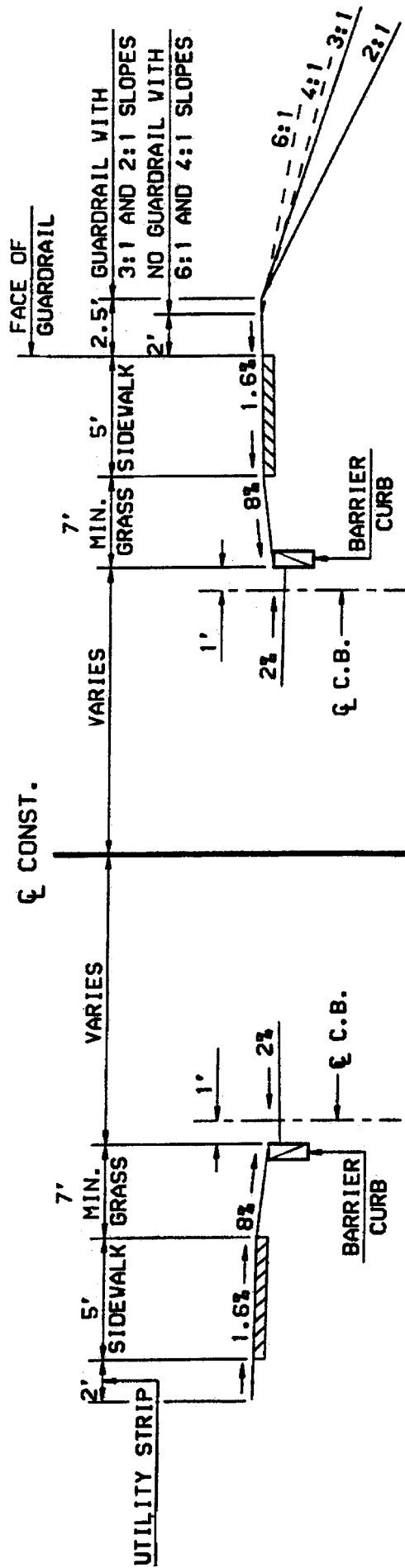
| <b>New Bituminous Sidewalks</b>  |                              |                                      |
|--|------------------------------|--------------------------------------|
| <b>Description</b>   | <b>Weighted Cost (\$/LF)</b> | <b>Range of Average Cost (\$/LF)</b> |
| 5' wide curbed bituminous sidewalk with 4' shoulders   | \$140                        | \$110-155                            |
| 5' wide curbed bituminous sidewalk without shoulders   | \$120                        | \$45-140                             |
| 5' wide uncurbed bituminous sidewalk.  | \$60                         | \$45-135                             |
| <b>New Concrete Sidewalk</b>   |                              |                                      |
| <b>Description</b>   | <b>Weighted Cost (\$/LF)</b> | <b>Range of Average Cost (\$/LF)</b> |
| 8' wide curbed concrete sidewalk with shoulders (sidewalk and shoulders both sides)  | \$382                        | \$235-549 LF                         |
| <b>Existing Bituminous Or Concrete Sidewalk</b>  |                              |                                      |
| <b>Description</b>   | <b>Weighted Cost (\$/LF)</b> | <b>Range of Average Cost (\$/LF)</b> |
| Rehabilitating existing 5' wide sidewalk   | \$110                        | \$15-325                             |
| <b>Bituminous Shoulders For Bicycles</b>   |                              |                                      |
| <b>Description</b>   | <b>Weighted Cost (\$/LF)</b> | <b>Range of Average Cost (\$/LF)</b> |
| 4' wide paved shoulders (both sides) for shared bicycle use.   | \$65                         | \$55-415                             |
| <b>Multi-use Path</b>  |                              |                                      |
| <b>Description</b>   | <b>Weighted Cost (\$/LF)</b> | <b>Range of Average Cost (\$/LF)</b> |
| Paved independent multi-use path for pedestrians and non-motorized vehicles 8' to 10' in width.  | \$45                         | \$20-95                              |
| <b>Constructing Bicycle Lockers</b>  |                              |                                      |
| <b>Description</b>   |                              | <b>Range of Average Cost (\$/LF)</b> |
| Installation of bicycle lockers (cost/unit varies depending on the number of bicycles it accommodates). A recent project specified 4 units each having a 2 bicycle capacity. Average cost based on this project. |                              | \$ 2,150/UNIT                        |

-Preliminary engineering and right of way expenses are included in the above estimated costs.

-Curbing is granite.

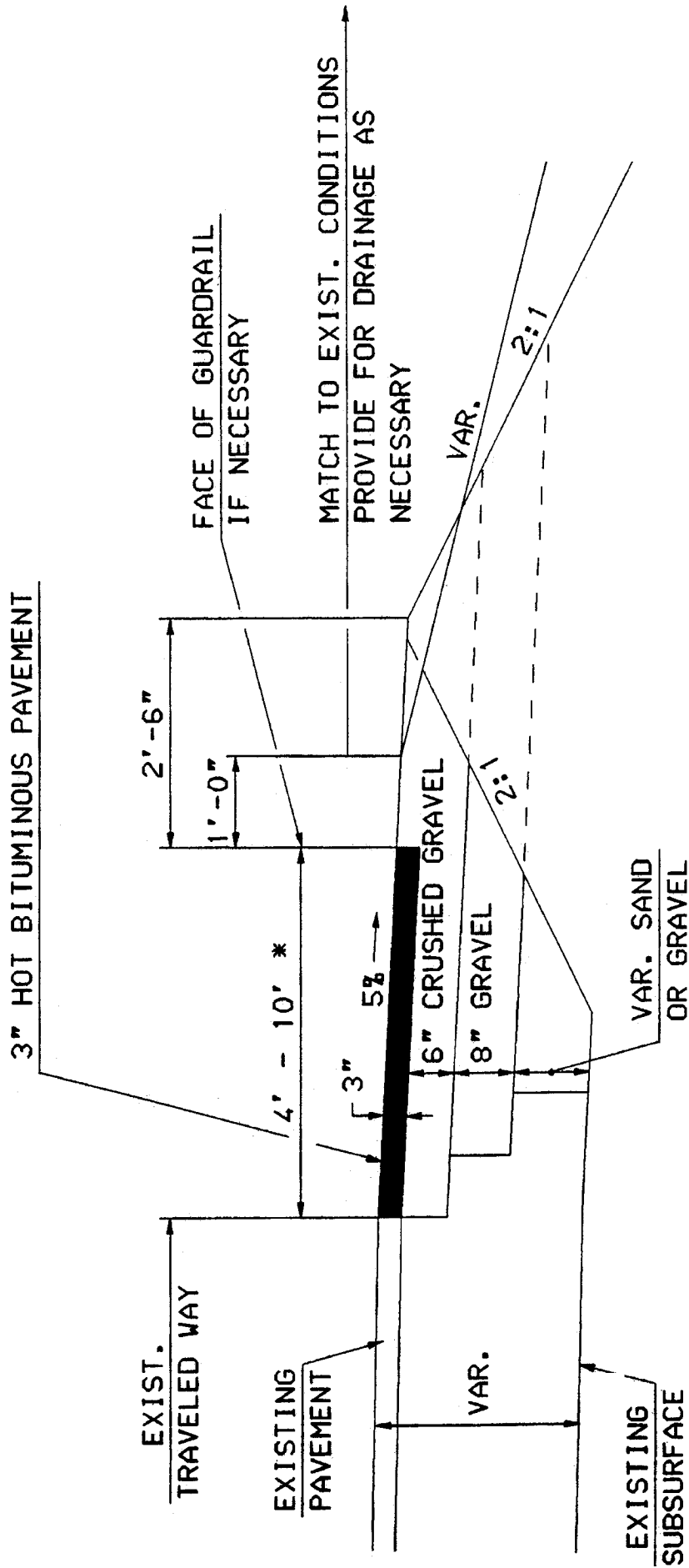


**SIDEWALK**



**SIDEWALK AND GRASS STRIP**

# SHARED ROADWAY BIKEWAY TYPICAL SECTION



\* VARIES, DEPENDS ON AADT  
 (SEE "SELECTING ROADWAY  
 DESIGN TREATMENTS TO  
 ACCOMMODATE BICYCLES,"  
 FHWA, JAN. 1994)

