


**ROADWAY DESIGN MEMORANDUM**

TO: Dallas Hammit, Steven Boschen, Brent Cain, Robert Samour, Todd Emery, Barry Crockett, Jesse Gutierrez, Randy Everett, Paul O'Brien, Annette Riley, Julie Kliewer, Maysa Hanna, David Eberhart, Scott Beck, James Windsor, Raul Amavisca, Audra Merrick, Lynn Johnson, Alvin Stump, Roderick Lane, Bill Harmon, Paul Patane, Lonnie Hendrix, Michael DenBleyker, Mike Phillips, Lisa Sinclair

FROM: Reed Henry, Deputy State Roadway Engineer 

CC: Tom Deitering (Federal Highway Administration)

DATE: November 3, 2017

RE: Turnout Paving in PM<sub>10</sub> Non-Attainment Areas

*(Supersedes Highways Division Policy and Procedure Memorandum No. 95-01 Turnout Paving in PM<sub>10</sub> Non-Attainment Areas)*

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**Purpose**

The purpose of this memorandum is to update the design procedure for surface treatments of side roads, turnouts and driveways in PM<sub>10</sub> Non-Attainment Areas within state highway right-of-way, to reduce the amount of suspended dust particles and to reduce the amount of mud and dirt tracked onto the state highway. Throughout this memorandum, the term "turnout" should be construed to include "driveway" as well.

**Implementation**

Construction projects on the State Highway System within the boundaries of PM<sub>10</sub> Non-Attainment Areas will provide a surface treatment on permitted turnouts, when paving operations are an integral part of new construction, reconstruction or pavement rehabilitation projects. Project location with respect to PM<sub>10</sub> Non-Attainment Areas should be determined early in the scoping process. PM<sub>10</sub> Non-Attainment Area maps are provided by ADOT's Environmental Planning Group and may be found at <https://azdot.gov/images/default-source/environmental-planning/az-mpo-cogs-and-na-area.jpg>

Turnouts proposed to be surfaced within ADOT right-of-way in conjunction with a construction project will require the property owner to obtain a "Permit to Use State Highway Right-of-Way" from the District prior to construction of the project, preferably before the Stage III design submittal. The District will provide a list of permitted turnouts to the designer. Turnouts without approved permits will not be paved by ADOT.

In areas where ADOT construction projects are located in easements from federal or other agencies, all efforts will be made to surface turnouts through agreement with the agency. If an agency requests not to pave specific locations, the request will be honored.

Changes in turnout profile will not normally be undertaken; however, reshaping and compacting of existing turnouts prior to paving may be required as determined by the District and the designer. If reshaping and compacting is required, it should be indicated in the plans or specifications. The width of existing turnouts should generally remain the same. Widening of existing turnouts will not be undertaken except in special circumstances where the District may support a functional change of the turnout, (e.g. Residential to Commercial access). In areas where access points are not well defined, the designer and District will determine the appropriate area to be surfaced. Standard turnout widths should be utilized and interaction with the property owner may be necessary. Turnout should be paved to the right-of-way limits or up to 100' from the mainline centerline, whichever is less.

The type of surface treatment should be determined by ADOT's Pavement Design Section. Turnouts to receive surface treatments should be called out and dimensioned on the plans. Structural Sections with material type should also be provided in the plans and/or specifications. The following may be used as preliminary guidance:

#### Residential Turnouts

1. Single Residential (one dwelling unit) – 3" AC over 6" AB
2. Multiple Residential (two to five dwelling units) – 4" AC over 6" AB

#### Commercial Turnouts

1. Subdivision (more than five dwelling units) – 5" AC over 6" AB
2. Other Commercial – 5" AC over 8" AB, or 6" PCCP over 4" AB

#### Industrial Turnouts

1. Light (less than 15 combination unit trucks per day) – 6" AC over 8" AB , or 8" PCCP over 4" AB
2. Heavy (15 or more combination unit trucks per day) – consult with Pavement Design Section

#### Intersecting Roadways

1. Length to be surfaced less than 50 feet - match mainline structural section
2. Length to be surfaced greater than 50 feet – consult with Pavement Design Section

Note: A 50/50 blend of milled AC and AB may be used in lieu of AB