

**CITY OF NORFOLK
DEPARTMENT OF UTILITIES
APPENDIX F-1 – SITE PLAN SUBMISSION DESIGN CHECK-LIST**

Project Title: _____

- ____ 1. Virginia registered engineer’s stamp, signature, and date.
- ____ 2. Plan and profile sheets are on 24”x36” paper. Drawing organization and format comply with Section 7 of the Department of Utilities Design and Construction Standards.
- ____ 3. Department of Utilities Standard Site Plan Notes and applicable standard details are provided on the plans.
- ____ 4. Domestic water meter calculations are shown on plans where applicable in accordance with A.W.W.A. Manual _____” diameter line is required to adequately serve this project in accordance with City Standards.
 - a. Average Domestic Design Flow _____
 - b. Peak Hour Domestic Flow _____
 - c. Design Fire Flow _____
 - d. Total Design Peak Flow _____
 - e. Residual Pressure at Total Design Peak Flow (last hydrant) _____
- ____ 5. Sanitary Sewer Analysis is shown on sewer shed map. _____” diameter line is required to adequately serve this project in accord with the City Standards.
 - a. Average Daily Flow** _____
 - b. Design Peak Flow _____

** If the average daily flow is greater than or equal to 40,000 GPD, a HRSD Flow Acceptance Certificate application shall be submitted with the site plan. Application information can be found at _____
- ____ 6. If this is a phased project, overall water and sewer plans have been submitted for approval.
- ____ 7. The sewer drawings include stationing, pipe size, material, bearings, direction of flow, deflection angles, grade and distance between centerline of manholes. Benchmarks are shown every 500 feet.
- ____ 8. I.S.O. Fire Flow computations are included (where applicable). Note: The maximum velocity through a pipe shall be no greater than 9 fps, Hazen-Williams coefficient (c-factor) shall be 120 for new, 110 for existing VC and 100 for existing CI mains, and a minimum residual pressure of 20 psi shall be maintained in the City system.
- ____ 9. Adequate fire hydrant spacing and fire hydrant water supply.
- ____ 10. Where all proposed sewer and/or water mains cross other utilities, these crossings are profiled, and the means for crossing and resolving any conflicts are clearly shown.
- ____ 11. All existing sewer and water connections to the property are shown on plans.
- ____ 12. All proposed utility easements deemed necessary have been identified and an exhibit plat has been submitted with the plans.
- ____ 13. A list of the Approximate Material Quantities to be used and the latest Material Notes are shown on the plans.
- ____ 14. A backflow prevention device is provided on domestic and fire service connections; the device shall be installed on private property.

I have reviewed this Checklist for accuracy and hereby certify that the water and/or sewer plans as submitted have been designed in accord with the latest City Standards, Waterworks Regulations and Sewerage Regulations (whichever is more restrictive). The plans have been reviewed for completeness and accuracy and are herewith submitted for approval.

_____, P.E.
Signature

Certificate Number

Name Typed or Printed

Date