PRINCE WILLIAM COUNTY

Internal Audit Report: Residential Site Inspections and Recordkeeping

Prince William County, Virginia

August 20, 2026

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Transmittal Letter

August 20, 2026

The Board Audit Committee of
Prince William County, Virginia
1 County Complex Court
Prince William, Virginia 22192

Pursuant to the Prince William County, Virginia ("County" / "PWC") internal audit plan for calendar year (“CY”) 2025, as approved by the Board of County Supervisors ("BOCS") and the subsequent internal audit plan modification dated September 23, 2025, we hereby present the residential site inspections and recordkeeping internal audit. We will be presenting this report to the Board Audit Committee of Prince William County at the next scheduled meeting on September 22, 2026.

Our report is organized into the following sections:

Executive Summary	This provides a high-level overview and summary of the observations noted in our internal audit of residential site inspections and recordkeeping.
Background	This provides an overview of the function, as well as relevant background information.
Objectives and Approach	The internal audit objectives are expanded upon in this section, as well as a summation of the various phases of our approach.
Observations Matrix	This section includes a description of the observations noted during our review and recommended actions, as well as Management’s response, including the responsible party, and estimated completion date.
Appendix	This section contains additional information regarding a comparison of County operations data.

We would like to thank the staff and all those involved in assisting our firm with this internal audit.

Respectfully Submitted,

RSM US LLP

RSM US LLP

Executive Summary

Background

Residential site inspections support the County's oversight of residential development activity and confirm compliance with approved plans, County ordinances, and applicable state regulations. Inspections primarily focus on transportation and infrastructure-related components, including roadways, sidewalks, grading, drainage, concrete work, and Americans with Disabilities Act ("ADA") related features associated with bond-eligible improvements. Residential site inspections are performed by both the Department of Transportation and Capital Construction ("DTCC") and the Department of Public Works ("DPW") supporting stormwater-related components. Building-specific inspections and Certificates of Occupancy ("CO") are managed by the Building Development Division, while the Department of Development Services ("DDS") approves site plans prior to construction.

While the full project lifecycle (i.e., zoning, planning, pre-construction coordination, field-based inspections during construction, occupancy review, where applicable, and bond reduction and close-out activities), involves multiple departments and teams, residential site inspections are performed by DTCC and DPW inspectors. Inspectors perform site visits throughout the project and at key milestones (e.g., subgrade, stone, asphalt, and concrete) and coordinate with developers and third-party engineers to review testing results and confirm work aligns with approved plans. Inspection activity is generally documented in the County's Site Inspections Application ("SIA"), also referred to as Timmons. Inspectors must maintain ongoing communication with site owners and developers to understand the project status, review project updates, inspect the project site, confirm ongoing adherence to site plans, and communicate any issues and challenges requiring remediation.

Residential site inspections are performed within a regulatory framework that includes local County policies and Virginia Department of Transportation ("VDOT") standards, which establish requirements for inspection, documentation, and approval prior to continuation of work, occupancy, and bond release.

Overall Summary / Highlights

Internal audits provide insight into an organization's culture, policies, and procedures and aid the Board and Management in oversight by verifying internal controls are operating effectively, and adequately mitigating risk, and are in compliance with relevant laws, regulations, and policies. The observations detailed in the pages that follow represent only the instances where exceptions were noted, and do not detail the instances where testing resulted in no reportable observations. For each observation, we discuss the relevant risks, which may include financial, operational, and/or compliance, as well as public perception or "brand" risks.

Objectives and Scope

The objective of this internal audit was to assess whether the system of internal controls over residential site inspections activities is adequately designed and operating effectively to promote compliance with policies, building codes, and environmental regulations. An internal audit of the Commercial Site Inspections and Recordkeeping process was performed in 2025, which emphasized tasks performed by DPW. By contrast, the scope of this Residential Site Inspections and Recordkeeping audit focused primarily on the tasks performed by DTCC. Our procedures included the following:

- Reviewed policies and procedures governing residential site inspections, including those outlined in the *Administrative Procedures Manual* and *Pre-Construction Package.*
- Evaluated workload distribution among residential site inspectors to determine whether responsibilities are equitably assigned and effectively managed.
- Assessed the accuracy and completeness of inspection documentation, including inspection reports, Plan Approval Letters, and required project documents.
- Reviewed compliance with applicable County and state mandates, including building code requirements and standards relevant to residential site development.
- Coordinated with neighboring Virginia counties to perform a comparison of residential site inspection operations and workload distribution.

Our audit period covered residential projects that were active as of February 4, 2026. Additional data from July 1, 2025 to June 30, 2026 was utilized for data analysis purposes.

Fieldwork was performed from March 2026 through May 2026.

Summary of Observation Ratings

(See page 4 for definitions)

	High	Moderate	Low
Residential Site Inspections and Recordkeeping	2	4	-

We would like to thank all County team members who assisted us throughout this internal audit.

Executive Summary (Continued)

Observations Summary

Below is a summary listing of the observations that were identified during this internal audit. Detailed observations are included in the observations matrix section of the report.

Summary of Observations	
Observations	Rating
1. Inspection Data Management and System Functionality	High
2. Inspector Certifications and Job Alignment	High
3. Timeliness of Inspection Entry	Moderate
4. Bond Monitoring	Moderate
5. Standard Operating Procedures	Moderate
6. Project Documentation	Moderate

Risk Rating Definitions

Provided below are the observation risk rating definitions for the detailed observations.

Observation Risk Rating Definitions	
Rating	Definition
Low	Observation presents a low risk (i.e., impact on financial statements, internal control environment, brand, or business operations) to the organization for the topic reviewed and/or is of low importance to business success/achievement of goals.
Moderate	Observation presents a moderate risk (i.e., impact on financial statements, internal control environment, brand, or business operations) to the organization for the topic reviewed and/or is of moderate importance to business success. Action should be taken in the near term.
High	Observation presents a high risk (i.e., impact on financial statements, internal control environment, brand, or business operations) to the organization for the topic reviewed and/or is of high importance to business success/achievement of goals. Action should be taken immediately.

Background

Overview

The residential site inspections process supports the County's responsibility to oversee residential development activity and confirm compliance with approved plans, County ordinances, and applicable state regulations. Residential site inspections primarily focus on transportation and infrastructure-related components of residential development, including roadways, sidewalks, concrete work, grading, drainage, erosion and sediment controls, ADA-related features, and other bond-eligible improvements. Residential site inspections are performed by DTCC and DPW inspectors. Building-specific inspections and Certificates of Occupancy are managed by the Building Development Division, while DDS plays a key role earlier in the process by reviewing and approving site plans and initiating projects within County systems prior to construction.

Key Roles and Responsibilities

The key roles and responsibilities related to the residential site inspections process are detailed below.

- **Developers:** Also referred to as the "client," developers are responsible for submitting residential site plans, obtaining required permits, coordinating pre-construction meetings, requesting inspections at required milestones, and addressing deficiencies identified during inspections. Developers are also responsible for providing documentation necessary for bond reductions, final inspections, and project close-out, and for confirming construction activities adhere to approved plans and applicable requirements.
- **Department of Development Services ("DDS"):** DDS reviews and approves residential site plans, initiates projects within County systems, and coordinates the transition from plan approval to inspection. DDS establishes the administrative framework under which inspections occur but does not perform field inspections.
- **Department of Public Works ("DPW") Environmental Services ("ES"):** DPW supports residential projects where stormwater, erosion, or watershed considerations apply. DPW ES inspectors coordinate with DTCC throughout the inspection lifecycle, particularly for stormwater compliance, bond reductions, and final inspections, as applicable.
- **DTCC Site Inspectors:** DTCC residential site inspectors are responsible for conducting field inspections for assigned residential projects to verify compliance with approved plans, County standards, and applicable VDOT requirements. Inspectors document inspection activity, coordinate with developers and other County departments, and support bond reduction, final inspection, and close-out activities. Inspectors are typically assigned projects based on geographic area and remain involved throughout the construction lifecycle.
- **DTCC Supervisors:** Provide oversight, review procedures, and assist inspectors with complex projects and challenges.

Department of Transportation and Capital Construction

The DTCC is primarily responsible for inspecting transportation and infrastructure-related elements of residential development sites, including roadways, sidewalks, concrete work, grading, drainage systems, ADA-related features, and other bond-eligible improvements. DTCC inspectors are generally assigned projects based on geographic service areas and remain involved throughout the entire construction lifecycle, from pre-construction activities through final inspection, street acceptance, and bond release. In addition to inspection responsibilities, DTCC personnel support transportation-related Capital Improvement Projects and coordinate with local and state agencies, including the Virginia Department of Transportation ("VDOT"), which maintains most public roadways within the County. In addition to these responsibilities, the residential site inspection team, consisting of five (5) inspectors and two (2) supervisors, performs significant administrative and project management functions.

BACKGROUND (CONTINUED)

Key Roles and Responsibilities (Continued)

Department of Transportation and Capital Construction (Continued)

These responsibilities include reviewing site plans and construction documents, maintaining project records and supporting documentation, coordinating with developers and other County departments, responding to inquiries, and tracking project status throughout the development process. The team also provides oversight and inspection support for County capital and infrastructure projects in addition to residential development activities. Residential site inspection frequency is not governed by predetermined inspection schedules or specific triggering events. Instead, inspection activity is driven by project progression and construction needs. As a result, inspection requirements can vary significantly among projects. Consequently, project counts alone are not necessarily indicative of workload or inspection effort.

Department of Public Works

As noted above, the DPW plays a critical role in the residential site inspections process. The DPW is also charged with protecting and enhancing the community's natural resources and infrastructure. Their work spans a wide range of environmental management functions, including flood control, drainage maintenance and improvement, watershed management, and stream monitoring. The team also leads efforts in stormwater pollution prevention and oversees site and land development activities to confirm compliance with local, state, and federal regulations. Key responsibilities include inspecting and maintaining a system of drains, culverts, pipes, and ponds to prevent flooding and reduce pollution runoff. DPW undertakes stream restoration and reforestation projects to improve water quality in local waterways, including the Chesapeake Bay and Potomac River. Staff also confirm the safety and functionality of county-owned and state-regulated dams. The DPW team is also tasked with performing inspections for all single-family home sites within the County, participating in the occupancy issuance for residential site inspections, and the management and maintenance of undeveloped County-owned parcels.

Inspection Lifecycle

The inspection lifecycle typically follows the following phases:

- **Plan Approval:** Residential site plans are reviewed and approved by DDS. Following approval, projects are initiated within County systems and transitioned to the inspection phase. Inspectors review approved plans in preparation for pre-construction coordination.
- **Pre-Construction Meeting:** Inspectors meet with developers and key client personnel (i.e., emergency site contacts, engineers, etc.) to review requirements, permits, and milestones. These meetings are intended to set expectations and facilitate ongoing compliance.
- **Active Construction:** Inspectors conduct field visits to verify installation of infrastructure, erosion controls, and other elements. Inspections are documented in the SIA, a separate system from EnerGov.
- **Occupancy Inspection:** Prior to issuing a Certificate of Occupancy, inspectors confirm that all site conditions meet County and state requirements.
- **Bond Release:** Final inspections are conducted to confirm completion of all bonded improvements. Violations must be resolved before release is approved.

Training and Certification

DTCC inspectors are trained to perform infrastructure-related inspections and maintain certifications related to roadway materials, soils, asphalt, concrete, erosion and sediment control, and stormwater management, as applicable. Certain inspections require coordination with qualified third-party professionals, such as geotechnical engineers. Environmental Services inspectors supporting residential projects maintain certifications related to erosion and sediment control and stormwater management. Supervisors are tasked with actively monitoring certification status and encouraging staff to pursue additional credentials, with annual performance reviews serving as a checkpoint for progress.

BACKGROUND (CONTINUED)

Regulatory Framework

Residential site inspections are governed by a combination of state regulations and County standards that establish requirements for inspection, documentation, compliance, and approval prior to occupancy and bond release. Key authorities include the Virginia USBC, which sets minimum inspection and approval requirements, and applicable VDOT standards for roadway and infrastructure improvements. Residential projects are also subject to County design standards and administrative procedures that supplement state requirements and define local requirements for site development, accessibility, inspection milestones, and project close-out. Projects with stormwater or erosion impacts must comply with applicable environmental regulations, with Environmental Services supporting inspection and compliance activities as required. Noncompliance with applicable requirements may result in failed inspections, corrective actions, delays in occupancy, or delays in bond release.

Applicable Systems

The residential site inspections process primarily relies on two (2) systems to manage inspection workflows:

- **EnerGov:** This refers to the internal, County-facing application used for tracking plan approvals and major project milestones. The external-facing component of EnerGov is called “E-Portal” (see below). While individuals within DPW and DTCC may have access to EnerGov, it is primarily used by DDS. Documentation related to permits, bond release, and occupancy are stored here.
- **E-Portal:** This refers to the external, client-facing web-based platform that manages permit applications, plan submissions, inspection scheduling, and payments for residents, contractors, and developers. The E-Portal supports major development processes and allows users to access records, track project status, and receive automatic updates from any device.
- **Site Inspections Application (“SIA”)**: Used by the site inspectors and supervisors to record day-to-day inspection activities. The SIA functions as a construction diary and compliance log, and documentation related to inspections, violations, and work assignments is stored here. This system does not integrate to EnerGov.

Additional tools may be utilized for technical work, such as geotechnical testing, material and soil quality verification.

OBJECTIVES AND APPROACH

Objectives

The objective of this internal audit was to assess whether the system of internal controls over residential site inspections activities was adequately designed and operating effectively to promote compliance with County policies, building codes, and environmental regulations. This review focused on the operational integrity, oversight mechanisms, and documentation practices specific to residential site inspections. Our audit period covered residential projects that were active as of February 4, 2026. Additional data from July 1, 2025 to June 30, 2026 was utilized for data analysis purposes. An internal audit of the Commercial Site Inspections and Recordkeeping process was performed in 2025, which emphasized tasks performed by DPW. By contrast, the scope of this Residential Site Inspections and Recordkeeping audit focused primarily on the tasks performed by DTCC.

Approach

Our audit approach consisted of the following phases:

<u>Understanding and Documentation of the Process</u>
This phase consisted primarily of inquiry and walkthroughs to obtain an understanding of the current operating policies and procedures, monitoring functions, and control structures as they relate to the processes within our scope. The following was performed as part of this phase:

- Obtained and reviewed key documents, including County policies and procedures, relevant state and County regulations and reporting.
- Conducted interviews and walkthroughs with key personnel to obtain a detailed understanding of applicable policies and procedures, and roles/responsibilities related to the processes within the scope.
- Gained an understanding of procedures as they relate to the processes within scope and developed a work plan to evaluate the operating effectiveness of key processes and controls based on the information obtained through interviews, walkthroughs, and preliminary review of documentation.

<u>Evaluation of the Process and Controls Design and Testing of Operating Effectiveness</u>
The purpose of this phase was to evaluate the design of key processes and controls and test compliance and internal controls for operating effectiveness based on our understanding of the processes obtained during the first phase. We utilized sampling and other auditing techniques to meet our audit objectives outlined above. Our testing procedures included, but were not limited to:

- Obtained a population of residential site development projects and selected a sample of twenty-five (25) residential projects for detailed testing.
- For the sampled projects, reviewed supporting documentation to assess completeness, accuracy, and compliance with applicable requirements.
- Reviewed plan approval documentation and applicable permits, evidence of inspection activity and required testing, where applicable, documentation supporting key project milestones, including occupancy certification and bond release documentation, and evidence of coordination with stakeholders.
- Evaluated whether inspection activities were appropriately documented and supported, including consistency in how inspections were recorded and retained.
- Assessed whether required inspections, approvals, and project milestones were supported by appropriate documentation, aligned with policies.
- Reviewed documentation supporting inspection requests and timing to assess whether inspection activities were initiated and performed timely.
- Assessed the completeness and consistency of project records across systems and identified instances where documentation was missing or incomplete.
- Evaluated compliance with applicable County and state requirements, including permitting, inspection, and documentation standards.
- Performed a comparison analysis of select residential site inspection practices against peer jurisdictions to identify leading practices and assess consistency in inspection processes, documentation standards, and oversight approaches.

<u>Reporting</u>
At the conclusion of this internal audit, we summarized our findings into this report. We have reviewed the results with the appropriate Management personnel and have incorporated Management's response into this report.

Observations Matrix

1. Inspection Data Management and System Functionality	Risk Rating: High

Observation

The SIA serves as the primary system of record for residential site inspection activities, project tracking, inspection documentation, and related administrative functions. As such, information maintained within the system is intended to be complete, accurate, and structured in a manner that supports inspection operations, workload management, supervisory oversight, and reporting. System functionality should also align with operational processes and provide Management with reliable information regarding project assignments, inspection activity, and resource utilization. As noted in the 2025 Commercial Site Inspections and Recordkeeping audit, the SIA contains several system limitations related to Management reporting, workload visibility, and supervisory oversight. During this review, we identified additional data management and functionality limitations that continue to affect the reliability and usefulness of information maintained within the system.

Completeness of Inspection Data
A comparison of inspection activity recorded in SIA to inspectors' independently maintained activity logs identified significant discrepancies in recorded inspection volumes. Inspectors' personal logs reflected 6,587 inspections performed during the review period, while the SIA reflected 5,839 inspections, resulting in a difference of 748 inspections. Management indicated that inspection records are entered into SIA; however, system limitations affect the reliability and retrievability of inspection activity data, necessitating the continued use of supplemental tracking records maintained by inspectors.

Project Ownership and Reporting
We also identified limitations related to project ownership and assignment tracking. Residential development projects commonly involve oversight responsibilities from both the Department of Transportation and Capital Construction and the Environmental Management Division; however, the SIA currently permits only a single inspector assignment field per project. As a result, project assignments may not fully reflect all personnel responsible for inspection and oversight activities, limiting Management's ability to generate complete project listings by inspector and effectively monitor workload distribution.

Project Listings
Additionally, we noted that SIA is being used to track certain long-term administrative obligations that no longer require active inspection activity. For example, projects associated with landscape maintenance escrows and similar obligations may remain within the system indefinitely for monitoring purposes despite requiring little or no ongoing inspection work. As a result, project inventories maintained within SIA may include records that do not represent active inspection assignments. This practice may inflate project counts and affect workload reporting, assignment metrics, and Management's ability to accurately assess inspection resources and activity levels.

OBSERVATIONS MATRIX (CONTINUED)

1. Inspection Data Management and System Functionality (Continued)

Observation (Continued)

<u>Workload Monitoring and Assignment Oversight</u>
As noted in the 2025 Commercial Site Inspections and Recordkeeping Audit, the SIA does not currently provide dashboards or management reporting tools that allow supervisors to effectively monitor inspection activity, workload distribution, project status, upcoming due dates, or resource utilization. During our review, we noted a significant disparity in project assignments among inspectors, with one inspector assigned 214 of 423 active projects (51%), while the remaining inspectors were assigned between 48 and 54 projects each (11% to 13%). Management indicated that assignments are primarily based on geographic service areas and are reviewed during regular meetings, which occur at least biweekly, to discuss workload and reallocate assignments as necessary. We also noted that project assignments do not necessarily correspond to the same level of effort. Depending on a project's scope, complexity, and phase, inspection demands may vary, which could reasonably result in differences in assignment volumes among inspectors. However, limitations in SIA reporting capabilities reduce Management's ability to readily assess project activity levels, resource utilization, and workload distribution across the inspection team.

Inquiry with DTCC Management indicated that these conditions are attributable to system design and functionality limitations that have not kept pace with evolving operational requirements. As a result, inspectors and supervisors have implemented manual workarounds, supplemental tracking records, and alternative reporting mechanisms to compensate for limitations in existing system functionality.

When inspection activity, project assignments, and project inventories are not accurately reflected within the system of record, Management's ability to effectively monitor operations, assess workloads, allocate resources, evaluate performance, and confirm project activities are completed as required, is reduced. In addition, reliance on manual tracking mechanisms increases the risk of inconsistent information, duplicated effort, inaccurate workload reporting, and incomplete supervisory visibility into residential site inspection activities.

Recommendation

In addition to, and in conjunction with, the recommendations stated in the 2025 Commercial Site Inspections and Recordkeeping audit, the following is recommended:

- Evaluate opportunities to enhance SIA functionality to improve the completeness, accuracy, and reliability of inspection activity, project assignment, and project inventory data, eliminating the need for multiple inspection tracking methods.
- Assess alternatives for documenting and reporting shared project responsibilities when multiple departments or inspectors have oversight roles for a project.
- Develop criteria for differentiating active inspection projects from long-term administrative or monitoring obligations so that project inventories and workload reporting more accurately reflect current inspection responsibilities.
- Once workload data and project activity information can be reliably extracted from the SIA, develop management reporting and performance metrics to support workload monitoring, resource allocation, project assignment decisions, and supervisory oversight.

Observations Matrix (Continued)

1. Inspection Data Management and System Functionality (Continued)
Management's Response
Response: DTCC will designate EnerGov as the single system of record for all site inspection activities across DTCC and DPW. **Responsible Party:** DTCC / DPW / DoIT **Estimated Completion Date:** Fall 2027

Observations Matrix (Continued)

2. Inspector Certifications and Job Alignment	Risk Rating: High

Observation

Through discussion with Management, we noted the *Comprehensive Inspection Program Agreement*, originally adopted in 1982, under which Prince William County is the only participating county in Virginia, requires County inspectors to maintain professional certifications to demonstrate competency in the technical areas associated with their assigned duties. As part of our review, we obtained certification documentation from Management and noted the following:

Based on our review of certification records for five (5) Transportation Division inspectors, we identified instances in which required certifications had expired. Specifically:

- Four (4) inspectors maintained expired VDOT Soils and Aggregate certifications
- Three (3) inspectors maintained expired ACI Concrete Field Testing Technician certifications, and
- Two (2) inspectors maintained expired certifications in both areas.

Management indicated that one (1) inspector was on extended medical leave during the period in which the certifications expired. For the remaining certifications, Management reported that required training had been completed or certification courses had been scheduled, with renewal activities in progress at the time of our review.

Inquiry with Management and inspection personnel indicated that certain certification requirements have remained largely unchanged for more than twenty (20) years despite significant changes in inspection responsibilities and industry practices. Specifically, Management stated that specialized activities such as geotechnical testing and related technical reviews have been routinely performed by third-party consultants rather than County inspectors for twenty-three (23) years. As a result, certain required certifications may no longer directly correspond to the duties regularly performed by inspection personnel. Management further indicated that certifications more closely aligned with current responsibilities are available; however, existing certification requirements have not been comprehensively reassessed to reflect evolving job functions.

As part of our procedures, we also contacted the inspections teams at Fairfax, Loudoun, and Arlington Counties. Preliminary comparisons suggest that PWC DTCC inspectors may be performing comparable or broader responsibilities with fewer dedicated personnel, suggesting that further evaluation of staffing levels, workload distribution, and certification requirements may be warranted.

If staffing constraints exist, maintaining certification requirements that are not closely aligned with current job responsibilities may further limit opportunities to prioritize training and professional development activities that directly support day-to-day inspection functions. As inspection responsibilities continue to evolve, certification requirements that are not aligned with current duties may result in resources being devoted to maintaining credentials with limited applicability to day-to-day operations. In addition, outdated certification requirements may contribute to challenges in maintaining compliance with required credentials and may limit opportunities to prioritize training and professional development that more directly supports current inspection activities and operational objectives, which is compounded by potentially limited staffing.

OBSERVATIONS MATRIX (CONTINUED)

2. Inspector Certifications and Job Alignment (Continued)

Recommendation

The following is recommended:

- Evaluate opportunities to revise certification requirements while maintaining compliance with VDOT expectations. This may require updated agreement language and coordination with VDOT, the County Attorney's Office, and County Leadership. If requirements are modified, update applicable job descriptions and qualification standards accordingly.
- Expand training and professional development opportunities for inspection staff, with a focus on certifications and coursework relevant to their day-to-day responsibilities.
- Once workload data has been restored and reliable workload and project management metrics are available (see **Observation 1**), assess staffing ratios and performance measures to determine whether inspection staffing levels are aligned with peer jurisdictions and desired service outcomes.

Management's Response

Response: DTCC is coordinating with VDOT to update the comprehensive inspections agreement, including revised certification requirements aligned with current industry standards.

Responsible Party: DTCC

Estimated Completion Date: Fall 2027

Observations Matrix (Continued)

3. Timeliness of Inspection Entry — Risk Rating: Moderate

Observation

Inspection results should be entered into SIA in a timely manner following completion of field activities to support accurate project records, effective oversight, and informed decision-making. Timely entry promotes the accuracy and completeness of inspection information by reducing reliance on memory, handwritten notes, or other supplemental records when documenting inspection results and observations.

We analyzed 645 inspection records and compared the inspection date to the date the inspection information was entered into SIA. The analysis identified the following:

Count of Inspections	Percentage of Inspections Analyzed	Timeliness of Inspection Entry
193	30%	Entered on the same day the inspection was performed.
99	15%	Entered within 48 hours of the inspection.
67	10%	Entered within three (3) to five (5) days of the inspection.
45	7%	Entered within six (6) to ten (10) days of the inspection.
241	37%	Entered more than ten (10) days after the inspection was performed.

The *Administrative Procedures Manual* does not require inspection entries to be entered within a certain timeframe, and discussions with inspection personnel indicated that field responsibilities, workload demands, and competing priorities may contribute to delays in entering inspection information into the system. As discussed in **Observation 1**, inspectors maintain supplemental records outside of SIA due to system functionality and reporting limitations, which may further affect the timeliness of information recorded within the system of record.

When inspection information is not entered in a timely manner, project records may not accurately reflect current project status, limiting management's ability to monitor inspection activity, track project progress, and make informed operational decisions. Delayed entry may exacerbate the data completeness and reliability challenges discussed in **Observation 1** by increasing reliance on supplemental tracking records and reducing the accuracy of information available for workload analysis, performance reporting, and supervisory oversight. Delayed entry also increases the risk that information is omitted, inaccurately recorded, or unavailable when needed to support project oversight and Management decision-making.

Observations Matrix (Continued)

3. Timeliness of Inspection Entry (Continued)

Recommendation

The following is recommended:

- Establish timeliness expectations regarding when inspection records should be entered (i.e., no more than 48 hours after inspection activities have occurred, for example). We understand Management is actively reviewing the *Administrative Procedures Manual,* and it may be updated or combined with other DDS procedural documents; we recommend these timeline expectations are defined in the updated document.
- Monitor adherence to those expectations once oversight tools (see **Observation 1**) have been created and implemented.

Management's Response

Response: This will be addressed through the transition of EnerGov to the system of record.

Responsible Party: DTCC / DPW / DoIT / DDS

Estimated Completion Date: Fall 2027

Observations Matrix (Continued)

4. Bond Monitoring	Risk Rating: Moderate

Observation

Maintenance bonds are retained following project completion to provide financial assurance that defects identified during the warranty period will be corrected by the developer. Upon expiration of the warranty period, bonds should be reviewed to determine whether outstanding deficiencies exist and whether the bond may be released. Accordingly, bond expiration dates should be monitored to facilitate timely review and appropriate administrative action.

Based on our testing of twenty-five (25) residential development projects, we identified one (1) instance in which a maintenance bond expired and remained pending review. Specifically, the SIA records indicated that the $139,727 bond expired in 2023 but was not identified for follow-up until 2026, when Management performed a manual review in response to audit inquiries. As a result, the bond remained outstanding for approximately three (3) years following its expiration.

Inquiry with County DTCC and Bond Administration personnel indicated the delay in bond identification and review may be due to resource constraints. There is currently no automated tracking mechanism to identify upcoming or expired bond terms. Currently, DTCC receives a weekly PDF report listing all bonds currently posted with the County, including the expiration dates of their associated performance agreements. DTCC staff must review the report and determine if any bonds are eligible for adjustment. The report generated on August 31, 2026 is approximately 55 pages long, and lists 1,543 bond and escrow records for review. In addition to reviewing the bonds listed within the report, inspections staff receive e-mails and calls directly from developers who may be seeking bond review and reduction requests.

Without effective monitoring of bond expiration dates, the County may be unable to timely determine whether maintenance obligations have been fulfilled and whether bonds should be released or retained for corrective action. As a result, expired bonds may remain administratively open, project records may become inaccurate, and the County's ability to effectively administer development agreements and bond requirements may be diminished.

Recommendation

The following is recommended:

- Explore opportunities to automate bond expiration tracking and notification processes.
- Explore opportunities to integrate bond information within a project workload dashboard (see **Observation 1**) for real-time review and tracking. This data can be utilized to track bottlenecks in review and approval workflows, and monitor workforce needs.

Management's Response

Response: DTCC will coordinate with DDS on bond expiration tracking and notification processes. DTCC will work with DoIT on involving EnerGov earlier in the process.

Responsible Party: DTCC / DDS / DoIT

Estimated Completion Date: Fall 2027

Observations Matrix (Continued)

5. Standard Operating Procedures	Risk Rating: Moderate

Observation

Policies and procedures should be periodically reviewed and updated to reflect current operational practices, regulatory requirements, systems, and organizational responsibilities. Further, documented standard operating procedures should clearly define the responsibilities of County personnel and third-party service providers to support consistent process execution, accountability, and oversight.

During our review, we noted that the *Administrative Procedures Manual*, which is used by multiple teams including Development Services, Zoning Administration, Public Works, and Transportation, has not been updated since April 2000. While the manual contains detailed information regarding development review and approval processes, portions of the document may not reflect current inspection practices, system usage, organizational responsibilities, or the increased use of third-party specialists that has occurred over the past two (2) decades.

For example, discussions with inspection personnel indicated that certain activities historically performed or documented by County staff are now performed by third-party consultants. For example, manufacturer and producer certifications used to verify roadway construction materials are generally maintained by third-party geotechnical consultants and have not been routinely collected or retained by the County for approximately twenty (20) years. While these documents may be reviewed by inspectors during the construction process, current procedures do not clearly define the documentation County personnel should obtain, review, and retain to support oversight of activities performed by third parties.

These conditions appear attributable to procedural documentation that has not been comprehensively updated to reflect changes in operational responsibilities and the current inspection process. Without current procedures that clearly define responsibilities among County personnel and third-party consultants, there is an increased risk that critical oversight activities, documentation reviews, or record retention requirements may be inconsistently performed or overlooked. In addition, Management may have limited assurance that activities performed by third-party specialists are subject to appropriate County review and monitoring.

Recommendation

The following is recommended:

- Review and update the current *Administrative Procedures Manual* to reflect current processes. This will require collaboration between all teams, departments, and divisions who share responsibilities described in the current *Administrative Procedures Manual*. Specific areas of focus should include:
  - Delineating roles and responsibilities between internal County teams, and between County staff and any external parties (i.e., geotechnical engineers). For activities performed by third-parties, clearly state the review/oversight responsibilities that still are under County staff purview.
  - Specific review and approval processes (i.e., plan review, final site inspection requirements and signoff, use of punch lists, occupancy inspections) should be clearly described, detailing the position(s) involved, procedures performed, documentation created, and where documentation is ultimately retained.
  - The team(s) responsible for reviewing and updating the Manual should also be involved in any Transformation Management Office initiatives regarding system use and changes, confirming that updated processes are properly reflected in the Manual.

OBSERVATIONS MATRIX (CONTINUED)

5. Standard Operating Procedures (Continued)
Management's Response
Response: DTCC will continue to follow Section 600 and Pre-Construction Package but DTCC will coordinate with DDS on the updates to the APM. **Responsible Party:** DTCC / DDS **Estimated Completion Date:** Fall 2027

OBSERVATIONS MATRIX (CONTINUED)

6. Project Documentation	Risk Rating: Moderate

Observation

The *Administrative Procedures Manual, Pre-Construction Package,* and DTCC process flow charts establish required inspection activities and documentation throughout the residential site inspection process (i.e., approval of phased occupancy plans, approval of geotechnical testing reports, use of inspection checklists, etc.). These requirements are derived from County policy and VDOT requirements. During our review, we identified multiple instances where required documentation was incomplete or compliance with established inspection requirements could not be demonstrated. Specifically:

- For two (2) projects requiring Phased Occupancy Plans, evidence of approval by a DTCC inspector was not available, although approvals from other departments were retained.
- For three (3) projects requiring California Bearing Ratio ("CBR") testing, documentation confirmed testing was performed by a VDOT-certified geotechnical engineer; however, evidence of PWC DTCC attendance during testing, as required by policy, was not available.
- For two (2) projects, the CBR testing report was not available, despite inspection records indicating testing results being reviewed.
- For nineteen (19) of the twenty-five (25) projects reviewed, inspection reports did not contain sufficient detail to clearly describe the activities performed, when an inspection request was received, what individuals were contacted, the purpose of the inspection, or any conclusions reached. Although County Management has not established expectations regarding the level of detail required in inspection notes or when inspection reports should be prepared, limited documentation hinders the ability to verify adherence with other project expectations (i.e., timeliness of inspections, purpose of inspection, etc.).

When required approvals, notifications, inspection activities, and supporting documentation are not consistently retained, or when inspection requirements are not performed within established timeframes, Management's ability to demonstrate compliance with applicable requirements, perform supervisory review, validate project activities, and resolve questions regarding project decisions is reduced. In addition, incomplete documentation and untimely inspections increase the risk of inconsistent practices, reduced accountability, project delays, and an inability to verify that required procedures were performed in accordance with County and regulatory requirements.

Observations Matrix (Continued)

6. Project Documentation (Continued)

Recommendation

The following is recommended:

- Review all policy and procedures (see **Observation 5**) to determine whether updates are required to describe current expectations and operating responsibilities.
- Establish a standardized inspection documentation protocol specifying the required level of detail for each site visit, including descriptive notes of work performed and supporting evidence (i.e., photographs, copies of checklists, etc.), where appropriate. The written protocol should also specify when inspection documentation is expected to be created, when supporting records are expected to have DTCC-specific sign-off and how sign-off should be documented. Further, consider documenting informal communications with clients regarding project status or next steps to maintain a complete project audit trail.
- Reinforce expectations regarding project documentation with inspections staff.

Management's Response

Response: DTCC Site Inspection Staff will require weekly site inspection reports from the site inspectors for all assigned projects.

Responsible Party: DTCC

Estimated Completion Date: Fall 2027

APPENDIX: COUNTY OPERATIONS COMPARISON DATA

As part of our procedures, we contacted Fairfax, Loudoun, and Arlington Counties to compare specific data points regarding inspections operations. We have summarized their responses and provided an overview in the rightmost column below.

	PWC	Comparison Summary/Highlights
1. Are there any time tracking mechanisms used in performing/reviewing residential site inspections? For example, are paper timesheets used, or is time recorded in any system?	None	None of the responding counties utilize timesheets to record inspector's time. However, one (1) county noted that site inspections staff utilize a priority level of high, medium, and low to determine the frequency / urgency of inspections. Integration of the PLUS Accela program enabled them to manage projects without utilizing hourly time sheets. Another county noted that all inspections are expected to be performed within 24 hours, and monitoring of this expectation reduced the need for timesheets.
2. What department(s) perform residential inspections at your jurisdiction?	Department of Transportation and Capital Construction	Residential site inspections are performed by Land Development Services, the Building Inspections Team within the Code Enforcement Division, or within Inspections Service Division within the Community Planning Housing Development.
3. How many FTEs are responsible for performing residential inspections?	5 inspectors, 2 supervisors	Responses ranged from 11 FTEs to 22 FTEs. See **Observation 2** for additional analysis. Two (2) of the counties noted that inspectors are responsible for both commercial and residential site inspections.
4. Approximately how many residential projects are assigned to each inspector? Please provide an estimate if the exact figure is not obtainable.	50-200	One (1) of the counties could not report a specific number, one (1) county reported an average of 100 projects (mixed between commercial and single family residential), and one (1) county reported an average of 4,400 inspections per inspector annually.
5. What system(s) are used to record residential inspection activity?	Timmons	Two (2) counties utilize Accela, and one (1) utilizes IG Inspect.
6. Does the system allow you to generate a report of all residential projects?	No	One (1) county noted that reports can be generated and are generated every evening and are sent to the contact on record. One (1) county noted that while IG Inspect does not allow for advanced reporting, the Landmarc system can be utilized to support this function.
7. What are the biggest challenges you are currently facing with performing residential inspections (i.e., workload challenges for existing staff, maintaining residential inspection documentation, getting on-site within desired timeframes, etc.)?	System limitations, plan quality, and cross-department coordination	Challenges reported are: • System limitations, requiring manual data extraction and use of additional software, like Power BI. • Lack of flexibility to add and change inspections in the field within the system utilized. • Ability to find qualified personnel.

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