



JEFFERSON COUNTY, WEST VIRGINIA

Departments of Planning and Zoning

116 East Washington Street, P.O. Box 338

Charles Town, WV 25414

www.jeffersoncountywv.org

File Number: \_\_\_\_\_

Staff Initials: \_\_\_\_\_

Date Received: \_\_\_\_\_

Fees Paid: \_\_\_\_\_

Email: planningdepartment@jeffersoncountywv.org

Phone: (304) 728-3228

zoning@jeffersoncountywv.org

Fax: (304) 728-8126

Site Plan Review Checklist

Project Name: \_\_\_\_\_

Major  or Minor  Full  or Limited

Applicant Contact Information

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Email: \_\_\_\_\_

Physical Property Details

Property Owner Name: \_\_\_\_\_

Physical Address \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Tax District: \_\_\_\_\_ Map No: \_\_\_\_\_ Parcel No: \_\_\_\_\_

Parcel Size: \_\_\_\_\_ Deed Book: \_\_\_\_\_ Page No: \_\_\_\_\_

Zoning District: \_\_\_\_\_

Items Due at Submission:

1 Copy of Completed Building Permit Application

2 Sets of Plans

Building Permit Fees

2 Copies of SWM Report with Narrative

1 Copy of Checklist

Table with 3 columns: Staff Initials, Returned to:, Date:

Table with 5 columns: Submittal Date, 1st Review, 2nd Review, 3rd Review, 4th Review

APPROVED FOR: \_\_\_\_\_ BY: \_\_\_\_\_ COUNTY ENGINEER DATE

**Applicable Dates**

Pre-Proposal Conference (if applicable)	
Pre-Proposal Conference Memo:	
Application Meeting:	
Site Inspection (if applicable):	
Written Determination to be Mailed:	
Approval Date:	
Approval Expiration (60 days from approval)	
Recordables Approved:	

**Reviewing Agencies Comments (attach additional comments as needed)**

---



---



---

**Conditions of Approval (attach additional comments as needed)**

---



---



---

**Instructions**

1. This checklist serves as a quick reference guide only. The consultant/developer is responsible for reading the regulations and complying with all of the requirements. All references to the Subdivision Regulations, Appendix A and Appendix B are cited for informational purposes only.
2. The checklist shall be completed by the Engineer/Surveyor and attached to the Site Plan review submission. The Engineer/Surveyor shall note in the "Engineer/Surveyor" column where each item on the checklist is addressed on the Site Plan.
3. Place all site notes (i.e. flood plain designation, permit numbers, building setbacks, etc.) that address items on the checklist together under a "Site Information" heading so they can be easily found by the reviewer.
4. For all other items on the checklist that cannot be addressed by a note under "Site Information", provide the sheet number and/or note number in the checklist column marked "Engineer/Surveyor", where the information can be found. This will allow for a quicker and more thorough review of the Site Plan on the first submission.

# Subdivision Regulations

(see notes on page 2)

Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
					√	O.K.
					O	Incomplete
					N/A	Not Applicable
					×	Unacceptable

## Applicant's Registered Engineer(s) or Surveyor(s) Information

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Sub-Section	Appendix A, Section 1.3(A) Site Plan Requirements						Staff Comments
1	Border: 1/2" on top, bottom, & right; 1-3/4" border on left edge. Text height minimum of 1/10".						
2	Title Block: lower right corner with Site Plan Name & Jefferson County, WV						
	Deed Book & Page Numbers; Tax District, Map, & Parcel						
	Owner: Name, address, & phone						
	Developer: Name, address, & phone						
	Engineer/Surveyor: Name, address, phone, signature & seal						
	Sheet index on cover sheet						
3	Tix Marks/SPCS WV North NAD83						
4	North Arrow, graphic scale, & date (on all plat plan views)						
5	Location Map: 1" = 2000' or other approved scale						
6	Subdivision Section Location Map (adjacent sections/lots previously platted)						
7	Lot Boundary: show bearings & distances. Note the source of boundary description.						
8	Lot Boundary Lines: drawn to scale & dimensioned.						
9	Lot numbers for each lot & in logical order.						
10	Symbol Key: identify monuments & markers by type & whether "found", "set", or "to be set".						
11	Show existing easements & ROW; reference deed/plat book & page. Otherwise, note none existing.						
12	Show proposed easements & ROW; Roads shall be named & approved by the Addressing Office. Otherwise, note none proposed.						

<b>Subdivision Regulations</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
	Where state road has a ROW less than 50' wide, provide a fee simple dedication or road improvement easement, a minimum of 25' wide from existing centerline of the state road ROW.							
13	Show future easements & ROW; otherwise, note none proposed.							
14	Show adjoiners: owner(s) name, tax district, map, & parcel; zoning district, deed book, & page; Show departure lines for each adjoining property.							
15	Existing & Proposed Contours: 2' interval, or other approved interval; & contour source noted.							
16	Benchmarks: show location & elevation on site plan.							
17	Show existing conditions on a separate sheet.							
18	Show existing physical features: woods, watercourses, rock outcroppings, sink holes, quarries, culverts, bridges, & drains.							
	Show existing on-site structures/buildings.							
	Show existing utilities: water, sewer, electric, phone, cable, TV, etc.							
	Show off-site structures/buildings & associated topography, within 200' downstream of any drainage pipe outfall.							
	Show 100 Year Floodplain & delineated wetlands; otherwise, note that there are no floodplain/wetlands on site.							
19	Show adjoining roads including ROW widths, pavements widths, road names, & route numbers.							
21	Show reservations of land for public/semi-public use.							
22	Surface drainage plan & erosion control methods. See Article II.C.4.d of SWM Ordinance.							
23	Complete design & construction plans, profiles, & engineering specifications for proposed water treatment & distribution facilities & proposed sewage collection & treatment facilities to be installed. <b>See App. B, Sec. 3.0 of Sub. Regs.</b>							
24	WVDOH entrance permit: provide copy of permit & note permit number on site plan.							

<b>Subdivision Regulations</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
25	Water/Well Permit: provide copy of plans & permits; note permit number on site plan.							
	Septic/Sewer System Permit: provide copy of plans & permits; note permit number on site plan.							
26	Provide copy of PSD letter: water/sewer availability.							
27	Note WVDEP permit numbers for all approvals.							
28	Copy of written notification to WV Public Service Commission of intent to construct & operate public water/sewer utility systems.							
29	Design & construction plans, profiles, cross-sections, & engineering specifications for roads, sidewalks, curbs, & gutters.							
30	Description of soils, subsurface geology, & hydrology.							
31	Show building setback lines & note minimum building setbacks.							
32	Rural District: provide density calculation & density notation per this section.							
33	Statement of Acceptance signed by the developer.							
34	Signature Block: on cover sheet, per this section.							
35	On cover sheet, provide Table of Construction Notes & Milestone Inspections, per this section.							
36	On cover sheet, provide waiver/variance table; if none, note "None Granted" in the table.							
37	Site Plan shall be sealed, signed, & dated, in accordance with state law.							
Article	Zoning Ordinance Requirements							Staff Comments
4.10	Site Plan Requirements							
4.11	Landscaping, Screening, & Buffer Yard Requirements							
5	Complies with Article 5, District Regulations							
8	Supplement Use Regulations (if applicable)							
10	Provisions for Signs							
Appendix A & B	Setbacks for parking/drive aisles							

<b>Subdivision Regulations</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
<b>General Comments</b>							<b>Staff Comments</b>	
Special requirements imposed by Planning Commission?								
Special requirements imposed by Board of Zoning Appeals?								
Sub-Section	Appendix B, Section 2.2 Streets					Staff Comments		
A	Roadway plan & profile sheets scale: 1" = 50' horizontal; 1" = 5' vertical							
B	Road improvement specifications per WVDOH "Standard Specifications for Roads & Bridges"							
C	Geometric & pavement design in accordance with Table 2.2-1, <i>Roadway Design Standards</i> ; & standard details established by County Engineer.							
H.2	Non-residential ROW = minimum 60' wide							
H.4	Revertible slope easement?							
H.5	Centerline of roadway is congruous with center of ROW							
K.2.b	Entrance: gutter flow 10 year storm							
K.3.a	Sidewalks: minimum 4' width; maximum grade 20:1; provide details & notes.							
K.3.b	Handicap accessible walkways, stairs, & ramps designed/constructed per "ADA Standards for Accessible Design (28 CFR, Part 36).							
Sub-Section	Appendix B, Section 2.3.B Site Development Access to Public Roads					Staff Comments		
3	Entrance width: One-way = 13'-17'; Two-way = 24'- 35'; Length = 50' from existing edge of pavement, with 1 to 15 taper to approved width.							
4	Access drives spaced at 75' centerline to centerline or subdivision intersection; 150' from public road intersection.							
5	Entrance apron shall be concrete; minimum is from existing edge of road pavement							
6	Minimum curb radius: 35'							
Sub-Section	Appendix B, Section 2.3.C Improvements to State Highways <i>*Only if warranted by the WVDOH</i>					Staff Comments		
1	Traffic signals warranted per Part IV of the Manual on Uniform Traffic Control Devices (Warrant 1-8 Hour Vehicular Volume)							
2	Left turn lanes existing road: required if two-way PHV ≥ 600, & ADT ≥ 6000, & Peak Hour left turning movement ≥ 50.							

<b>Subdivision Regulations</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
3	Deceleration Lane: required on Primary & Secondary Routes if operating speed $\geq$ 45 mph.							
4	Acceleration Lane: required on two-way, two-lane highways where peak hour volume $\geq$ 600.							
5	Vertical/Horizontal Alignment of Existing Roadway: need for reconstruction per AASHTO Geometric Highway Design Manual.							
6	Shoulder Widening Existing Road:							
a	Secondary Route: asphalt paved 8' wide across front of property or minimum of 600'							
b	Local Service Route with ADT $\geq$ 2500: see above.							
c	Local Service Route with ADT 1500 to 2499: Asphalt paved 6' wide across front of property or minimum of 400'.							
d	Other Local Service Routes: 3' wide gravel with 4:1 slope into 1' ditch & out with 2:1 sideslope.							
e	Safety Improvements Existing Road: signs, pavement markings, etc. Show basis for improvement.							
Sub-Section	Appendix B, Section 2.5 Off-Street Parking Standards						Staff Comments	
C	Parking Lots & Bays physically separated from the street - use curb.							
D	Curb line in parking areas shall have a minimum radius curvature of 5'.							
F	Dead-end parking areas have sufficient back-up area for end stalls of the parking area.							
G	Handicapped Parking: meets ADA Standards for Accessible Design. Provide details.							
H	Parking area & drive aisle grades: 0.5 - 6.5%							
I	Access drive & entrances below 8% grade							
J	Maximum embankment cut or fill-grade for parking areas: 3:1 vertical slope.							
	3' wide stripe at 5% slope between parking areas, sidewalks, & access drives to any embankment.							
K	Minimum 10' median between the end of a row of parking spaces & access drive for sight distance.							
L	Show pavement markings.							
M	Parking areas shall be bituminous asphalt or concrete paved (if zoned rural, may utilize minimum of 6' gravel).							
N	Minimum Dimensions: Perpendicular 9' x 20', Parallel 9' x 22'. See table 2.5-1.							

<b>Subdivision Regulations</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
<b>Appendix B, Section 2.6 Outside Lighting</b>							<b>Staff Comments</b>	
Street lighting shall be provided as required by the Zoning Ordinance and Section 22.209, <i>Street Lighting</i> , of the Subdivision Regulations.								
<b>Sub-Section</b>		<b>Appendix B, Section 9.4 Internal Vehicular Circulation &amp; Parking</b>					<b>Staff Comments</b>	
B	Table with calculation of type & number of parking spaces required by Zoning Ordinance.							
D	Shared Use of off-site parking: requested & availability proven.							
E	Internal Site Driveways Width: One-Way = 12' - 14'; Two-Way = 22' - 24'							
F	Large Trucks: provide internal access drives 44' tracking radius.							
G	Bay Door/Loading Dock Access Spaces: delineate on site plan.							
H	Drive-up Window: adequate vehicle stacking space provided. 10' width minimum.							
<b>Sub-Section</b>		<b>Appendix B, Section 9.6 Curbs, Gutters, &amp; Sidewalks</b>					<b>Staff Comments</b>	
C	Sidewalks: provide where needed to continue existing off-site.							
<b>Sub-Section</b>		<b>Appendix B, Section 9.8 Site Grading</b>					<b>Staff Comments</b>	
D	Provide minimum 3' wide strip, maximum 3% grade between parking areas, internal driveways, & sidewalks; & the toe or top of slopes that are steeper than a 4:1 slope.							
E	Retaining Walls 4' or greater in height require a building permit & shall be designed & certified by WV Licensed Engineer.							
<b>Sub-Section</b>		<b>Appendix B, Section 9.9 Utilities and Water &amp; Sanitary Sewer Systems</b>					<b>Staff Comments</b>	
B.1	Minimum 2% grade; minimum 4" line; & minimum 100' from well.							
B.2	Monitoring manhole: required if oils, chemicals, paint, or petroleum products could result into sanitary sewer system.							
B.3	Sewer Flow: show peak gpd flow rate & service line capacity.							
C.1	Water Demand: provide gpd demand for use.							
C.2	Sprinkler System: required water supply is available.							
C.3	Fire Hydrants: shall be within 1000' of the project.							
C.4	Fire hydrant water lines minimum of 6" diameter.							



<b>Subdivision Regulations</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
C.5	Fire Hydrants: note that they are compatible with local fire department specifications/equipment.							
C.6	Fire Hydrants: if in ROW, set 2' behind sidewalk.							
D	On-site utility service lines shall be underground.							
<b>Division 22.300.C Dry Hydrants</b>							<b>Staff Comments</b>	
Meets ISO standards as established by the Jefferson County Office of Emergency Services.								
<b>Sub-Section</b>	<b>Appendix B, Section 9.11 Landscaping, Screening, and Buffer Yard Requirements</b>					<b>Staff Comments</b>		
A & B	Landscape Plan in accordance with Zoning Ordinance.							
C	Parking lot greenspace: 5% of parking lot & access drives.							
D	Opaque screen fence: minimum 6' high; include sketch for approval with the Site Plan.							
F	On-site utilities & dumpsters: effectively screened.							
<b>Sub-Section</b>	<b>Appendix B, Section 5.3, Requirements for Townhouses Appendix B, Section 6.3, Requirements for Condominiums</b>					<b>Staff Comments</b>		
A	Roads & ROW: Townhouse Subdivisions - or - Condominium Subdivisions							
B	Curbs, Gutters, & Sidewalks							
C	Storm Drainage & Erosion Control							
D	Utilities							
E	Street & Parking Area Lighting							
F	Building Sites or Lots & Setbacks							
G	Screening (Townhouses Only)							
H / G	Parkland							
I / H	Parking & Parking lot greenspace: 5% of parking lot & access drives.							
<b>Sub-Section</b>	<b>Appendix B, Section 6.3, Requirements for Condominiums</b>					<b>Staff Comments</b>		
I	Surveys							
J	Construction Plans & Specifications							
K	Construction Practices							

<b>Stormwater Management Ordinance</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
Sub-Section	Article II.B, Erosion and Sediment Control Plan						Staff Comments	
2.b.i	North arrow & graphic scale.							
2.b.ii	Symbol Key / Legend							
2.b.iii	Existing & Proposed contour							
2.b.iv	Outlined Limits of Disturbed Area							
2.b.v	Chart of Q10 discharge rates & velocity at outfalls							
2.b.vi	Erosion & sediment control provisions							
	Preserve topsoil & limit disturbance							
	Details of grading practices							
	Design details & construction notes							
	Erosion & Sediment Control Notes (Fig. 1)							
2.b.vii	Seeding Specifications, temporary & permanent							
2.b.viii	Sequence of construction outlining the installation & maintenance of erosion & sediment controls.							
2.b.ix	Offsite source of borrow materials - reference in Plan or state if no offsite borrow source is needed.							
2.b.x	Stabilized construction entrance note, per this section.							
2.b.xi	Provide computations necessary to show adequate sizing of erosion & sediment control measures.							
Sub-Section	Article II.C, Conveyance Plan Requirements						Staff Comments	
3.a	Property owner(s) name, address, & phone no.							
3.b	Tax District, Map, & Parcel Numbers							
3.c	Existing/proposed buildings, roads, & parking areas							
3.d	Existing/proposed drainage areas & areas necessary to determine downstream analysis for SWM facilities.							
3.e	Existing/proposed utilities, easements, & structural SWM & SEC facilities.							
3.f	Proposed land use with tabulation of the percentage of surface area to be adapted to various uses.							
3.g	Clearing & grading limit boundaries.							
3.h	1" = 200' topographical base map extending 200' beyond limits of proposed development.							

<b>Stormwater Management Ordinance</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
3.i	Existing surface water drainage (streams, ponds, culverts, ditches, drainage patterns, & wetlands)							
3.j	Natural resources shown or described.							
3.k	Environmentally sensitive features shown as defined in Subdivision Regulations							
3.l	Maintenance route to SWM feature in ROW or easement.							
3.m	Construction specifications							
3.n	NRCS 378 Pond Design Criteria							
3.o	Downstream flow analysis							
3.p	Sequence of construction							
3.q	Plan & profile view through all SWM features.							
3.r	Geotechnical properties of soils							
3.s	Outlet protection details							
3.t	Tabular summary of all SWM facilities in a spreadsheet, per this section.							
3.v	Digital Data Submission in DXF or DWG in a coordinate system with NAD83, US survey foot							
3.w	Other required information from the Jefferson County Engineering Department.							
3.x	Stormwater Control & Conveyance Plan with Hydrologic & Hydraulic design calculations:							
	Description of the design storm frequency, intensity, & duration							
	Time of concentration							
	Soil Curve Numbers or runoff coefficients							
	Peak runoff rates & total runoff volumes for watersheds							
	Infiltration rates, if applicable							
	Culvert and/or channel capacities							
	Flow velocities							
	Data on the increase in rate & volume of runoff for designed storms.							
	Documentation of sources for all computation methods & field test results.							
4.a	Plan over profile sheets for storm sewer system							
	Inlet identification in both plan & profile							
	Top & bottom of storm inlet elevations							

<b>Stormwater Management Ordinance</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
	Pipe size, shape, material type & length							
	Pipe inlet & outlet invert elevations							
	Slope of pipe							
	Outlet end-section type							
	Outfall rip-rap apron/energy dissipation device at 10% grade							
	Q10 flow rate & velocity							
	Hydraulic Grade line							
	Details of inlets & associated structures							
4.b	Plan over profile sheets for Culverts							
	Culvert identification in plan & profile view							
	Invert elevations at inlet & outlet of culvert							
	Pipe size, shape, material type & length							
	Slope of pipe							
	Outlet end-section type							
	Outfall rip-rap apron/energy dissipation device at 10% grade							
	Q10 flow rate & velocity							
4.c	Drainage swales							
	Grading of the swales							
	Typical cross section of the swale showing the 10-year water surface							
	Any required lining							
	Slope of the swale							
	Q10 flow rate & velocity							
	Any applicable details							
4.d	Stormwater Control and Conveyance Plan, per this section. Report shall be dated, signed, & sealed by the Engineer of Record.							

<b>Stormwater Management Ordinance</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
Sub-Section	Article II.D, Maintenance Requirements							
	Inspection report requirements on plans "Jefferson County, West Virginia Stormwater Management Facilities Maintenance Requirement"							
Sub-Section	Article IV.A, Reference to the Design Manual						Staff Comments	
	West Virginia Stormwater Management and Design Guidance Manual, NRCS 378							
Sub-Section	Article IV.C, Stormwater Quantity Control Criteria						Staff Comments	
14	SWM & Culvert Discharge: in cuts & 0% grade to end of rip-rap.							
15	Outfall Rip-Rap: depressed 6" if within 75' of property line.							
16	Anti-seep Devices: provide if embankment > 6' height.							
17	Dam Breach Analysis: provide if embankment >10' height.							
18	SWM basin embankment – core trench							
19	1' freeboard for 100-year, 24-hour storm event							
20	SWM basin bottom at 1% slope to low flow outlet							
21	Infiltration BMP checklist - Chapter 4.2.6 in the WV SWM & Design Guidance Manual							
22	Infiltration rates for Infiltration basins							
23	Stormwater management easements, 100-year storm event storage limits.							
24	Demonstrate adequate downstream conveyance of stormwater discharge from the Site							
27	Outfall pipe discharges into a natural wetland, the velocity shall not exceed 2' per second for the two-year storm event.							
Sub-Section	Article IV.D, Stormwater Quality Control Criteria						Staff Comments	
1.a	General Quality Control Provisions							
	Capture stormwater runoff volume of the first 1" of rainfall from a 24-hour storm event.							
	Designed per West Virginia Stormwater Management & Design Guidance Manual							
	Facility constructed in accordance with all applicable plans & permits.							
	Facility maintained per Article VI							

<b>Stormwater Management Ordinance</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
	WVDEP's Stormwater Spreadsheet Tool							
1.d	.75 runoff reduction for:							
	Redevelopment							
	Brownfield Redevelopment							
	Transit oriented development							
	Vertical density FAR of 2 or >18 units per acre							
1.e	If high water table or other constraints exist – follow this section.							
1.f	New development activities:							
	Provide or encourage infiltration							
	Capture & treat the runoff volume from first 1" of rainfall							
2.a	Table 2: Potential Stormwater Hotspot Land Uses							
2.a(i)	Stormwater Pollution Prevention Plan							
2.a(ii)	Restricted Infiltration: 50% treated by infiltration							
2.a(iii)	Infiltration Prohibition: 0% treated by infiltration							
Sub-Section	Article IV.F, Redevelopment						Staff Comments	
Only one of the following requirements is needed for redevelopment.								
1.a	20% reduction of impervious cover							
1.b	10% reduction in volume the 1 yr 24 hr storm event							
1.c	Reduce post-development peak discharge rates to 90% of the pre-development rates for the 2-yr, 10-yr, & 100-yr							
Sub-Section	Article IV.H, Stormwater Conveyance & Drainage Criteria						Staff Comments	
1	Drainage Culverts:							
1.b, c, d, e, f	Culverts: galvanized, minimum 15", minimum 0.5% slope, & rip-rap aprons, minimum 12" cover under subdivision roads. Manufactured end sections.							
1.g	Profiles of the roadway culverts:							
1.g(i)	Culvert ID in both plan & profile view							
1.g(ii)	Pipe size, shape, material type & length							

<b>Stormwater Management Ordinance</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
1.g(iii)	Inlet & outlet invert elevations							
1.g(iv)	Slope of pipe							
1.g(v)	Inlet & outlet end section type							
1.g(vi)	Outfall rip-rap apron/energy-dissipation device at 0% grade							
1.g(vii)	Q10 flow rate & velocity							
1.h	Construction details & specifications for culvert pipe, outfall aprons, & end sections/wing walls.							
1.i	Individual lot driveway culverts sized for 10-year storm event; the minimum is 15" in diameter.							
2	Roadway Ditch Lines							
2.a	Minimum depth of 1½' with a 4:1 slope in from the road shoulder & a 2:1 return slope back out							
2.b	Minimum linear slope of 1.5% unless a trapezoidal ditch (minimum 2' wide) is used; then a minimum of 0.5% is acceptable.							
2.c	Generally parallel to the roadway							
2.d	Ditch line invert treatment: see Table 3							
2.e	Location & type of ditch line treatment & a typical section of the roadway ditch line.							
3	Curb & Gutter							
3.b	Curb & gutter construction details, 3,000 psi strength Portland cement concrete							
4.a	Roof drain discharge points located to avoid icing of walkways, driveways, parking, & entrances.							
5	Drainage Swales							
5.a	Sized for 10-year, 24-hour storm event.							
5.b	Grading & drainage details							
	Cross section of the swale showing 10-year water surface							
	Any required lining							
	Slope of the swale							
	Q10 flow rate & velocity							
	Any applicable details; see also: Article II.4.c							
6	Storm Sewers							
6.a	Designed for the 10-year storm event. Storm sewer inlets designed for the 2-year storm event.							

<b>Stormwater Management Ordinance</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
6.c	Galvanized CMP; minimum of 15" diameter or equivalent elliptical/arched pipe size.							
6.d	Outlet end - protected from scour by rip-rap aprons.							
6.e	Storm sewer outfalls shall be at a 0% grade							
6.f	Minimum of 12" of cover over the pipe.							
6.g	Manufactured end sections or concrete end walls.							
6.h(i)	Inlet identification in both plan & profile view							
6.h(ii)	Top & bottom of storm inlet elevations							
6.h(iii)	Pipe size, shape, material type & length							
6.h(iv)	Pipe inlet & outlet invert elevations							
6.h(v)	Slope of pipe							
6.h(vi)	Outlet end-section type							
6.h(vii)	Outfall rip-rap apron/energy-dissipation device at 0% grade							
6.h(viii)	Q10 flow rate & velocity; Hydraulic Grade line; any applicable details							
6.i	Drain inlets in residential subdivisions with closed section roads shall have bicycle-safe grates							
6.j	Construction details & specifications							
7	Drainage Easements							
7.a	Drainage swale easements shall be sized to contain the 10-yr, 24-hr storm event flow & shall be a minimum width of 15'.							
7.b	Storm sewer system easements shall be a minimum width of 15'.							
<b>Sub-Section</b>	<b>Article IV.I, Landscaping</b>						<b>Staff Comments</b>	
1	The maintenance requirements component of the SWM Plan.							
2	Landscaping in & around constructed SWM practices with minimum surface area of 1,000 sq ft.							
3	No woody plants planted within saturated zone or on a berm constructed for impounded water.							
<b>Sub-Section</b>	<b>Article IV.J, Riparian Buffers</b>						<b>Staff Comments</b>	
1	Activity within buffers limited to the following:							



<b>Stormwater Management Ordinance</b> (see notes on page 2)		Engr./Surveyor	1st Review	2nd Review	3rd Review	4th Review	Review Key	
							√	O.K.
							O	Incomplete
							N/A	Not Applicable
							×	Unacceptable
1.a	Activities integral to the utilization of the watercourse that meet all other federal, state, county, & local code, ordinance, & permitting requirements, including but not limited to the construction & use of:							
1.a(i)	Docks							
1.a(ii)	Boat Ramps							
1.a(iii)	Piers							
1.a(iv)	Other facilities designed to allow recreational access to watercourse. Corridor crossings for farm vehicles & livestock.							
1.b	Public roads & improvements							
1.c	Corridor crossings for roads & railroads.							
1.d	Public utility crossings, including but not limited to sewer, water, & electric							
1.e	Passive recreation uses.							
1.f	Steambank improvement projects.							
1.g	Any activity, as approved by the Jefferson County Engineering Department, that will minimally disrupt the existing tree cover & soil mantle in order to maximize filtering & overall physical removal of particulate-form pollutants from stormwater runoff.							
2	Riparian buffer requirements, per this section.							
2.a	Lakes & ponds - 75'							
2.b	Ephemeral streams with stream channels - 50' (100' when located in the Elk Run & Elk Branch Watersheds)							
2.c	Potomac River & Shenandoah Rivers - 300' (unless a greater standard required by Zoning Ordinance)							
2.d	Opequon Creek & Perennial Streams - 100'							
2.e	Wetlands, Marl - 75'							
2.f	Wetlands, Farmed - 10'							
2.g	Wetlands - 50'							
2.h	Hillsides 15 - 25% - to the top of the slope where it falls below 15% or 400', whichever is less.							
2.i	Hillsides 25% or more - to the top of the slope where it falls below 15% or 600', whichever is less.							