



**ENGINEERS & SURVEYORS INSTITUTE**  
**Peer Review Checklist**  
**FAIRFAX COUNTY**



**PUBLIC IMPROVEMENT PLAN**

Plan Name: \_\_\_\_\_ Plan #: \_\_\_\_\_ District: \_\_\_\_\_  
 Submitting Firm: \_\_\_\_\_ Project Coordinator: \_\_\_\_\_  
 Designated Plans Examiner #: \_\_\_\_\_ Name: \_\_\_\_\_ Phone #: \_\_\_\_\_  
 Review Date: \_\_\_\_\_ ESI Reviewer: \_\_\_\_\_ Reviewer's firm: \_\_\_\_\_

Plan is non-acceptable if any \* box is checked w/o explanation on plan or alternate solution noted.

LINE	CODE SECTION	REQUIREMENT	SHEET	OK	NO	N/A	FFX
<b>COVER SHEET</b>							
1	LDS Notice 2/24/2016	3/16 edition of cover sheet used			*		
2	LDS Notice 2/24/2016	Plan approval information completed (identification number, approval dates, and sheet number)					
3	LDS Tech Bulletin 02-16 LDS Notice 2/24/2016	All approved waivers/modifications and waiver/modification requests are listed, including the ones approved with the zoning application			*		
4	PFM 9-0202.2C	Fire Marshal notes and data filled in					
5	PFM 10-104.1A	Sanitary sewer information filled in					
6	112-17-106.3	Vicinity map legible and to 1"=2,000' scale or greater					
7	LDS Notice 2/24/2016	Stormwater Information filled in			*		
8	112-17-106.3 PFM 8-0201.6	Vicinity map shows maintenance responsibilities for existing and proposed sidewalk/trail (VDOT, County or privately maintained)			*		
9	112-17-106.4	Tax map reference number(s) filled in correctly			*		
10	112-17-106.4	Name, contact information and address of the owner and developer filled in					
11	LDS Notice 2/24/2016	Design engineer/surveyor's name, address, and phone number shown. Project manager name and email provided.					
12	112-17-106.4	Magisterial district shown and is correct			*		
13	112-17-106.6	Certificate signed by the surveyor or engineer setting forth the source of title of the owner of the site and the place of record of the last instrument in the chain of title					
14	112-17-106.7	Soil map shown, with site identified. Soils map is based on current <a href="#">County Soils Map</a> .			*		
15	112-17-106.7	Soil data chart filled in per " <a href="#">Description &amp; Interpretive Guide to Soils in Fairfax County</a> "			*		
16	112-17-106.25	Owner/developer wetlands certification signed			*		
17	LDS Policy	Sheet index and sheet titles match					
<b>PUBLIC STREETS</b>							
18	112-17-106.11	Road name and route number shown for existing state-maintained streets					
19	112-17-106.11	Street widths, pavement and right-of-way shown for existing and proposed streets					
20	VDOT Road Design Manual	Right of way, driveways, intersections, medians, curb or edge of pavement shown and labeled on both sides of existing roadways					
21	112-17-201.3	Vehicular travel lanes, services drives, driveways or other access connections to adjoining properties are proposed or service drive/travel lane waiver is approved					
22	PFM 7-0101.2 VDOT Road Design Manual Appendix A	Curve data shown for new streets and conform with street category					
23	PFM 7-0105.1 VDOT Road Design	Street category and traffic volume shown for each new street					

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	Manual Appendix A						
24	PFM 7-0107.5A & 5B	Stop or yield signs shown at all intersections					
25	PFM 7-0201.1C PFM 7-0304.13	All proposed street construction is within existing or dedicated street right-of-way					
26	PFM 7-0301.1A & 1B PFM 8-0101.8	Curb-cut ramps provided where required (at site entrance curb returns, along accessible routes, at major crosswalks, HC accessible parking spaces, etc.). Curb cut ramps are entirely within right of way if VDOT maintained.					
27	PFM 7-0304	Profile shown for all proposed streets including widening and turning lanes on existing streets. Elevations, percent grade, culverts, storm/sanitary sewer and utility crossings shown on street profile. Existing grade or existing street centerline profile is shown for an additional min. 200'.			*		
28	PFM 7-0304	Centerline stationing shown in plan view for existing and proposed streets			*		
29	PFM 7-0305 112-2-505 VDOT Road Design Manual Appendix F (Intersection, Stopping and Commercial Sight Distance)	Sight distance plan and profile shown. Required or available sight distance shown along the path of the sighted vehicle and not along the line of sight. Sight triangle is clear of obstructions. Sight distance easement exists or proposed where the sight line leaves the right of way. Sight distance easement is shown on layout, grading, tree preservation and landscape plans.			*		
30	PFM 7-0306.6B	Typical section with dimensions, street category and design speed shown for each proposed street			*		
31	VDOT Road Design Manual	Turn lanes are proposed where required unless a VDOT access management exception is approved					
32	County Policy	Posted speed shown at existing street intersections			*		
33	VDOT Road Design Manual Appendix A	Super-elevation provided where required by category					
34	VDOT IIM-LD-55 PFM 7-0401	At least one curb ramp provided across from new intersections on existing curb and gutter roadways. One curb ramp provided in each direction of intersection crossings.					
35	ADA VDOT IIM-LD-55	Curb ramp width matches connecting sidewalk/trail					
36	VDOT IIM-LD-55	Curb ramp spot elevations provided to confirm ramp slopes, gutter pan transitions, etc.					
37	VDOT Policy	Latest version of VDOT general notes provided					
38	VDOT Drainage Manual Chapter 9	Flow arrows provided for each storm pipe					
39	117-17-106.3 PFM 7-0107	Street names and route numbers shown for adjoining streets. Street names are shown for proposed streets.					
40	PFM 7-0306.8 & 13D PFM 8-0100 101-2-2(10) VDOT SSAR	Sidewalks provided within the subdivision and along the site's frontage as required, unless a modification or waiver is approved. Sidewalks connect to adjacent sidewalks, trails and walkways.					
<b>STREET LIGHTS</b>							
41	PFM 7-0802.3	Existing and proposed utility poles and street lights shown and labeled					
42	PFM 7-0805.5B, LDS Tech Bulletin 14-07	Lighting computations are shown and sealed by lighting professional for proposed non-standard streetlights					
<b>EROSION AND SEDIMENT CONTROL</b>							
43	PFM 2-0203.1C PFM 2-0208.12	Limits of clearing and grading shown and includes all work to be done (offsite, utility extensions, outfalls, etc.) and matches between grading, erosion and sediment control, landscape plans			*		
44	LDS Tech Bulletin 11-08	Priority Rating Form for E&S control is shown, and physiographic province is correctly identified			*		
45	LDS Policy	Completed certified E&S Control Checklist provided			*		
46	VESCH Uniform Coding System	Erosion & sedimentation controls identified			*		

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47	PFM 11-0104.1	Two-phased plans provided for erosion and sedimentation control					
48	PFM 11-0104.1	Phase 1 initial limits of clearing to install controls needed with minimal clearance is shown and described in E&S phase I narrative					
49	VESCH 3.13 PFM 11-0106.2D	Sediment trap computations provided (Pipe outlet required if drainage is greater than 1 acre)			*		
50	VESCH 3.14 PFM 11-0106.2C	Sediment basin calculations provided			*		
51	PFM 11-0104.3	Region specific temporary and permanent seeding tables provided					
52	VESCH 3.05 (SF) VESCH 3.07 (IP) VESCH 3.09 (DD) VESCH 3.13 (ST)	Drainage divides shown for E&S measures that have drainage area limitations. Drainage areas do not exceed ¼ ac/100 ft for SF, 1 acre for IP, 5 acres for DD and 3 acres for ST. Drainage divides for SSF are only required when it needs to be demonstrated that concentrated flow to SSF does not exceed 5 cfs.			*		
<b>DRAINAGE &amp; STORM SEWERS</b>							
53	PFM 6-0201.2	If discharge is to an open channel, it is an existing natural watercourse (a stream with a defined channel) or manmade channel with sufficient capacity					
54	PFM 6-0202.2	Drainage system honor natural divides for both concentrated and non-concentrated stormwater runoff leaving the site, unless a written justification is provided and approved by the Director.					
55	PFM 6-0202.4	Concentrated runoff discharge leaving the site shall not aggravate or create a condition where an existing structure under an approved building permit floods. If such a structure exist, detention for the 100-year storm event is provided.			*		
56	PFM 6-0202.5	No concentrated surface water discharged offsite without easements unless the discharge is into a natural watercourse, or other appropriate discharge point.					
57	PFM 6-1104.3	Inlet ponding is within an easement					
58	PFM 6-0202.6	Sheet flow into lower lying properties: Pre- and post-developed runoff computations provided to demonstrate that increase in peak flow runoff would not cause or aggravate drainage problem on the downstream properties. Description is included in the outfall narrative.			*		
59	PFM 6-0203.2C	Cross-section with equal horizontal and vertical scale, water surface elevation and computations shown for existing natural defined channels			*		
60	PFM 6-0203.3	Adequacy verified for all natural watercourses, channels, and pipes in accordance with channel protection and flood protection requirements in Chapter 124. Narrative provided with adequacy conclusion.			*		
61	PFM 6-0904.2 PFM 6-0904.4 PFM 6-0905.4	HGL computations provided for all storm systems. HGL is depicted on the storm profiles and is at least 1 foot below established ground elevation and no more than 5 feet above the crown of the pipe.					
62	PFM 6-0905, 6-1008 and 6-1200	Design computations provided for closed and open systems, including driveway culverts					
63	PFM 6-1501.2A PFM 6-1502.2 PFM 6-1502.3	Location and approximate extent of the overland relief paths shown in proximity of buildings. Calculations provided. No building is flooded by the 100-year flow.			*		
64	112-17-106.40	The extent of any dam break inundation zone of a state-regulated impounding structure is shown on the plan and labeled with the name of the impoundment and the date of the study that established the inundation zone.					
<b>STORMWATER MANAGEMENT: QUALITY AND QUANTITY CONTROLS</b>							
65	124-4-2 124-4-3	If plan is subject to Technical Criteria under Article 4, computations demonstrate compliance with water quality control requirements, including VRRM spreadsheet					
66	PFM 6-0402.8A	A brief narrative provided summarizing how water quality control					

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		requirements are being provided for the site					
67	124-4-4.A	If plan is subject to Technical Criteria under Article 4, computations demonstrate compliance with channel protection requirements			*		
68	124-4-4.B	If plan is subject to Technical Criteria under Article 4, computations demonstrate compliance with flood protection requirements			*		
69	124-4-4.D	If plan is subject to Technical Criteria under Article 4, computations demonstrate compliance with 2-year and 10-year detention requirements			*		
<b>RESOURCE PROTECTION AREA (RPA)</b>							
70	PFM 6-1701.3 112-17-106.33	Site specific RPA boundary shown. Label references approved RPA delineation study number and approval date			*		
71	118-4-2	WQIA with proper mitigation submitted or approved for water-dependent improvements (outfalls) or redevelopment within RPA					
72	118-5-3	An RPA Exemption request is submitted or approved and provided for trails, sidewalk, site amenities, public utilities within RPA					
73	118-6-9 PFM 6-0303.3	An RPA Exception request is submitted or approved and provided for SWM facilities or other uses within RPA					
<b>FLOODPLAIN (FP)</b>							
74	PFM 6-0704.1	Proposed structures do not adversely affect the existing 100-year floodplain elevation. An approved 100-year water surface elevation is specified.					
75	PFM 6-1401.1 PFM 6-1405	A floodplain study is submitted or approved. 100-year floodplain limits are shown. "Floodplain and drainage easement" exists or is proposed.					
76	112-2-903	A Floodplain Use Determination (FPUD) request is submitted or approved and provided for public utilities, roadway crossing or outfall within floodplain					
77	112-2-903 112-2-904	A Special Exception (SE) is submitted or approved for major fill or use that are not permitted within the floodplain					
<b>SANITARY SEWER</b>							
78	PFM 10-0102.5A(4) & (5)	Vertical and horizontal separation shown between sanitary sewer main and waterlines and storm sewer lines					
79	PFM 10-0102.5A(7) PFM 10-010.5L	Sanitary sewer crossing stream or on fill or deeper than 18' proposed to be DIP					
80	PFM 10-0102.5B	Sanitary sewer main extended to the nearest property line of the last lot to be served					
81	PFM 10-0102.5B	Sanitary sewer easement extended to the property line where adjoining areas must be served					
82	PFM 10-0102.5C	Sanitary sewer setback 15' from all buildings					
83	PFM 10-0102.8D	Sanitary sewer grade not less than 1% to terminal manhole					
84	PFM 10-0104.2A	Sanitary sewer profiles on same sheet as plan					
85	PFM 10-0104.2C	Bearings and distances on centerlines of sanitary sewers shown					
86	PFM 10-0104.5A	Install sanitary sewer lateral to the required distance beyond property lines per PFM					
87	PFM 10-0104.2D	Location of existing structures, houses, utility crossings, curbs, property lines, railroad crossings, culverts and bridges shown on plan view					
88	PFM 10-0104.2D	Location of utility crossings shown on profile					
<b>FAIRFAX COUNTY WATER AUTHORITY</b>							
89	PFM 9-0102.2 112-17-106.29	Location, size and type of proposed and existing water mains and fire hydrants shown and labeled			*		
90	PFM 9-0102.3A	Proposed tie-ins to existing water system shown			*		
91	PFM 9-0102.3A FCWA Policy	Water main stationing on the plan and profile			*		
92	PFM 9-0102.3B	Watermains have 4' of cover unless otherwise noted					
93	PFM 9-0102.3D	Utility crossings shown on the profiles			*		
94	PFM 9-0102.3S	Profile of all proposed public water mains included			*		

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95	PFM 9-0102.3V	Test holes shown where required					
96	Fire Marshal Policy	Provide profile of all private fire lines					
97	PFM 9-0102.3J	All hydrant, water service, fire line and stub-out valves must be restrained					
<b>URBAN FORESTRY</b>							
98	PFM 12-0204.3 PFM 12-0305.1A	Tree protection shown on demolition plan					
99	PFM 12-0304.1A	Existing tree line for groups of trees clearly shown with graphic key provided					
100	PFM 12-504.1B	Proposed limits of clearing and grading shown and labeled					
101	PFM 12-0309.2E	Tree preservation fence and measures shown and identified					
<b>MISCELLANEOUS</b>							
102	112-17-106.1	All sheets have engineer's and/or surveyor's/landscape architect's seal and signature			*		
103	112-17-106.2	Plan is drawn to a scale of not less than 1" = 50'. Match lines are shown where sheets join. Plan is legible at the scale provided.			*		
104	112-17-106.5 101-2-5(c)(6)	North arrow referenced to State Grid System (VCS 83) and reference note is provided			*		
105	112-17-106.5 101-2-5(c)(6)	Two adjacent corners or two points with coordinate values are shown on each sheet. Metes and bounds are provided around the site boundary.					
106	112-17-106.5 101-2-5(c)(6)	Vertical datum reference note is provided, and it refers to NGVD 1929					
107	112-17-106.9 112-17-106.10 LDS Policy	Existing topography drawn at maximum 2' intervals. Where existing slope is less than 2%, additional spots or 1-foot contours are provided. Sufficient number of elevation labels shown on existing and proposed contour lines.					
108	112-17-106.9 LDS Policy	Existing topography not screened excessively so as not legible			*		
109	PFM 2-0106.1	Proposed grading shown by contours and spot elevations					
110	112-17-106.11 LDS Policy	Proposed easements shown and identified as "proposed". All existing easements are shown and labeled with deed book and page numbers. Easements are shown on all applicable sheets.			*		
111	112-17-106.11	Owners, zoning and present use of all adjoining properties must be shown					
112	112-17-106.18 124-2.7.B.8.e	Sufficient existing condition information (i.e. topography, structures, etc.) is shown beyond property boundaries, so impacts on adjacent properties can be evaluated			*		
113	112-17-201.2 PFM 8-0202.2C	Trails or walkways are provided in accordance with the Comprehensive Plan or waiver request submitted or approved. Adequate right of way is provided for trails within the right of way. Public access easements are shown where required. Trail shoulder shown.					
114	112-16-403	Trails and walks are proposed as shown on GDP, FDP, SE, or SP.			*		
115	112-17-106.15	Horizontal location of all proposed trails and vertical location of any trail which is proposed to exceed an 8% grade					
116	PFM 2-0101.1 County Policy	All approved waivers are valid and shown on the plan, with waiver condition compliance narrative					
117	PFM 2-0208.12	The location, elevation, and description of two benchmarks which are properly correlated to the plan elevations are shown on the plan					
118	PFM 2-0208.12	Clearing limits match among all site plan sheets					
119	PFM 2-0304.2	Horizontal and vertical location of existing transmission lines and pipelines and associated easements shown					
120	LDS Policy	Prints legible, not too light or too dark to digitize. Proposed improvements can be clearly differentiated from existing.			*		