



FAUQUIER COUNTY, VIRGINIA

MINIMUM SUBMISSION REQUIREMENTS MAJOR SITE PLANS

***DO NOT USE THIS CHECKLIST FOR CODE OF DEVELOPMENT SITE PLANS**

PLAN NAME _____ PRE-APP. DATE: _____
 SUBMITTING FIRM _____
 ENGINEER: _____ PHONE NUMBER: _____

Code Reference	Description	Sheet #	YES	NO	NA	#
Zoning Ordinance (Z.O.) 12-502.2	Proof of notification to adjacent property owners to include return receipts (white copy) with property addresses and copy of letter that includes description of properties, use, and review.					1
Z.O. 12-502.4	Seal and signature of the submitting professional					2
Z.O. 12-502.5	Name and address of the owner/developer					3
	Magisterial district, county, and state					
	North arrow, date on each applicable sheet					
	Number of sheets in the plan set, and list of plan sheets					
	Blank space for plan approval (4"x 4") (cover sheet)					
Z.O. 12-502.6	Scale 1"=50' or larger; Max. Sheet size 42"					4
Z.O. 12-502.7	Match lines when more than one sheet					5
Z.O. 12-502.8	Profiles for sanitary and storm sewers, streets adjacent thereto, 1"=50' horz., 1"=5' vert.					6
Z.O. 12-503.1	Existing use and zoning category of proposed development. Zoning and present use of adjacent properties, also proposed use & zoning of subject property					7
Z.O. 12-503.1	Min. requirements Part 4 Art. 3 of Zoning Ordinance, such as density, lot size, lot coverage, lot width, yards, height, open space, landscaped green space, etc. Dimensions of all buildings, yards, setbacks, distances between buildings etc. Table showing required and proposed for each category.					8
Z.O. 12-503.2	General notes/identify by right or special permit/special exception, approved date, and copy of all conditions attached; copy of any zoning proffers on property and explain how the site plan meets each applicable special permit, special exception condition, or rezoning proffer.					9

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
Z.O. 12-503.3	Vicinity map, with north arrow, at a scale of 1"=2000' showing the relationship of the proposed project to the adjoining property. The map should show all adjoining roads, their names and numbers, town/county boundaries, subdivisions, and other landmarks within one-mile radius of the proposed project.					10
Z.O. 12-503.4	Boundary survey of site, error of closure 1:10,000					11
Z.O. 12-503.5	Engineer's/surveyor's certificate, source of title					12
Z.O. 12-503.6	Existing and proposed streets, easements. Need detail to include names, numbers, and width.					13
Z.O. 12-503.6	Existing & proposed utilities of all types.					14
Z.O. 12-503.7	Location, type, size of ingress and egress of site					15
Z.O. 12-503.8	Location, type, size, and height of fencing, screening, retaining walls					16
Z.O. 12-503.9	Off-street parking/loading spaces, walkways, handicap parking, type of surfacing, number and size of spaces, angles of stalls, width of aisles, tabulation of required vs. provided					17
Z.O. 12-503.10	Number of floors, floor area, height, and location of each building, and use of each building. If residential, size and type of dwelling units					18
Z.O. 12-503.11	Building front elevations to scale					19
Z.O. 12-503.12	Existing and proposed water and sanitary sewer, pipe sizes, types, grades and good connections to existing or proposed system.					20
Z.O. 12-503.13	Adequate storm drainage outfall, indicating quantity and quality. Direction & type of drainage from any storm water control structures. Show drainage easements as necessary.					21
Z.O. 12-503.14	Erosion and Sediment control plan – permanent and temporary during all phases of development.					22
Z.O. 12-503.15	Existing topography with 2-foot contours					23
Z.O. 12-503.16	Proposed finished grading by contour with supplemental spot elevations					24
Z.O. 12-503.17	Horizontal dimensions to the 0.01foot. All bearings in deg./min./sec (to the nearest 10 sec.).					25
Z.O. 12-503.18	Landscape plan including crown coverage calculations, proposed landscaping with species and sizes and easements for existing tree save areas and street trees (7-600, 7-602)					26
Z.O. 12-503.19	Certification from appropriate officials as to availability of gas, electric, water, and sewer					27

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
Z.O. 12-503.20	All existing facilities shown on lot					28
Z.O. 12-503.21	Right of way, centerline, departing lot lines, lot numbers, limits of construction, and building location					29
Z.O. 12-503.22	Centerline curve data including delta, radius, arc, cord & tangent					30
Z.O. 12-503.23	Radius of all curb returns					31
Z.O. 12-503.24	Street names and state route numbers on all existing streets in vicinity.					32
Z.O. 12-503.25	Edge of proposed street or face of curb for full length of all streets.					33
Z.O. 12-503.26	Width of right of way and easements. Distance between curb faces. Note easements public or private					34
Z.O. 12-503.27	At proposed street intersections with existing streets, show edge pavement/curb and gutter for 100 feet or length of the connection, whichever is greater.					35
Z.O. 12-503.28	Existing and proposed drainage easements and the direction of flow in streets/gutters/streams					36
Z.O. 12-503.29	All water mains, sizes, valves/fire hydrants					37
Z.O. 12-503.30	All sanitary and storm sewers, and appurtenances by type and number, top and invert elevations					38
Z.O. 12-503.31	Contributing drainage area in acres					39
Z.O. 12-503.32	Floodplain limits					40
Z.O. 12-503.33	Location of any springs and proposed method of treatment					41
Z.O. 12-503.34	Location of streams and drainage ways					42
Z.O. 12-503.35	Type or class of concrete/treated metal drain pipe					43
Z.O. 12-503.36	Location of no-through street signs					44
Z.O. 12-503.37	Driveway entrance type					45
Z.O. 12-503.38	Provision at ends of curb for erosion control					46
Z.O. 12-503.39	Typical street section					47
Z.O. 12-503.40	Symmetrical transition of pavement at intersection					48
Z.O. 12-503.41	Connection to proposed VDOT construction					49
Z.O. 12-503.42	Two benchmarks to USGS datum					50
Z.O. 12-503.43	Miscellaneous notes to explain intent and purpose of specific items					51
Z.O. 12-503.44	All existing trees (by common name) greater than 6" caliper, tree masses covering >1000 sq. ft, and rock outcroppings >100 sq. ft.					52
Z.O. 12-503.45	Wells on adjoining property and within 500 feet of property line if a well is proposed for this development.					53

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
Z.O. 12-620	Lighting Plan including location of lights, type of lights and illumination calculations.					54
Z.O. 12-503.46	Incorporate Type 1 Soil Report prepared by Fauquier County Soil Scientist's Office or a Preliminary Soil Report prepared and signed by a certified professional soil scientist, consistent with the standards found in Fauquier County Subdivision Ordinance Section 9.5©. Show all infrastructure on soil map, and include soil information on Phase 1, E&S Plan.					55
Fauquier County Design Standards Manual (DSM) 201.1.1	For storm drainage systems that are located within public rights-of-way and/or will be included for maintenance under the state highway system, the rainfall frequencies required by the VDOT Drainage Manual shall be used, with the exception that no system shall be designed for less than the ten (10) year storm.					56
DSM 201.1.1	The VDOT Drainage Manual shall be used for the design of inlets or catch basins unless the conditions require the design for a large storm event as determined by the County.					57
DSM 201.1.1	The ten (10) year storm event and the actual time of concentration shall be used for the design of all grate inlets.					58
DSM 201.1.1	Grate inlets shall be designed using a fifty percent (50%) clogging factor.					59
DSM 201.1.1	The specified design storms for stormwater management facilities shall be defined as the 24-hour storm using site specific rainfall precipitation frequency data recommended by the National Oceanic and Atmospheric Administration (NOAA) Atlas 14 unless using the Modified Rational Method, in which case the storm of critical duration should be used.					60
DSM 201.1.2	All storm drainage designs for open channels, culverts, and storm drains shall be designed to provide overland relief to convey the 100-year storm event where there is a possibility of flooding residences, commercial or industrial buildings, overtopping primary roads, experiencing significant economic loss, or catastrophic failure.					61
DSM 201.2	A topographic map identifying all drainage areas. The 5-foot contour topographic maps available from the Fauquier County GIS Department are appropriate to delineate drainage areas that extend beyond the site development area.					62
DSM 201.2	The travel time path shall be reflective of the actual conditions both before and after the land disturbing activities.					63
DSM 201.3.2	The length of overland flow shall be reflective of actual conditions and shall be no greater than 150 feet unless approval from the Program Administrator is obtained.					64

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
DSM 201.3.2	Overland flow shall be calculated using TR-55 methodology or using the Seelye chart and the roughness coefficients (Manning's n-values) for sheet flow provided in DSM Table 201.1.					65
DSM 201.3.3	The maximum allowable length for shallow concentrated flow shall be 1000 feet. The travel time for shallow concentrated flow shall be calculated using TR-55 methodology or the Kirpich nomograph.					66
DSM 201.3.4	The travel time for channelized flow and pipe flow shall be calculated using TR-55 methodology or the Kirpich nomograph.					67
DSM 201.4.1	The Natural Resources Conservation Service (NRCS) synthetic rainfall distribution and models, including but not limited to Technical Release 20 (TR-20), TR-55, and the USACE's HEC-1 and HEC-HMS software, as well as other NRCS applications are preferred and acceptable for all stormwater management and floodplain analyses.					68
	<ul style="list-style-type: none"> The NRCS method must be used where drainage areas are equal to or greater than 200 acres, or where times of concentration are 20 minutes or longer. 					
	<ul style="list-style-type: none"> The Rational Method may be used for drainage areas that are less than 200 acres. 					
	<ul style="list-style-type: none"> The Modified Rational Method may be used to determine peak discharge rates for drainage areas less than 200 acres and when the time of concentration is less than 20 minutes. 					
DSM 201.4.2.A	The Runoff Coefficient (C factor) shall be selected from the range of values for a given land use provided in DSM Exhibit 201.3. Deviations from these values must be approved by the Program Administrator.					69
DSM 201.4.2.B	Rainfall Intensity (I) shall be determined using the formula $I = B / (t_c + D)^E$. Values for B, D and E can be obtained in the table in DSM 201.4.2.B.					70
DSM 204.4.3.C	When calculating existing rates of runoff (pre-construction), assume that all cover types are in good hydrologic condition.					71
DSM 201.6	Design of drainage infrastructure shall be based on the ultimate development conditions of the contributing drainage area.					72
DSM 202.1.1	Design flows for open channels must be contained within the channel.					73
DSM 202.1.2	The lining of channels shall be designed to withstand the erosive effects from a 2-year storm event.					74

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
DSM 202.1.3	The minimum allowable slope for vegetated-lined open channels is 2-percent, and the minimum allowable slope for concrete-lined channels is 1-percent, other than roadside ditches within VDOT's right of way.					75
DSM 202.2.A & 205.2.A	Projects obtaining VSMP coverage under Part IIA and Part IIC of the Virginia Stormwater Management Program (VSMP) Permit Regulations; and projects not requiring coverage under VSMP Permit Regulations but do require coverage under the Virginia Erosion and Sediment Control Regulations shall meet the requirements of VSMP Part IIC and the Virginia Erosion and Sediment Control Regulations for stream channel erosion prevention criteria and flood protection criteria.					76
DSM 202.2.B & 205.2.B	Projects obtaining VSMP coverage under Part IIA and Part IIB of the VSMP Permit Regulations shall meet the requirements of VSMP Part IIB Regulations for channel protection and flood protection criteria.					77
DSM 203.1.A	Culverts shall be designed with a headwater to culvert diameter ratio of less than 2.0 for the 10-year storm, unless otherwise restricted by VDOT.					78
DSM 203.1.B	The overland relief area of the 100-year frequency storm with the culvert 100% clogged shall be shown not to flood adjacent buildings/structures.					79
DSM 203.1.C	The minimum culvert performance shall be determined by analyzing both inlet and outlet control for the design flow and using the higher resulting headwater.					80
DSM 203.1.D	Culverts under public roads shall be provided with end sections or endwalls in accordance with the outlet protection requirements of the VDOT Drainage Manual.					81
DSM 203.1.E	The minimum velocity in a culvert shall be 3 feet per second for a 2-year storm event.					82
DSM 203.1.E	All closed conduit and culvert design within the VDOT right of way should be in accordance with the latest version of the VDOT Drainage Manual.					83
DSM 203.2.B	Private culverts not in the VDOT right-of-way may be Reinforced Concrete Pipe (RCP) or Corrugated Metal Pipe (CMP). Corrugated High-Density Polyethylene (HDPE) with an integrally formed smooth interior is allowed for culverts of 48" diameter or smaller.					84
DSM 203.2. C	Manning's n-values for culverts shall be representative of the culvert material specified per DSM exhibit 203.1.					85

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
DSM 203.3	The minimum culvert size shall be 15-inch diameter.					86
DSM 203.3	The maximum length of culvert shall be 300 feet.					87
DSM 203.5	When a culvert is set in a perineal stream the invert of the culvert shall be set below the normal flow line as required in the VDOT Drainage Manual. The slope of the culvert shall not exceed the slope of the natural stream.					88
DSM 204.1	Storm drain calculations establishing the design flow shall be submitted with the Storm Drainage Plan. Design flows shall be based on ultimate build-out of the contributing watershed based on the current Comprehensive Plan.					89
DSM 204.2.A	Inlets shall be designed for the 10-year storm.					90
DSM 204.2.B	Storm drains shall be designed for the 10-year frequency design storm.					91
DSM 204.2.B	Grate inlets in a sump condition shall be designed using a 50% clogging factor.					92
DSM 204.2.C	The minimum slope of a closed conduit storm drain pipe shall be 0.5%.					93
DSM 204.2.D	Stormwater conveyance pipes shall have a minimum of 15-inch diameter.					94
DSM 204.2.D	Storm drain pipe size shall not be reduced in the direction of flow, except as required for the proper operation of stormwater management facilities. In general there may not be a reduction in pipe size greater than one standard increment in the direction of flow.					95
DSM 204.2.E	A cleanout access point, either an inlet, manhole or junction box, shall be provided at a maximum of every 300 feet of pipe.					96
DSM 204.3	The hydraulic grade line shall not exceed any critical elevation during the design storm, including rising above the ground elevation at inlets or other structures, or reaching a point where storm flow would back-up to cause flooding damage.					97
DSM 204.4	In all Service Districts, drainage systems shall be designed to provide overland relief from the 100-year rainfall event without increasing flood potential for nearby buildings.					98
DSM 204.5.A	Storm drains not in the VDOT right-of-way shall be constructed with RCP or HDPE pipe.					99
DSM 205.3	To properly design stormwater detention facilities, a flow routing computer program shall be used with appropriate elevation-discharge-storage relationship for the design storm events.					100
DSM 205.4	Stormwater detention facilities should not be constructed within a Federal Emergency Management Agency (FEMA) designated					101

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
	Special Flood Hazard Area (SFHA). If this is unavoidable, the facility shall comply with all applicable regulations under the National Flood Insurance Program, 44 CFR Part 59.					
DSM 205.4	A minimum separation of 50' from the computed 100-year water-surface elevation of an extended detention pond and drainfields is required.					102
DSM 205.4	All Stormwater Management Ponds shall have their toe of embankment established a minimum of 10 feet from all property lines.					103
DSM 205.4	A "No Plant Zone" area shall be established extending a minimum of 10 feet beyond the embankment toe and shall be included in a stormwater maintenance easement.					104
DSM 205.4	Hydrophilic trees or shrubs, such as maple, sycamore or willow species, shall not be permitted within 25 feet of the embankment toe.					105
DSM 205.4	Stormwater management and BMP facilities shall not be located in required buffer areas unless authorized by the Zoning Administrator.					106
DSM 205.5	Impounding structures that are not covered under the Virginia Dam Safety regulations shall be designed to maintain structural integrity during the 100-year frequency storm event. An emergency spillway shall be provided. The emergency spillway may be separate or incorporated into the design of the principal spillway. Weirs or orifices used to control lesser frequency storms are to be considered 100% clogged for the design of the emergency spillway.					107
DSM 205.5	Embankment side slopes shall be no steeper than 3:1 unless prior approval is obtained from the VSMP administrator.					108
DSM 205.5	Embankments must provide at least one foot of freeboard from the maximum 100-year storm water-surface elevation to the lowest elevation on the top of the dam.					109
DSM 205.5	A geotechnical study must be provided for all stormwater embankments greater than 6 feet in height as measured from the toe of the embankment.					110
DSM 205.5	Dry stormwater management detention facilities shall be designed to be empty within 72 hours of the storm event.					111
DSM 205.5	The minimum orifice size shall be 1" diameter.					112

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
DSM 205.5	All riser structures shall be cast-in-place concrete unless a substitute material has been approved by the Program Administrator.					113
DSM 205.5	Outflows from stormwater detention/retention facilities shall be discharged into an adequate channel as specified in Section 202.2.					114
DSM 205.5	Stormwater basin embankments shall be vegetated in accordance with the standards in the Virginia Stormwater Management Handbook or the BMP Clearinghouse.					115
DSM 205.5	If underground facilities are proposed, the following note shall appear on the plans: <i>“Construction inspections are required throughout construction by the design engineer or other qualified professional to ensure that stormwater management facilities are constructed in conformance with the approved design plan.”</i>					116
DSM 205.5	Trash racks are required at the low flow orifice controlling extended detention drawdown. Trash racks are required at the tops of all risers/drop inlet spillways. The trash rack shall be a removable unit.					117
DSM 205.5	Emergency spillways and their outfall channels must safely convey the 100-year storm to a receiving channel (the receiving channel does not have to be adequate for the 100-year storm).					118
DSM 205.6	Access to remote stormwater management/BMP facilities must be provided by an all-weather vehicular traversable route a minimum of 8 feet wide and contained in appropriate easements.					119
DSM 205.6	Stormwater management access roads with grades of 0%-3.49% may be stabilized with grass; access roads with grades of 3.5%-6.99% shall be stabilized, at a minimum, with compacted gravel mix (21-a), and access roads with grades of 7%-12% shall be paved with asphalt.					120
DSM 206.1	Permanent outlet protection shall be provided at culvert and stormdrain discharge points and shall be designed in accordance with VDOT methods.					121
DSM 207.3	A geotechnical report with site specific infiltration rates is required for all stormwater infiltrations practices. The report must demonstrate that the infiltration BMP will work as designed.					122
DSM 207.3	All wet ponds shall have an aquatic safety bench at least 10 feet wide with slopes not to exceed 1:10 (V:H) or 1' water depth.					123
DSM 207.3	No more than one penetration shall be allowed through a dam structure without prior approval of the program administrator.					124

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
DSM 208.2	Stormwater management/BMP practices having an infiltration component are prohibited in stormwater management hot spot areas.					125
DSM 208.2	Stormwater detention facilities shall be separated a minimum of four feet from the seasonal high groundwater table, or use an impermeable liner if the facility will be receiving runoff from a stormwater management hotspot.					126
DSM 209.1	Easements shall not split property lines. Open channels or storm drains that run parallel to a property line shall be offset a sufficient amount so that the easement is totally contained on the property that contains the open channel or storm drain.					127
DSM 209.1	A storm drainage easement shall be provided for the exit channel of all emergency spillways sufficient to convey the maximum emergency spillway flow to an existing downstream receiving channel.					128
DSM 209.1	For all Site Plans, the maximum computed 100-year water-surface elevation must be contained within the Stormwater Management Easement.					129
DSM 209.1	Underground utility lines and structures shall be kept at least 5-feet horizontal from drainage pipes, structures, and channels. Utility crossings at drainage easements shall be as near to 90 degrees as possible.					130
DSM 209.1	Where a storm drainage system terminates or starts short of a property line, adequate drainage easements shall be dedicated to allow for maintenance and future extension of the system through the property.					131
DSM 209.1	Drainage easements at the inlet and outlet of all culverts and storm drain inlets shall include areas inundated by the headwater during the 10-year storm.					132
DSM 209.1	Storm drainage easements shall extend a minimum of 10 feet from culvert inlets and outlets and storm drain inlets to allow for maintenance access.					133
DSM 209.1	Storm drain easements shall cross private driveways at perpendicular angles to the extent practicable.					134
DSM 209.3	All stormwater structures and BMPs shall be accessible. All access easements shall connect to a public road or right-of-way.					135

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
Chapter 6, VESCH	<p>Project description – Briefly describes the nature and purpose of the land-disturbing activity</p> <ul style="list-style-type: none"> <input type="checkbox"/> Total acreage of site <input type="checkbox"/> Total disturbed acreage <input type="checkbox"/> Include how many acres will be in permanent seed <input type="checkbox"/> Include all utility work (storm sewer and waterline) <p>Include work in live streams as defined by DEQ (may require additional permitting from the Virginia Department of Environmental Quality and/or the US Army Corp of Engineers).</p>					136
Chapter 6, VESCH	<p>Existing site conditions – A description of the existing topography, vegetation and drainage</p> <ul style="list-style-type: none"> <input type="checkbox"/> Wetland type vegetation <input type="checkbox"/> Shrubs/tree line <input type="checkbox"/> Include all drainage swales <input type="checkbox"/> Identify any existing structures 					137
Chapter 6, VESCH	<p>Adjacent areas – A description of neighboring areas such as streams, lakes, residential areas, roads, etc., which might be affected by the land disturbance</p> <ul style="list-style-type: none"> <input type="checkbox"/> Include all adjacent sensitive areas such as wetlands or water bodies <input type="checkbox"/> Address any possible traffic issues <input type="checkbox"/> Does it reflect actual conditions <input type="checkbox"/> Staging areas 					138
9VAC25-840-80, Chapter 8, VESCH	<p>Off-site-areas – Describe any off-site land-disturbing activities that will occur (including borrow sites, waste or surplus areas, etc.)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Does the site balance in regards to amount of cut and fill? <input type="checkbox"/> Will offsite areas be used as a borrow area or stockpile? <input type="checkbox"/> Include a note that the borrow area & stockpile location has not been identified with this plan that a plan amendment will be required along with a bond estimate for the new disturbance if the borrow area & stockpile location is not permitted. <input type="checkbox"/> Offsite Soil Tracking Form 					139
Chapter 6, VESCH	<p>Soils – A brief description of the soils on the site giving such information as:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Soil name <input type="checkbox"/> Mapping unit <input type="checkbox"/> Erodibility <input type="checkbox"/> Permeability <input type="checkbox"/> Depth 					140

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
	<input type="checkbox"/> Texture <input type="checkbox"/> Soil structure <input type="checkbox"/> Type 1 Soil Map provided <input type="checkbox"/> Specify micaceous soils <input type="checkbox"/> Reference soils information in narrative to plan sheet <input type="checkbox"/> Specify high water table soils					
Chapter 6, VESCH	Critical areas – A description of areas on the site which could potentially have a serious impact <input type="checkbox"/> Drainfields <input type="checkbox"/> Offsite SWM facility <input type="checkbox"/> Micaceous soils – highly erodible soils <input type="checkbox"/> Wetlands or water bodies <input type="checkbox"/> Steep slopes <input type="checkbox"/> Wet weather/underground springs <input type="checkbox"/> Channels <input type="checkbox"/> Traffic issues					141
MS-1 thru 19	Minimum Standards – All applicable Minimum Standards must be addressed.					142
Chapter 3, VESCH	Erosion and sediment control measures – A description of the methods which will be used to control erosion and sedimentation on the site. (Controls should meet the specifications in Chapter 3, VESCH) <input type="checkbox"/> Controls used should be specific to the project <input type="checkbox"/> List E&S controls to be used – Reference to VESCH <input type="checkbox"/> Provide detail for each control – Reference to VESCH <input type="checkbox"/> Include the statement that “the E&S inspector has the authority to add or delete E&S control as necessary in the field as site conditions change. In addition, no sediment basin or trap can be removed without written authorization.” <input type="checkbox"/> Stream Crossing Installation (MS-12 thru 15, Std. 3.24) <ul style="list-style-type: none"> • Type of diversion needs to be provided • How will the work be done in the dry? • What type of crossing will be used? • Removal process? Stabilization? 					143
Chapter 6, VESCH	Management Strategies <input type="checkbox"/> Discuss E&S Phase 1 and 2 <input type="checkbox"/> Perimeter sediment trapping measures to be installed as a first step.					144

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
	<ul style="list-style-type: none"> □ Include the phasing of removal for each sediment basin & sediment trap, until all upslope areas are stabilized. Take in consideration of utility installation, roadways, building locations, etc. □ Discuss conversion of sediment basins to its permanent storm water facility for both wet and dry ponds. 					
MS-3	<p>Procedure for Converting Dry Ponds: (MS-3)</p> <ul style="list-style-type: none"> — Consult with the erosion and sediment control inspector prior to beginning the conversion from sediment basin to dry pond to ensure that the timing is appropriate for the conversion to take place. — Pump down basin – use approved dewatering measures. Effluent must be filtered. — Remove accumulated sediment (as needed) to establish the final grade of the pond. — Sediment must be disposed of in an approved area. — Grade and roughen the bottom of the pond to prepare it for seeding. — Install debris/trash rack device on the low-flow orifice to prevent clogging. — Seed, mulch, and tack jute mesh or other suitable matting to the bottom of the pond. <p>After the conversion is complete, prepare and submit as-built plans of the pond(s) to the Department of Community Development in conjunction with the bond reduction request.</p>					145
MS-3	<p>Procedure for Converting Wet Ponds: (MS-3)</p> <ul style="list-style-type: none"> — Consult with the erosion and sediment control inspector prior to beginning the conversion from sediment basin to wet pond to ensure that the timing is appropriate for the conversion to take place. — Pump down basin – use approved dewatering measures. Effluent must be filtered. — Remove accumulated sediment (as needed) to establish the final grade of the pond. — Sediment must be disposed of in an approved area. — Grade and roughen the bank of the pond to prepare it for seeding. 					146

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
MS-1 thru 3 & 5 and Chapter 3, VESCH	<p>Permanent stabilization – A brief description, including specifications, of how the site will be stabilized after construction is completed:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Specify type of seeding, matting, sod or other types of stabilization that may be used <input type="checkbox"/> Include table 3.31-B (temporary seeding guidelines) <input type="checkbox"/> Include table 3.32-D (permanent seeding guidelines) <input type="checkbox"/> Include table 3.35-A (mulching guidelines) 					147
MS-19	<p>Stormwater runoff considerations – Will the development site cause an increase in peak runoff rates? Will the increase in runoff cause flooding or channel degradation downstream? Describe the strategy to control stormwater runoff (MS-19).</p> <ul style="list-style-type: none"> <input type="checkbox"/> Minimum Standard 19 has been included where applicable <input type="checkbox"/> List what type of permanent stormwater facility that will be installed on the project 					148
9VAC25-840-40, MS-19, and Chapter 6, VESCH	<p>Calculations – Detailed calculations for the design of temporary sediment basins, permanent stormwater detention basins, diversions, channels, etc. Include calculations for pre- and post-development runoff.</p>					149
9VAC25-840-40	<p>Maintenance – A schedule of regular inspections and repair of erosion and sediment control structures should be set forth. Please include maintenance information for each control proposed to be used.</p>					150
Std. & Spec 3.14, MS-6	<p><input type="checkbox"/> The following information must be submitted when a Temporary Sediment Basin is proposed for a project:</p> <ul style="list-style-type: none"> — Temporary Sediment Basin Design Data Sheets — Time of Concentration flow path (broken up into sheet, shallow concentrated and channel flow). When a Tc of 5 minutes is used, the flow path is not required. — Stage/storage elevation information in graph format — When using TR-55, all worksheets must be included in submittal. — When using the Modified Rational method (for drainage areas less than 20 acres) a “C” factor of 0.6 must be used. — A schematic for each sediment basin must be provided showing dimensions and elevations. — Show the length of the flow path from the inflow at the wet pool to the outflow to ensure that the length to width ratio is adequate. — Emergency spillway dimensions and calculations 					151

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
	<ul style="list-style-type: none"> — Provide adequate channel calculations and cross sections — Include this note that a stake or spray paint marker on riser for cleanout elevation will need to be in place for sediment basins & sediment traps 					
Std. & Spec. 3.13, MS-6	<input type="checkbox"/> The following information must be submitted when a Temporary Sediment Trap is proposed for the project. <ul style="list-style-type: none"> — Embankments height (H), Outlet Height (Ho), and Minimum Top Width (W), Weir Length — One detail for multiple traps is sufficient — Provide dimensions for wet & dry storage — Provide wet & dry storage elevations — Provide cleanout elevation — Include this note that a stake or spray paint marker on riser for cleanout elevation will need to be in place for sediment basins & sediment traps 					152
Std. & Spec. 3.18 and 3.19	<input type="checkbox"/> Outlet protection calculations <ul style="list-style-type: none"> — Provide tailwater depth — Provide apron length — Provide apron width — Provide bottom grade — Identify type and size of materials used to lined outfall — Provide detail 3.18-1 <p>Note: Permanent outlet protection must be designed using VDOT standards and specifications.</p>					153
Std. & Spec. 3.24, MS-12 thru 15	<input type="checkbox"/> The following information must be submitted with a Temporary Stream Crossing <ul style="list-style-type: none"> — If a crossing is to remain in place up to 14 days, it must carry a 2 year storm — If a crossing is to remain in place for 14 days to 1 year, it must be sized to carry a 10 year storm. — A profile of the crossing and all calculations used must be submitted — Drainage area shown — Does pipe diameter provided coincide with drainage area? — Temporary culvert crossing should not exceed 40 ft 					154
	<input type="checkbox"/> Provide Minimum Standard 19 adequate channel calculations for the following as applicable: <ul style="list-style-type: none"> — Diversions — Channels — Sediment basins outfalls 					155

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
	____ Coordinate a Pre-Construction Meeting with the Fauquier County E&S inspector after receiving the Land Disturbing Permit. A copy of the Stormwater Pollution Prevention Plan is required to be provided at pre-construction meeting for review.					156
	____ Variance request- if there are any E&S structural practices proposed that are not included in the VESCH. Submittal of a variance request requires a statement of justification and calculations if applicable for items not per VESCH. (9VAC25-840-50, plan approval authority)					157
	____ Provide installation instructions for each Best Management Practice.					158
Chapter 6, VESCH	Vicinity map – A small map locating the site in relation to the surrounding area. Include any landmarks which might assist in locating the site. <input type="checkbox"/> Directions					159
Chapter 6, VESCH	Indicate north – The direction of north in relation to the site <input type="checkbox"/> This is to be shown on each plan sheet, including vicinity map					160
Chapter 6, VESCH	The E&S plan should be at a scale of at least 1” = 50’					161
Chapter 6, VESCH	Limits of clearing and grading – Areas which are to be cleared and graded. All areas involved in the construction of the project should be included. <input type="checkbox"/> Construction entrances must be included at all access points. <input type="checkbox"/> Include ‘staging areas’. <input type="checkbox"/> Include stockpile / borrow areas <input type="checkbox"/> Areas that may have safety fence but will not be disturbed <input type="checkbox"/> Phase I E&S controls-give spot elevation to show drainage <input type="checkbox"/> Offsite stockpile areas <input type="checkbox"/> Trails <input type="checkbox"/> Well installation <input type="checkbox"/> Storm sewer installation <input type="checkbox"/> Waterline installation <input type="checkbox"/> Power line installation <input type="checkbox"/> Stream crossings <input type="checkbox"/> Drainfields <input type="checkbox"/> Drip lines for trees to be retained <input type="checkbox"/> Identify SWPPP items such as dumpsters, porta-johns, fuel-containment areas, etc.					162

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
Chapter 6, VESCH	Existing contours – The existing contours of the site. <input type="checkbox"/> Does this reflect the actual current condition of the site? <input type="checkbox"/> Show sufficient elevations					163
Chapter 6, VESCH	Final contours – Changes to the existing contours, including final drainage patterns.					164
Chapter 6, VESCH	Existing vegetation – The existing tree lines, grassed areas, or unique vegetation. <input type="checkbox"/> Does this reflect the actual current condition of the site?					165
Chapter 6, VESCH	Soils – The boundaries of different soil types. <input type="checkbox"/> Show on the E&S Phase 1.					166
Chapter 6, VESCH	Existing drainage patterns – The dividing lines and the direction of flow for the different drainage areas. Include the size (acreage) of each drainage area. <input type="checkbox"/> Show drainage areas & acreage for pre-development on phase 1 <input type="checkbox"/> Show drainage areas & acreage for post-development on phase 2					167
Chapter 6, VESCH	Critical erosion areas – Areas with potentially serious erosion problems. (See Chapter 6 for criteria). <input type="checkbox"/> Identify critical areas with * on the Phase 1 & 2 E&S plan.					168
9VAC25-840-40, Chapter 6, VESCH	Site Development – Show all improvements such as buildings, parking lots, access roads, utility construction, etc. <input type="checkbox"/> Sediment basins & sediment traps need to stay in place until upslope areas are stabilized, take in to consideration of utility installation, lots, and buildings <input type="checkbox"/> Roads & lots need to be shown on phase 1 & 2 <input type="checkbox"/> Actual lot numbers & road names need to be shown on phase 2 <input type="checkbox"/> Target areas to be stabilized ASAP <input type="checkbox"/> Consider phasing of a project <input type="checkbox"/> All engineered plans require a phase 1 & 2 E&S plan <input type="checkbox"/> Sanitary sewer, water line and storm sewer must be shown on the Phase 2 E&S plan. <input type="checkbox"/> Structure numbers must also be shown. While these are not required to be shown on the Phase 1 E&S plan, the perimeter E&S controls for Phase 1 must take the construction of these utilities into account.					169

Comments:

Code Reference	Description	Sheet #	YES	NO	NA	#
	<ul style="list-style-type: none"> <input type="checkbox"/> Keep all of phase 1 E&S controls on phase 2 E&S plans <input type="checkbox"/> Show stockpiles – with appropriate E&S controls <input type="checkbox"/> Are stockpiles located above sensitive areas? <input type="checkbox"/> Identify areas of permanent seeding with (PS) <input type="checkbox"/> Identify areas of temporary seeding with (TS) 					
Chapter 3, VESCH	<p>Location of practices – The location of erosion and sediment controls and stormwater management practices used on the site. Use the standard symbols and abbreviations in Chapter 3 of the Virginia Erosion and Sediment Control Handbook.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Use standard symbols to identify controls <input type="checkbox"/> Provide a legend <input type="checkbox"/> When micaceous soils are found on a site, rock check dams and silt fence should be used in conjunction with sediment traps and sediment basins in those areas. 					170
9VAC25-840-40, Chapter 8, VESCH	<p>Off-site areas – Identify any off-site land-disturbing activities (e.g., borrow sites, waste areas, etc.)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Does the site balance in regards to the amount of cut and fill required? <input type="checkbox"/> Is it on the same property as the project? If so, it needs to be included in the LOC. Show access. <input type="checkbox"/> Show offsite stockpile <input type="checkbox"/> Show location of erosion controls. <input type="checkbox"/> Offsite Soil Tracking Form 					171
Chapter 3, VESCH	<p>Detail drawings – Any structural practices used that are referenced to the E&S handbook or local handbooks should be explained and illustrated with detail drawings.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Include details of structural practices and reference them to the VESCH. <input type="checkbox"/> If any E&S structural practices are proposed that are not included in the VESCH, then a detail and a request for a variance must be submitted to the County (plan approval authority). 					172
	<p>Provide Comment Response letter. Please provide a comment-response letter identifying how each comment is addressed with the current plan submission. This will greatly assist in the review of all future plan submissions.</p>					173

Comments: