

## ENGINEERING SERVICES

### DEVELOPMENT PLAN CHECKLIST

Please carefully review this checklist, and make sure you accurately fill it out. If this checklist is not accurately filled-out, you will be notified within 3 business days that your submittal is incomplete. If the checklist is inaccurately submitted the technical review of the Development Plan will be delayed until the Development Plan is re-submitted to include the information contained within this checklist.

#### A. COVER SHEET

- Name of proposed Development
- Owner/developer, address, phone, email & fax
- Design professional, address, phone, email & fax
- Signed and sealed by PE or LS; date
- Vicinity Map, scale 1" = 800'
- Overall Lot Layout (large subdivisions only)
- Sheet Index
- Legend of existing & proposed Development Plan symbols
- Approval block which contains; name and date lines for the City Engineer, and Director of Public Works
- Utility agencies, addresses and phone numbers.
- Governing agencies, addresses and phone numbers.

#### General Notes

- Tax Map or Parcel ID number
- Datum and benchmark. (i.e. NAVD 88, TBM or City benchmark number)
- Zoning & intended use
- Any variances or re-zonings, conditional privileges, use permits, or wetlands permit (case number, date, and conditions).
- Flood plain; flood zone \_\_\_\_\_, per panel \_\_\_\_\_, dated \_\_\_\_\_, indicate IN or OUT.
- CBPD Map No.; indicate IN or OUT
- Reference to City of Hampton, Design & Construction Standards Manual, Department of Public Works, Rev. 1995, City of Hampton Utility Policy, February 1994, and Hampton Development Plan Standard Notes, October 1, 2003.

#### Site Statistical Resume

- Total site area (square feet/acre)
- Total area within the right-of-way (square feet/acre)

- Total area of lots
- Total number of lots
- Minimum lot size (square feet/acre)
- Maximum lot size (square feet/acre)
- Type, number, and diameter of trees per Hampton Code Section 35-82

### **Site Development Notes**

- Hampton Development Plan Standard Notes, October 1, 2003.
- Before you dig, call Miss Utility (1-800-552-7001)

### **B. DEVELOPMENT PLAN**

- Graphic and numeric scale
- North arrow with references to source of meridian
- Bearings and distances
- Lot numbers.
- Adjacent parcels labeled
- Adjacent streets (to minimum center line) labeled; name and right-of-way width
- Site grading notes
- Pavement design (when it varies from Hampton Standards)
- Front building set backs only
- BMP location; impervious greater than 34% or post development flow to equal predevelopment flow; design for 10-year design frequency; check ponds for overtopping 25-year design frequency; soil boring for BMP required
- Chesapeake Bay features (water bodies shown and labeled) – if applicable
- Show existing tree caliper and tree lines
- Existing and proposed elevations
- Existing OH & UG electrical, telephone, CATV
- Connection to existing storm drain system (if applicable) with rim & inverts of applicable storm drain structures
- Proposed storm drain system (all structures labeled with structure number, rim, invert - all pipe labeled with length, diameter, material & slope); Class III RCP in streets and minimum of 15” pipe diameter; provide hydraulic grade line.
- Proposed rip rap (sized) for flared ends, headwalls, etc.; grouted rip rap for outfall into existing City ditches
- Existing & proposed ditches; indicate material (i.e. PD-1 or grassed) and flow line; minimum slope for earth swale is 1.0% and 0.25% for PD-1
- Drainage easements noted on plan; existing (deed book and page number) and proposed (recorded with instrument number)
- Existing utilities (sanitary sewer, sewer force main, water); owner of pipe line
- Proposed sanitary sewer (gravity) linear feet, diameter, material, slope; manhole rims & inverts proposed and existing (where applicable)
- Proposed sanitary sewer laterals at center line of property, 10’ horizontal separation from water services lines
- Proposed sewer force main (if applicable)

- Proposed pump station location; invert in and out, type and gallons per minute (if applicable); provide design calculations, and HRSD certification from wastewater division regarding capacity.
- Proposed water line, sanitary sewer & sewer force main connections ( plus inverts)
- Proposed water line; linear feet, diameter, and material
- Proposed water service size and material
- Fire hydrants; existing and proposed
- Proposed and existing sanitary sewer and water line easements
- Street barricades at dead end streets
- Street slopes 0.3% minimum; 0.5% minimum street slope for cul-de-sac.
- Provide curve data
- Four foot minimum sidewalk width
- Curb & gutter and sidewalk required; provide CG-12s at all intersections

### **C. E & S PLAN & DETAILS**

- Reference to Virginia Erosion and Sediment Control Handbook, 1992 Edition.
- Construction entrance
- Inlet and outlet protection
- Protection of proposed and existing inlets & outlets
- Protection of existing water bodies
- Protection of adjacent properties from storm water
- City of Hampton BMP maintenance plan (if applicable)
- Applicable E & S details
- Refer to VESECH for minimum E & S notes (Table 6-1) & include, at least, minimum notes on the plan
- Permanent seeding schedule per VESECH 3.32
- Temporary sediment basin for 3 acres or greater (include sizing).

### **D. DETAIL SHEET (Optional)**

- Do not include City of Hampton standard details unless revised for specific site
- BMP details, such as outlet structure and section
- Ditch section
- Any other applicable details

### **E. PROFILE SHEET**

- Sanitary sewer, sewer force main (if applicable), water main, and storm drain utility crossings; all PVC pipes and fittings shall be ASTM-D-3034, SDR 26.
- Label all utility and storm drain lines with length, diameter, slope, and material.

**Other**

- The hydrology and hydraulic analysis is for the 10-year design frequency. Size pipe and structures according to the Virginia Department of Transportation Drainage Manual (Rational Method). There are many different programs available for design, and are acceptable as long as the minimum information in the VDOT manual is provided for review. Include hydraulic grade line and storm water inlet computations. Use 4.0 intensity (i) for inlet design. Provide offsite analysis for outfall into existing structures, as necessary.
  
- A minimum of one soil boring is required for BMPs (exceptions for vegetated filter strip or grassed swales). Soil borings should include the seasonal high water table. Ponds are designed to control the 2 and 10-year peak flows, and checked for overtopping for the 25-year design frequency, at a minimum. Submit calculations for the entire spectrum of storms: 2, 10, 25 and 100-year. Due to ease of maintenance, dry ponds are preferred for subdivisions. All dry ponds shall have a paved swale to direct storm water from inflow to outfall.
  
- Complete and submit CBPA calculations for all projects. Submit two sets of CBPA, labeled drainage area map (areas, “C” factors), and all storm water calculations. Storm water calculations shall include pre and post development flow (Q) for the 10-year, and time of concentration (Tc) both pre and post development. If using the graphical peak discharge method, TR-55, provide CN determination for pre and post development. Submit one copy of the soil boring report.
  
- Water quality impact assessment required for any proposed development disturbing over 2,500 square feet; minor water quality impact assessment from 2,500 square feet to 10,000 square feet; major water quality impact assessment for disturbance over 10,000 square feet. Include both the erosion and control narrative and the water quality impact assessment with the storm water calculation package.
  
- Provide copies of letters notifying applicable agencies or utilities of proposed subdivision including: ACOE, DEQ, NNWW, HRSD, Dominion VA Power, VA Natural Gas, Verizon, and Cox Cable.

Sign Here: \_\_\_\_\_

I hereby understand that the checklist above has been filled out accurately. This checklist accurately conveys what has been submitted on the Development Plan. I understand that if the Land Development Services Office determines this checklist to be incomplete the technical review will not begin until this Development Plan is re-submitted with an accurate checklist. I assume complete responsibility for the accuracy of the information provided on this checklist.

## CITY OF HAMPTON, VIRGINIA DEVELOPMENT PLANS STANDARD NOTES

Effective October 1, 2003

1. All work on City right-of-way will require a separate infrastructure permit from Central Permit Office. All construction shall conform to City of Hampton specifications as set forth in the Public Works Design and Construction Standards handbook in effect at the time of plan approval.
2. Contact Central Permit office to obtain a site plumbing permit prior to installing storm drain, sewer force main or sanitary.
3. A Land Disturbing permit must be issued before construction may begin. A Responsible Land Disturber is required to obtain Land Disturbing Permits. Contact the Central Permit Office at 728-2444 to obtain this permit.
4. Install erosion control measures prior to clearing. Gravel inlet protection and or silt fence will be placed around all storm drain inlets and maintained throughout the construction period. All denuded areas of the site will be topsoiled and seeded in accordance with the Virginia Erosion and Sediment Control Handbook, Sections 3.30-3.32.
5. The site construction entrance(s) will have Virginia Department of Highways and Transportation No. 1 stone, 6" deep and 70' long.
6. Installation of utilities within City right-of-way shall follow procedures set forth in the City of Hampton Utility Policy.
7. Installation of storm drainage facilities shall be in accordance with City of Hampton Standards.
8. All lots draining front to rear (type C lot drainage) and lots draining rear to front (type A lot drainage) shall have a certified grading plan.
9. The developer and his contractor shall arrange a pre-construction meeting with Hampton Department of Public Works before starting construction.
10. A VPDES permit shall be obtained when land disturbed is greater than one acre.