

## GRADING PLAN CHECK LIST SUBMISSION REQUIREMENTS:

Per City of Alexandria Code Section 5-6-224 (d)

**Note:** The following sheets and information are required for every submission. Additional sheets and information should be provided where necessary to demonstrate compliance with City requirements or conditions of approval. Provide a cd of all submission documents, \$500 submission fee, applicable VSMP fee (see VSMP fee schedule-[LINK](#)), and a VSMP application if required with the first submission.

The Check List shall be completed and submitted with first submission of the plans. Failure to comply may result in the plan being deemed incomplete and unacceptable for review.

Property Address: \_\_\_\_\_

Engineer: \_\_\_\_\_

Engineer Phone # and Email: \_\_\_\_\_

Owner/Applicant (do not duplicate Engineer information): \_\_\_\_\_

Owner/Applicant Contact Phone # and Email: \_\_\_\_\_

THE UNDERSIGNED HEREBY agrees to allow the City to post an informational notice placard on the subject property for a total of 30 days.

APPLICANT OR AUTHORIZED AGENT:

Name \_\_\_\_\_

Signature \_\_\_\_\_

### REQUIREMENTS FOR EACH SHEET

- \_\_\_\_\_ Scale no less than 30' to 1" with scale identified on each sheet
- \_\_\_\_\_ City grading plan approval signature block in same place (lower right corner) on each sheet
- \_\_\_\_\_ Date, scale and north arrow with reference to source of meridian
- \_\_\_\_\_ Name, address, email, signature and registration number of professional preparing the plan on each sheet (original signature required for mylar submission)
- \_\_\_\_\_ Date the plan was prepared on each sheet/ Date of latest revision
- \_\_\_\_\_ Name, address, email, and phone number of the developer/builder and/or the owner(s) of record
- \_\_\_\_\_ Table of standard symbols per common engineering practice and abbreviations utilized in the plan set

### ADDITIONAL REQUIREMENTS

- \_\_\_\_\_ Location map on cover sheet with the site shown in relation to the nearest intersection of two or more streets, parcel number of property (includes the tax reference number)
- \_\_\_\_\_ A narrative description of the proposed development
- \_\_\_\_\_ Index to plan sheets

- \_\_\_\_\_ Total area included in the site plan, total area of tax parcel, total existing and proposed impervious area on the tax parcel, and total area that will be disturbed during construction (all expressed in square feet and acres). The disturbed area will be calculated as described in Memo to the Industry 02-08 on Grading Plan Requirements and Waiver Provisions ([LINK](#))
- \_\_\_\_\_ If applicable, a list of all special use permits, subdivisions, variances, certificate of appropriateness, special exception, waivers, etc., **approved** for the Grading Plan (i.e. Curb cut approval)
- \_\_\_\_\_ Copy of Curb cut approval (if required) shown on plan
- \_\_\_\_\_ City Standard Notes (*amend as applicable- available from Development Coordinator and online under T&ES Memos to Industry- [LINK](#)*)

## GRADING PLAN

*Show location, dimensions, size, height and elevation of the following along with the existing features to be retained:*

- \_\_\_\_\_ Sidewalks, streets, alleys with widths labeled, and elevations
- \_\_\_\_\_ Vision clearances (on corner lots)
- \_\_\_\_\_ Property lines; show course and distance of each site boundary line
- \_\_\_\_\_ Setback dimensions of front, side and rear yards
- \_\_\_\_\_ Buildings and structures, including optional decks and other projections such as canopies, roof overhangs
- \_\_\_\_\_ Stoops, steps and staircases
- \_\_\_\_\_ Locations of building entrances and exits
- \_\_\_\_\_ Sump pump and roof drain outfalls [*per the requirements of Memo to Industry 05-14- [LINK](#)*]
- \_\_\_\_\_ Existing and proposed storm and sanitary sewer systems, including lateral lines in plan and profile.
- \_\_\_\_\_ Existing and proposed gas mains and service lines in plan view
- \_\_\_\_\_ Show all utilities on one plan sheet
- \_\_\_\_\_ Provide profiles for any utility crossings, denoting horizontal and vertical clearances
- \_\_\_\_\_ Light poles and fixtures on-site and on adjoining rights-of-way
- \_\_\_\_\_ Driveways, entrances, exits, parking areas; show parking spaces by type (standard, compact and handicap) and indicate the number in each bay and the total count
- \_\_\_\_\_ Dimensions of new curb cut (if provided) at property line
- \_\_\_\_\_ Sidewalks, bike and walking trails on site and on abutting streets or public property/easements
- \_\_\_\_\_ If applicable, recreation areas, swimming pools, etc.
- \_\_\_\_\_ Watercourses, bodies of water, wetlands and limits of flood plains
- \_\_\_\_\_ Depict any Resource Protection Areas as defined in Article XIII of the Zoning Ordinance and delineate their appropriate buffer width
- \_\_\_\_\_ To any wetland or RPA add a note stating that “RPA buffer shall be vegetated with native riparian species and remain undisturbed. RPA is limited to water dependent facilities or redevelopment.”
- \_\_\_\_\_ Significant geological features and soil types (Hydrologic Soil Group A, B, C or D as defined by NRCS)
- \_\_\_\_\_ Proposed grading shown with 2' contours on the subject property and on adjacent parcels for sufficient distance to indicate the relationship of the site to off-site terrain. The Director of Transportation and Environmental Services (T&ES), at his discretion, may ask to show the contours at a lesser interval than 2', if required, to understand the pattern of micro drainage from the site and/or the adjacent properties.

- \_\_\_\_\_ Two benchmarks
- \_\_\_\_\_ Slopes, terraces and retaining walls, including elevations of level areas and tops and bottoms of walls and exterior stairways and ramps
- \_\_\_\_\_ Indicate elevations at the base of all utility structures other than individual poles, such as fire hydrants and transformers
- \_\_\_\_\_ Provide rim elevation and invert elevations of all piping at manholes
- \_\_\_\_\_ Elevations of streets and alleys
- \_\_\_\_\_ If an operator intends to meet the requirements established in 9VAC25-870-63 or 9VAC25-870-66 through the use of off-site compliance options, where applicable, then a letter of availability from the off-site provider must be included
- \_\_\_\_\_ Fee and fee form (Par XIII of Chapter 9VAC25-870)
- \_\_\_\_\_ A description of any additional control measures necessary to address a TMDL pursuant to subsection E of 9VAC25-870-54
- \_\_\_\_\_ Standard pollution prevention notes and any other management of site specific pollutants over and above those covered in the notes.

**ZONING REQUIREMENTS (Provided on cover sheet)**

*For each element, list zoning ordinance requirement, number approved on preliminary plan and number proposed on final plan, if different.*

- \_\_\_\_\_ Zoning of the site
- \_\_\_\_\_ Existing use on the site
- \_\_\_\_\_ Proposed use for the site
- \_\_\_\_\_ Existing and required lot area
- \_\_\_\_\_ Depict building restriction line
- \_\_\_\_\_ Preliminary gross square feet (GSF) of existing and new building area (attach P&Z floor area calculations sheet). Note FAR review as a Preliminary Review
- \_\_\_\_\_ Preliminary net square feet (NSF) of existing and new building area (attach P&Z floor area calculations sheet). Note FAR review as a Preliminary Review
- \_\_\_\_\_ Floor-area-ratio (existing and proposed)
- \_\_\_\_\_ Open space (existing and proposed)
- \_\_\_\_\_ Average finished grade of structure for existing and new construction
- \_\_\_\_\_ Height of structure from existing and average finished grade
- \_\_\_\_\_ Yards (front, side and rear) required and proposed
- \_\_\_\_\_ Parking space(s), if applicable listed by total number, size of space and type (compact, standard, and handicapped)
- \_\_\_\_\_ % of crown coverage existing and proposed (based on P&Z Landscape Guidelines)

**\*\*Note: \*\* If the proposed development includes multiple lots, the zoning tabulation information must be provided for each individual lot unless all the lots will be consolidated in conjunction with the proposal.**

**EROSION AND SEDIMENT CONTROL PLANS (When required)**

- \_\_\_\_\_ Delineate the total area that will be disturbed during construction and show it on the plan. Calculate the total disturbed area as described in the Memorandum to the Industry on Grading Plan Requirements and Waiver Provisions ([LINK](#)) in square feet and acres and show it on the plan. If the total disturbed area is more than 2,500 square feet then the proposed improvements shall be designed to complete the requirements of Article XIII of the Zoning Ordinance of the City of Alexandria.
- \_\_\_\_\_ Narrative phasing plan including demolition and sequence of construction activities
- \_\_\_\_\_ All appropriate details of erosion and sediment control measures [must meet Virginia Erosion and Sedimentation Control Handbook (VESCH) standards]
- \_\_\_\_\_ Sources of water for construction entrance wash down
- \_\_\_\_\_ Grading for drains and traps for construction entrance runoff
- \_\_\_\_\_ Show and list appropriate control measures defined for each drainage area
- \_\_\_\_\_ Identify areas having different ground covering materials (i.e. concrete, asphalt, gravel, turf, crushed stone, etc.)
- \_\_\_\_\_ Delineate any wetlands or Resource Protection Areas (RPA)
- \_\_\_\_\_ Legend for line types (must be in accordance with VESCH)
- \_\_\_\_\_ Temporary and permanent seeding mixtures
- \_\_\_\_\_ Erosion and Sediment Control Narrative per requirements outlined in Memo 02-09 ([LINK](#))
- \_\_\_\_\_ BMP strategies (projects with 2,500 SF of disturbed area including construction staging and storage.)
- \_\_\_\_\_ BMP Narrative
- \_\_\_\_\_ Delineation and description of areas with contaminated soils
- \_\_\_\_\_ Erosion & Sediment Control Notes (*amend as applicable- available from Development Coordinator and online under T&ES Memos to Industry- [LINK](#)*)

**STORMWATER MANAGEMENT (QUALITY AND QUANTITY) and BMP SHEETS (When Required)**

*(See Article XIII of the Zoning Ordinance for guidance on water quality calculations and quantity requirements)*

- \_\_\_\_\_ Location and description of RPA components
- \_\_\_\_\_ Location and nature of RPA encroachment
- \_\_\_\_\_ Water Quality Impact Assessment, if applicable
- \_\_\_\_\_ Type and location of proposed BMP (including geographic coordinates- NAD88), with supporting calculations
- \_\_\_\_\_ Pre and post development runoff calculations for 2 and 10 year storms
- \_\_\_\_\_ Stormwater Narrative
- \_\_\_\_\_ Stormwater Outfall Narrative
- \_\_\_\_\_ Stormwater Outfall Analysis
- \_\_\_\_\_ Stormwater Detention Facility Design
- \_\_\_\_\_ Pre and Post-development drainage divides off-site/on-site identified and delineated
- \_\_\_\_\_ Water Quality Volume (WQV) computation (in cubic feet and acre-feet)
- \_\_\_\_\_ Drainage area map with hatched areas indicating the impervious area draining to selected water quality BMPs
- \_\_\_\_\_ Virginia Runoff Reduction Method (VRRM) worksheets
- \_\_\_\_\_ City standard water quality BMP data blocks (2) (Project Description and Miscellaneous Blocks)

- \_\_\_\_\_ Signage detail for surface BMP
  - \_\_\_\_\_ Water Quality Improvement Fund request, if applicable, shall be included on the first final plan with original hard copy included. Once the request is approved then both the request and approval letters must be included on the plan of subsequent submissions and/or Mylar.
  - \_\_\_\_\_ BMP and associated structure details including planting plans if applicable.
  - \_\_\_\_\_ BMP Sign details
  - \_\_\_\_\_ BMP table with a separate listing for each individual BMP that includes the name of the practice, total area treated (acres), pervious area treated (acres), impervious area treated (acres), phosphorous removal efficiency (percentage), phosphorous removed by the practice (lbs), and geographic coordinates in decimal degree format. (SWM)
- When required, BMP and/or Detention Maintenance Agreement must be recorded prior to plan release

**EXISTING AND PROPOSED VEGETATION**

*(Refer to included example plan exhibit)*

- \_\_\_\_\_ Required notes for tree preservation and protection, and proposed plantings per the City’s Landscape Guidelines
- \_\_\_\_\_ Inventory, identification, and location(s) of existing trees on-site and within 15 feet of the property line (as applicable) as outlined in the City’s Landscape Guidelines.
- \_\_\_\_\_ Identify existing trees that are to be saved as “TBS” and existing trees that are to be removed as “TBR” (as applicable).
- \_\_\_\_\_ Location of tree protection fencing per the City’s Landscape Guidelines for all trees to be saved.
- \_\_\_\_\_ Notifications to neighbors per the City’s Landscape Guidelines of potential impacts to trees located within 15 feet of the property line on adjacent (as applicable).
- \_\_\_\_\_ Tree protection details per the City’s Landscape Guidelines (as applicable).
- \_\_\_\_\_ Locations of proposed vegetation.
- \_\_\_\_\_ A proposed planting schedule indicating species, specifications, quantities, and crown coverage allowance.
- \_\_\_\_\_ Crown coverage calculations including existing, removed, required, and proposed crown coverage.