Sidewalk effects on right-of-way: How they work together

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The Metro Nashville Comprehensive Sidewalk Program, which began in 2002 and is administered by the Metro Nashville Public Works Department, has encountered many issues to deal with in order to successfully implement the program. One of the most sensitive issues is the acquisition of right-of-way and easements for construction of the sidewalks and related drainage components.

The purpose of the Sidewalk Program was to make neighborhoods more accessible and to improve pedestrian safety by repairing existing sidewalks and constructing new sidewalks throughout the county. Also included in the program is the upgrading of existing sidewalk ramps to comply with Americans with Disabilities Act (ADA) minimum standards. The planning phase of the program involved prioritizing the projects based on the amount of repairs required and assigning numerical values to each project. These values take into account numerous factors, especially proximity to schools and connectivity of existing sidewalk networks.

Each project is evaluated to see how it benefits and fits into the overall objectives of the Sidewalk Program. Even though the evaluation process is formulated to be as objective as possible, there still are "reality checks" performed in the field to ensure that the projects are practical. Early in the planning process of the program, public input was sought through several venues. These include public meetings, telephone surveys, direct correspondence and media campaigns. Throughout the implementation phase of the program, input is received from the public through access to the website designed specifically for the program by the Sidewalk Program consultant, USInfrastructure, Inc.

The Metro Nashville Public Works Department attempts to avoid the acquisition of right-of-way and easements whenever possible. However, the acquisition of private property is often unavoidable. Many factors are involved in the design of the sidewalks. Americans with Disabilities Act requirements include cross-slope limitations and minimum path of travel dimensions which must be addressed, as well as slope requirements at ramps. Metro Public Works also has design standards for sidewalk construction, including curb and gutter, a four-foot (minimum two-foot) grass strip, and five-foot sidewalk width. This normally requires an additional eleven and a half feet from the edge of pavement. AASHTO design criteria require a twelve-foot minimum driving lane width on streets with curb and gutter.

Of course, as with all public works infrastructure improvements, storm drainage design again proves to be the most challenging design issue to deal with, especially in retrofit projects such as the addition of sidewalks. When curb and gutter is added to ditched sections of streets, strange things often happen to the drainage patterns in the area.
Many times, yard inlets are necessary in order to avoid ponding of stormwater behind the sidewalk in fill sections. In some cases, it is necessary to provide new storm sewers, culverts, or ditches located outside the right-of-way, which require drainage easements.

The most common location of right-of-way acquisition is at intersections, especially where the existing right-of-way does not have a radius. In many cases, these intersections require additional right-of-way to accommodate the radius of the sidewalk at the intersection of the streets. The placement of the sidewalk ramps is preferably at a point where pedestrians can cross the intersection in front of stopped vehicles, but well out of the travel path of vehicles along the parallel street. Whenever right-of-way acquisitions are necessary parallel to the street and sidewalk, the proposed right-of-way should encompass the sidewalk as a minimum. It is advisable to maintain a uniform right-of-way width along an entire stretch of roadway, normally between blocks. If feasible, five-foot increments of right-of-way acquisition are utilized.

Temporary construction easements are acquired to encompass the minor cut and fill slopes, install erosion and sediment control devices, and to allow space to work during construction. The temporary construction easements are set at approximately ten feet beyond the cut or fill slope lines and are parallel to the right-of-way. The width of the construction easements can vary from property to property, but remain the same width across each lot. Property owners are asked to donate temporary construction easements.

Permanent drainage easements are required whenever storm drainage features are constructed outside the existing or proposed right-of-way. This includes areas where improvements to the existing drainage system are required where there is no recorded drainage easement. An example of this is the regrading of an existing ditch in order to accommodate a new drainage system from the roadway. A minimum ten-foot drainage easement is normally acquired along small ditches and yard inlets. The width of the drainage easement for culverts and storm sewers varies according to the size of the pipe.

The actual acquisition process for right-of-way and easements is performed by the Real Property Services Division of the Metro Nashville Finance Department. The exhibits and legal descriptions necessary for the acquisition process are developed by the design engineer for the project. Exhibits and descriptions with bearings and distances are used for right-of-way and permanent drainage acquisition. A less complicated exhibit and description are used for temporary construction easements with only the width of the easement shown.

The success of the program takes all team members, government and private, working together in partnership. In some cases, the property owners are asked to dedicate right-of-way and easements in order to get the projects constructed. The earlier the property owners understand the process and reasons for this possible inconvenience, the more likely they will feel like they have significant input into the process. The continual close coordination and cooperation between the Metro Public Works Department, the Metro
Real Property Services Division, the Program Consultant, and the property owners is vital to make the right-of-way acquisition process a success. This process begins at the onset of the planning phase of the projects when public input is sought and technically continues until the acquisition document is signed by the property owner. In reality, the successful process is complete only when the sidewalk, appurtenances, and property restoration have been properly constructed to the property owner’s satisfaction. This results in a satisfied customer, indeed the real goal of any public works project.

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