

**New Jersey Department of Transportation
QUALITY IMPROVEMENT ADVISORY**

QUALITY MANAGEMENT SERVICES

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QIA No. QIA031

Approved: B. Strizki

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Subject: Drainage Problems on Private Properties.

Process Affected:

Scope Design Right of Way Utilities Environmental Historic Construction

Bureaus Affected:

All Design Consultants
Division of Design Services

Procedure(s) Affected:

Design and Construction

Nature of Problem(s):

The 70%–90% completion meeting database reveals that there is a recurring issue on contracts concerning trapped water on private properties beyond the NJDOT's ROW after construction is complete. The plans indicate that proposed driveways, sidewalks, slopes, etc. are to be constructed to meet existing conditions and grades. However, the conditions are not properly evaluated and therefore lead to drainage problems in the final condition. To alleviate these problems, additional inlets, re-grading, or overlaying has been performed, and the Department compensated contractors for these extra work items.

Recommendation(s):

Section 6.1.6 – Quality Assurance Checklists and Certification of the NJDOT Procedures Manual is a means of ensuring that designers perform necessary Quality Assurance tasks during design phases in order to minimize errors and/or deficiencies that may be discovered during construction. When the roadway is raised or a super-elevated area is constructed, designers must verify that water will not be trapped on or diverted to private property or another water shed (*as required by item #8 of subpart C "Drainage" of the Initial Design Submission QA Checklist*). Designers can accomplish this task by performing formal field surveys and reviews to evaluate the existing conditions beyond the ROW. In the vicinity of existing driveways, parking lots, and slopes that meet private properties additional cross-sections may be necessary to assist the designer in determining the impact that the proposed construction has on the existing facilities so that the designer can take the appropriate action. For instance, if flooding or trapped water conditions will be created, the designer may need to establish a construction easement so that an appropriate remedy can be constructed on the site. Designers are also to contact the appropriate Regional Maintenance office to determine if any drainage issues exist if no comments to that effect were received at the design reviews.

Designers who work with the Department are required to submit these checklists as part of both the Initial and Final Design Submissions, and designers will need to certify that all applicable items in these checklists have been performed.

Implementation: *Immediately*

Impact Assessment:

Schedule Quality Cost Scope

Cost Impact:

Varies

Superseded