
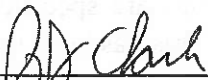


AUG 22 2003

To: SUPERSEDED BY EI 04-038 EFFECTIVE 7/7/05		New York State Department of Transportation ENGINEERING INSTRUCTION	EI 03-024
Title: REVISED DETECTABLE WARNINGS DESIGN GUIDANCE			
Distribution: <input type="checkbox"/> Manufacturers (18) <input type="checkbox"/> Surveyors (33) <input checked="" type="checkbox"/> Main Office (30) <input checked="" type="checkbox"/> Consultants (34) <input checked="" type="checkbox"/> Local Govt. (31) <input type="checkbox"/> Contractors (39) <input checked="" type="checkbox"/> Regions/Agencies (32) <input type="checkbox"/> _____ ()		Approved:  _____ Phillip J. Clark, Deputy Chief Engineer, Design 08/07/03 Date	

ADMINISTRATIVE INFORMATION: This Engineering Instruction (EI) is effective with projects submitted for the letting of January 15, 2004. This issuance, in conjunction with EI 03-025, supersedes EI 02-014. The information provided in this EI will be incorporated into a future revision of the Highway Design Manual.

PURPOSE: To issue revised design guidance for detectable warnings.

TECHNICAL INFORMATION:

American with Disability Act (ADA) requirement. Detectable warnings shall be installed whenever sidewalk curb ramps at street intersections, curb ramps or cut-throughs in median/refuge islands, and in-street or cross-sidewalk rail crossings are constructed or altered as a part of projects undertaken by the Department. This applies to all projects containing sidewalk curb ramps, and other applicable locations that have been constructed since July 26, 2001. (See BACKGROUND.) Regions may elect to accomplish this within a reasonable period of time (not to exceed one construction season). The Regional Landscape Architect should be consulted to assure detectable warnings are provided at all locations required by Americans With Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG).

Color. The colors of the detectable warning field are no longer specified in the specification. Designers must specify in the Contract Documents what color is to be used. The following colors have already been determined to satisfy the visual contrast requirements, defined in ADAAG Section A4.29.2. If a color other than those mentioned below is desired, the designer is responsible for ensuring that the ADAAG visual contrast requirement is met.

- Dark gray, Munsell Book Notation BG-PB 3/5.
- Dark brown, Munsell Book Notation 10YR 3/2.
- Dark red, Munsell Book Notation 10R 3/6.
- Dark green, Munsell Book Notation 2.5G 3/6.

(NOTE: When designing detectable warnings adjacent to asphalt concrete walkways, the color should be white.

Designers should be aware that there are limited color choices depending upon the available products or the method (special specification) selected. For example, Precast Portland Cement Concrete pavers that meet the ADAAG visual contrast requirements are currently available only in dark gray, clay brick are available in dark brown/red, and certain surface-applied methods are only available in red or black. Color can be enhanced using color hardeners or paint but this may subject the installation to increased maintenance needs. If more than one color will be used on a project, a table of curb ramps that specifies the color of the detectable warning surface

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at each curb ramp should be considered.

Design notes. Design consideration should be given to type of snow removal to which the detectable warnings will be subjected. In communities where snow removal will most likely be done by heavy machinery, i.e., small plows or tractor/skid, steer-driven snow blowers, surface-applied systems may not be the best choice.

When stamped detectable warnings are specified, it should be noted that the concrete type should be the Department's Class D concrete. This has been included in the material section of the special specification for stamped detectable warnings.

When embedded, preformed, detectable warning units are specified, designers should be aware that installation varies by product. It may be necessary for the designer to specify the desired installation method. Options may include directly embedding the preformed unit in plastic concrete, installation on a prepared bed, or following the guidelines outlined in the Standard Specifications.

It is anticipated that there will be no additional cost as a result of this EI. Curb ramps and other applicable surfaces will be constructed and paid for under the sidewalk or other item(s) in contracts. The detectable warnings will be paid for separately using the special specifications issued by EI 03-025.

IMPLEMENTATION: These changes may be implemented on existing contracts at the Region's discretion through Orders on Contract.

BACKGROUND: A detectable warning is a walkway surface treatment, detectable by blind persons and persons with low vision. Section 4.29 of ADAAG requires detectable warnings on new and altered (i.e., renovated, rehabilitated, or reconstructed) sidewalk curb ramps and at other locations. The requirement to use detectable warnings on sidewalk curb ramps was temporarily suspended, by the U.S. Department of Justice (DOJ) in 1994 pending further research. The DOJ allowed the latest suspension to expire on July 26, 2001. The result of DOJ's decision is that the 1991 ADAAG requirement to provide detectable warnings on sidewalk curb ramps and at locations referred to in ADAAG as hazardous vehicular areas was reinstated and became effective immediately. Detectable warnings installed on the Department's facilities must comply with the Department's most current specifications and Standard Sheets for detectable warnings.

DISTRIBUTION: This EI is being issued concurrently with EI 03-025, which issues revised special specifications for detectable warning installation, EB 03-042, which issues Standard Sheet M608-3R3, Sidewalk Curb Ramp Details, and EB 03-043, which issues the new Standard Sheet M608-5R2, Detectable Warning Details.

REFERENCES: American with Disabilities Act Accessibility Guidelines (ADAAG)
www.access-board.gov

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