

DEVELOPER PROJECT CHECKLIST

Section 1. PURPOSE

This policy is to explain the review process that the Bedford Regional Water Authority (“Authority”) utilizes for water and sewer developer projects planned within the service areas of the Authority.

Section 2. PROJECT CHECKLIST

The checklist that will be utilized by the Authority for the review of the project will be similar to that which is shown below.

PHASE 1 – REVIEW / DESIGN

1.	<p>PRELIMINARY REVIEW</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Initial plans are submitted for review along with the Base Project Review Fee. <input checked="" type="checkbox"/> Bedford Regional Water Authority (“Authority”) performs a preliminary review of the site plan of the proposed development. <input checked="" type="checkbox"/> Water/sewer plans are submitted for review to the Authority by the Developer’s design engineer.
2.	<p>DEVELOPER PACKAGE</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Developer package, including assessment of review and inspection fees (Project Fees), is mailed to developer. <ul style="list-style-type: none"> • The developer package includes the following documents: <ul style="list-style-type: none"> • Cover Letter (including assessment of Project Fees) • Review Schedule and Process Guidelines • Developer Project Checklist • Developer Agreement • (Sample) Irrevocable Letter of Credit • (Sample) Letter of Warranty • (Sample) Bill of Sale / Quitclaim Deed • Surveyed As-Built Requirements • Engineering Survey • Comments generated from the initial review of the water/sewer design plans are included with the developer package.
3.	<p>REVIEW FEES</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Developer submits an executed Developer Agreement to the Authority, including payment of Review Fees. <ul style="list-style-type: none"> • Review Fees are assessed at the current rates per foot of waterline 3-inches in diameter and greater, and per foot of sewer line (service laterals are excluded). • Inspection fees must be paid prior to the issuance of the certificate to construct (see item 10 below), but can also be paid at the same time as the Review Fees.

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4.	<p>SURETY</p> <p><input checked="" type="checkbox"/> Developer provides Authority with surety in the form of a letter of credit, performance bond, or cashier's check as outlined in the Agreement.</p>
5.	<p>PLAN REVISIONS</p> <p><input checked="" type="checkbox"/> Authority releases additional comments, clarifications, etc. to Developer and/or design engineer (if applicable).</p> <p><input checked="" type="checkbox"/> Re-review fee needs to be submitted with the third submittal and beyond.</p>
6.	<p>COST SHARING AGREEMENT <i>(See General Note A)</i></p> <p><input checked="" type="checkbox"/> Developer provides the Authority with a Cost Sharing Agreement, if applicable.</p>
7.	<p>PLAT APPROVAL <i>(See General Note B)</i></p> <p><input checked="" type="checkbox"/> Final plat for the subdivision must be approved and signed by all applicable County entities.</p> <p><input checked="" type="checkbox"/> Any necessary easements for the project are identified and included on the plat. Where platting is not necessary, proof of easement will be required.</p>
8.	<p>PLAN APPROVAL <i>(See General Note B)</i></p> <p><input checked="" type="checkbox"/> Final water/sewer design plans are reviewed by the Engineering and Maintenance departments in the presence of the design engineer when available. Any additional comments generated are submitted to the Developer and/or design engineer.</p> <p><input checked="" type="checkbox"/> Water/sewer design plans are approved by the Authority for construction.</p>
9.	<p>ADDITIONAL REQUIREMENTS</p> <p><input checked="" type="checkbox"/> Contractor submits shop drawings to the Authority for review and approval.</p> <p><input checked="" type="checkbox"/> Other items may be required including but not limited to easements, permits, etc.</p>
10	<p>INSPECTION FEES</p> <p><input checked="" type="checkbox"/> Developer submits payment of the Inspection Fees prior to the issuance of the certificate to construct; the fees are calculated as follows:</p> <ul style="list-style-type: none"> • Inspection Fees are assessed at the current rates per foot of waterline, and per foot of sewer line. • Bacterial testing fees: \$60.00 per 1,000 linear feet of waterline; Flushing fee is equal to the volume of water contained in said system multiplied by 4, charged at the current water billing rate. • Filling fee for testing Force Mains: Filling fee is equal to the volume of water contained in the force main system during testing, charged at the current water billing rate.
11.	<p>CERTIFICATE TO CONSTRUCT</p> <p><input checked="" type="checkbox"/> Authority Engineering Department submits the Certificate to Construct (C2C) to the Authority field representatives for final approval.</p>

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12.	<p>SURVEY / STAKE-OUT</p> <p><input checked="" type="checkbox"/> The design engineer performs a survey and stakes out the waterline, sewer line, and proposed edge of pavement prior to construction commencing. Waterlines are to be surveyed with a maximum spacing of 100 feet between stakes, including staking at any bends. Sewer lines are to be surveyed with staking at each manhole location. Surveying is to be performed by a licensed surveyor with a notice submitted by the surveyor or surveying company upon completion verifying what has been surveyed along with the date of survey.</p>
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PHASE 2 – CONSTRUCTION

13.	<p>SITE GRADING</p> <p><input checked="" type="checkbox"/> Grading contractor constructs the proposed road to within 6-inches of final sub-grade. Survey stakes for the roadway are to be set by a licensed surveyor and shall verify that sub-grade has been established. Some flexibility may be permitted for installations of gravity sewer.</p>
14.	<p>PRE-CONSTRUCTION</p> <p><input checked="" type="checkbox"/> Developer/Contractor schedules a pre-construction conference with the Authority's field representative(s).</p>
15.	<p>EXECUTED CERTIFICATE TO CONSTRUCT</p> <p><input checked="" type="checkbox"/> C2C is issued to the Developer/Contractor by the Authority field representative upon site approval determined at the pre-construction conference.</p>
16.	<p>PARCEL SIGNUP FEES</p> <p><input checked="" type="checkbox"/> Plat and design plans are submitted to Customer Service Department with Certificate to Construct to allow for the acceptance of applicable New Customer Signup Fees for parcel hook-ups to builders and/or property owners.</p>
17.	<p>CONSTRUCTION STARTS</p> <p><input checked="" type="checkbox"/> Developer/Contractor notifies Authority of anticipated start date at least three working days in advance and prior to construction.</p>
18.	<p>SERVICES</p> <p><input checked="" type="checkbox"/> Property corners, property lines, and applicable easements are staked by a licensed surveyor for proper location of the meter settings and sewer service laterals.</p> <p><input checked="" type="checkbox"/> Sewer laterals and meter bases are set and constructed by the Contractor according to the locations shown on the approved design plans. All lots within the development are to be provided with meter bases and sewer laterals where appropriate.</p>

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19.	<p>TESTING</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The contractor shall schedule with the Authority's field representative at least three working days in advance (after construction is complete) for pressure testing and/or air & vacuum testing. <input checked="" type="checkbox"/> Soil compaction tests are performed by a third party with the results being submitted to the Authority for review. The Authority's field representative shall administer the scheduling of all compaction tests. <input checked="" type="checkbox"/> (WATER) Pressure tests are performed by the Contractor and approved by the Authority's field representative upon satisfactory test results as per Authority Master Specifications. <input checked="" type="checkbox"/> (WATER) Bacteriological tests are performed by the Authority. <input checked="" type="checkbox"/> (SEWER) Air/vacuum tests are performed by the Contractor and approved by the Authority's field representative upon satisfactory test results as per Authority Master Specifications. <input checked="" type="checkbox"/> Other tests may be required to ensure that installation, materials, etc. is in accordance with the Authority Master Specifications as prescribed in the Agreement.
20.	<p>PROJECT COMPLETION</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Authority Utility Locator schedules walk through to verify proper trace wire installation, and Engineering Department notifies Developer and Engineer of scheduled date. (<i>See General Note J</i>) <input checked="" type="checkbox"/> Authority Utility Locator marks water / sewer lines during verification of trace wire. <input checked="" type="checkbox"/> Authority's field representative conducts a substantial completion walk-thru and issues a project punch-list to the Contractor. <input checked="" type="checkbox"/> Punch-list items are completed by the Contractor and verified by the Authority in a final completion inspection. <input checked="" type="checkbox"/> The waterline is verified to be the minimum required distance from the edge of pavement. Asphalt base is required to be in place for distance verification. <input checked="" type="checkbox"/> Field drawings and field notes are reviewed with the Authority's field representative for correctness and accuracy. <input checked="" type="checkbox"/> Field drawings and field notes are submitted by the Contractor to the Developer and/or the design engineer for inclusion in the as-built drawings.

PHASE 3 – PROJECT CLOSEOUT

21.	<p>LETTER OF WARRANTY</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The Contractor submits a Letter of Warranty for materials and workmanship, and a draft of as-built drawings to the Authority.
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22.	<p>DESIGN FILES / AS-BUILT DRAWINGS</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The Developer/design engineer submits surveyed as-built drawings to the Authority per the Authority’s Surveyed As-Built Requirements. The contractor mark-ups need to be submitted from the Engineer with the first submittal of As-Built. <input checked="" type="checkbox"/> AutoCAD and Adobe Acrobat files of the as-built drawings need to be submitted per the Authority Surveyed As-Built Requirements. <input checked="" type="checkbox"/> Water and sewer modeling files to be submitted if available. <input checked="" type="checkbox"/> Authority’s field representative reviews drawings for accuracy; if meter information is shown accurately, as-built drawings are forwarded to the Utility Locators and the Maintenance Department.
23.	<p>BILL OF SALE / QUIT CLAIM DEED</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The developer submits an executed Bill of Sale / Quit Claim Deed, included in the Developer Package, to the Authority. This needs to be dated after the contractor has been paid in full. <input checked="" type="checkbox"/> Proof of recordation of any and all associated plats and easements.
24.	<p>CERTIFICATE OF COMPLETION <i>(See General Note K)</i></p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The Project will be accepted into the public system for maintenance and operations upon completion of all requirements as prescribed in the Agreement and this Checklist. <input checked="" type="checkbox"/> A Certificate of Completion with copies of the as-built drawings shall be issued to the Customer Service Department upon approval given by the Authority Engineering, Maintenance, and Operations Departments. A copy of this Certificate will be mailed to the Developer.
25.	<p>WATER SERVICE AVAILABILITY</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Upon receipt of the Certificate of Completion, the Customer Service Department will make the determination of the ability to provide meters to the subdivision. See “Procedures for Customer Service Project Acceptance.”
26.	<p>PROJECT SURETY <i>(See General Note M)</i></p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The Authority reserves the right to retain the complete surety of 105% construction costs. Twelve months after the Authority has accepted the project for service, the surety shall be released to the Developer upon written request. A portion of the surety may be held until there are at least three (3) residential connections or one (1) commercial connection made to the project.

Section 3. General Notes:

- A. In certain situations the Authority will enter into Agreements with Developers to offset some costs if linework has been built in excess of what their development requires. Any such

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Agreement is entered into at the discretion of the Authority Board of Directors, and must be done prior to the commencement of construction.

- B. General notes on the plan sheets shall be consistent and reflected in the plans and design. Plats and utility plans shall reflect each other prior to plan approval of either plan. Alignment changes made to plan sheets should be reflected in the overall site map submitted with the utility plans.
- C. Should the requirements of the Agreement and associated documents not be met by the Developer within a reasonable time frame, the Authority reserves the right not to release the Developer's surety until all requirements have met the satisfaction of the Authority. Water/sewer service to the development may also be denied.
- D. The Authority has the authority to halt construction and order pipe and appurtenances to be removed if construction begins prior to the issuance of the Certificate to Construct.
- E. The Contractor is required to arrange for an Authority representative to be on-site at the beginning of any water/sewer construction project.
- F. The Contractor is required to have the latest Authority Master Specifications on-site at all times. Construction may be halted until this documentation is on-site and verified by the Authority's field representative.
- G. Construction may be halted at any time if the Developer/Contractor fails to comply with any of the requirements set forth by the Agreement and associated documents.
- H. The Authority works closely with VDOT on projects where utilities are proposed in the right-of-way. Delays in receiving VDOT approval may result in delays for the construction or acceptance of the water or sewer lines.
- I. The latest edition of the Authority Master Specifications shall serve as the standard for water/sewer construction practices in Bedford County. Any changes required by the Authority or noted deficiencies during construction shall be corrected by the Contractor.
- J. Developer and/or Engineer are responsible for scheduling survey of the utilities immediately following the Authority Utility Locator's scheduled walk through and trace wire verification. If proper scheduling is not arranged, and Utility Locator's marks are no longer present upon time of survey for as-built drawings, the Developer and/or Engineer are responsible for having the lines located and marked with proper locating equipment.
- K. Final plats and any necessary easements must be recorded prior to the acceptance of the system(s). Recordation information and/or instrument numbers must be provided to the Authority prior to the issuance of a Certificate of Completion.
- L. The Authority shall retain surety for a warranty period of one year. This warranty period shall not go into effect until the Authority is in receipt of both the letter of warranty from the Contractor

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and the Bill of Sale / Quit Claim Deed from the Developer, and the project has been deemed complete by the Authority.

- M. When the warranty period has expired the surety shall be released to the Developer upon written request provided the following conditions have been met:
- The Developer/Contractor has fulfilled all requirements set forth by the Agreement and associated documents.
 - Punch list items from Final Warranty inspection have been corrected.
 - There are at least three (3) residential connections or one (1) commercial connection that have been made to the project.

Section 4. REVISIONS

- A. This policy was approved and adopted by the Authority's Executive Director on April 23, 2013, effective July 1, 2013.
- B. This policy was modified as follows:
1. Approved July 15, 2014, effective July 16, 2014:
 - a. Section 3.K was added clarifying recorded final plats and easements.
 2. Approved April 3, 2015, effective April 22, 2015:
 - a. Section 2.3 was revised to remove reference to Base Project Review Fee.
 - b. Section 2.10 was revised to reflect current costs for bacterial testing fees.
 - c. Section 2.26 was revised to clarify surety retainage.
 - d. References to Inspector were modified to Authority's field representative.