

PRINCE GEORGE'S COUNTY DEPARTMENT OF
PUBLIC WORKS & TRANSPORTATION
STREET CONSTRUCTION PERMIT CHECKLIST & PROCESS

II. Plan Information COMPLETE INCOMPLETE NA NOT APPLICABLE

A. General Plan Information

- 1) Provide sheet size no greater than 36" x 24".
- 2) Show title block that includes the following information: formal subdivision name (or area name if not applicable), type of plan (eg, Storm Drain and Paving, Paving Only, etc.), election district, Prince George's County, Maryland and date.
- 3) Each street construction permit plan must relate to the property. Therefore, show a small composite that shows the entire property. Not much detail is needed, just property lines, road names, and edge of pavement.
- 4) Show North arrow and horizontal and vertical datum. Use NAD (North American Datum) 89/91 for horizontal datum and NGVD (National Geodetic Vertical Datum) 1929 for vertical datum.
- 5) Use the following minimum plan-view scales: 1" = 50' for single family and 1" = 30' for Townhouse, Industrial and Commercial.
- 6) Show vicinity map with Prince George's Page and Grid on first sheet. Use 1"=2000' scale.
- 7) Label fillets and cul-de-sacs to relate to respective fillet and cul-de-sacs profiles (only necessary if not on street grade establishment plan).
- 8) Show match lines coordinated with current number of sheets.
- 9) Show applicant's company name, contact name, contact position, address, phone, and fax on first sheet.
- 10) Show DPW&T approval stamps on EVERY sheet for Storm Drain and Paving Plans approval. Complete the permit number and the respective DPW&T District Engineer name on each stamp.
- 11) Label existing, proposed and future streets with the ultimate right-of-way width for all public roads (eg, Crescent Road, 60-foot Ult. R/W). Make sure that you have checked with the Maryland-National Capital Park and Planning Commission (M-NCPPC) to confirm the ultimate right-of-way width.
- 12) When permitting STORM DRAIN ONLY, be sure to mark-out the storm drain NOT included in this permit and BUBBLE the storm drain included. Label the other permit areas with their respective permit numbers.
- 13) When permitting street construction, be sure to mark-out the street construction area not included in this permit and bubble the street construction area included. Label the other permit areas with their respective permit numbers.
- 14) Do not include any extraneous sheets in the permit set that have nothing to do with what is being permitted.

- 15) Show a minimum of 100 feet of existing topography on BOTH SIDES of the existing roads (eg, sidewalk, curb & gutter, street trees, ditch centerline, edge of pavement, street lights, etc.).
- 16) Shade proposed street and sidewalks under this permit.
- 17) Show "Miss Utility" note on first sheet.
- 18) Show standard "General Notes for Paving and Storm Drain". Simply strike out those notes that do not apply, but please do not remove them from the list.
- 19) Every sheet must be signed, sealed and dated by a Professional Engineer licensed in the State of Maryland that certifies the design.
- 20) Show three grid coordinates labeled per sheet.
- 21) Show a minimum text size of 0.08-inch tall, 0.10-inch tall recommended.
- 22) Show limits of approved 100-year flood plain.
- 23) Show adjacent property ownership and/or plat reference, property line, lot and block number information in plan view.
- 24) Show curb radii label at road intersections and specify spill gutter, where applicable.
- 25) Make sure that sidewalks and driveways are identified on the GENERAL NOTES as being the responsibility of the DEVELOPER or the HOME BUILDER. This should be CONSISTENT with the street construction permit application and the street construction cost estimate.
- 26) Add **BIG BOLD** label of DPW&T PERMIT NO. _____ in the lower right side border of each sheet.
- 27) Show a table on first sheet for the lot coverage for the entire area covered by the DPW&T Street Construction Permit using the following format:

DPW&T Permit Number	Parcel and/or Lot and Block Identifiers

- 28) If the roadway is scenic and/or historic, add a bold note on the bottom left-hand of the drawing identifying said road as scenic and/or historic. **THEN, A MEETING WITH M-NCPPC AND DPW&T IS NECESSARY AND THE PLANS NEED TO BE REVISED TO CONFORM TO THE SCENIC & HISTORIC ROAD GUIDELINES.** For a copy of the latest Scenic and Historic Road Guidelines, see the DPW&T Standards and Specifications Appendix.
- 29) IF THE ENGINEER OF RECORD'S NAME AND/OR ADDRESS HAS CHANGED, PLEASE REFLECT THE NEW INFORMATION (firm name, address, phone, contact name) IN THE TITLE BLOCK AREA OF EACH PLAN SHEET.
- 30) Show typical pavement sections and standard details in accordance with the latest DPW&T Standards.
- 31) Show pavement section, and following the review of the Soils Report by the DPW&T Materials Lab, incorporate sub-grade and sub-base preparation requirements in the pavement section area of the plan.

- 32) If no street grades have been approved for the roadways under review (including the frontage roadway), then prior to issuance of the referenced permit a street grade establishment plan is required.
- 33) Submit the plan to the Prince George's County Department of Environmental Resources for the Storm Drain technical review. NOTE: DPW&T WILL ALLOW A CONCURRENT REVIEW WITH DER. HOWEVER, THE APPLICANT TAKES THE RESPONSIBILITY OF COORDINATING ALL CHANGES TO THE DESIGN AS A RESULT OF DPW&T AND DER REVIEW COMMENTS.

B. Street Elements

- 1) WHEN THE SITE HAS FRONTAGE WITH AN EXISTING COUNTY ROADWAY, WIDENING OF EXISTING ROAD FRONTAGES IN ACCORDANCE WITH THE APPROVED MASTER PLAN PER THE APPLICABLE DPW&T ULTIMATE TYPICAL SECTION IS REQUIRED.
- 2) WHERE A MASTER PLANNED ROADWAY RUNS THROUGH OR HAS FRONTAGE WITH THE PERMITTED SITE, THEN THE ROADWAY ULTIMATE IMPROVEMENT REQUIREMENTS MUST BE ADDRESSED. DEPENDING UPON THE STATUS OF SAID ROADWAY, THIS MAY INVOLVE RIGHT-OF-WAY RESERVATION, DEDICATION, CONSTRUCTION OR FEE-IN-LIEU PAYMENT OR A COMBINATION THEREOF. A DETERMINATION BY M-NCPPC AND DPW&T ON THE STATUS OF SAID ROADWAY IS NECESSARY.
- 3) Mill and overlay for frontages with existing roadway for a minimum of up to the centerline of the existing roadway, with the related base pave repair and utility adjustments (eg, manhole and valve adjustments) is required.
- 4) Mill and overlay at connections to existing roadway for a minimum of 50 feet to effect a smooth transition to the existing pavement. The mill and overlay will include the related base pave repair and utility adjustments (eg, manhole and valve adjustments). Show this in plan view and label accordingly.
- 5) Minimum milling depth is 1.5 inches.
- 6) Minimum radius for fillet at intersections with the largest road being a primary and/or secondary road shall be 37 feet. Minimum radius for fillet at intersections with the largest road being a collector and arterial road shall be 50 feet for urban arterial, 45 feet for urban collectors of all types, 50 feet for urban commercial and industrial, 50 feet for rural arterial, rural and/or scenic and historic collectors of all types, 43 feet for rural primaries, and 44 feet for rural secondary.
- 7) Show that there is proper surface drainage within all intersections and cul-de-sacs.
- 8) Show flow arrows with % Slope in plan view. Label all longitudinal slopes. Label % Slope at the intersections in the direction the water will actually flow around the warped fillets. Also, critical is labeling the slopes at the bulbous ends of the cul-de-sacs. All of this is required regardless of whether you include a cul-de-sac profile and fillet profile. At the intersections, do not simply repeat the longitudinal slope. The slope should change at each paved quadrant of the intersection. Reflect the flattest flowline from each fillet of the intersection.
- 9) Provide valley gutters when slopes across street intersections are less than 1.5%.

- 10) Show that POSITIVE DRAINAGE is maintained at connection to abutting properties within the right-of-way. This can be illustrated by % slope flow arrows.
- 11) Flows at the termination of public road that discharge to private property cannot be in excess of 3 CFS (cubic feet per second) if no drainage easement has been provided that takes the flows from the public right of way to an approved drainage course.
- 12) Show flumes within right-of-way at termination of street construction in a fill area.
- 13) Provide erosion protection at ends of all curb and gutter where an outfall situation is created due to termination of road construction.
- 14) Flows from any point along a public road to private property (except at the termination of a road) cannot be in excess of 5 CFS (cubic feet per second) if no drainage easement has been provided that takes the flows from the public right of way to an approved drainage course.
- 15) In a street construction permit involving rural-section roadways, driveways are REQUIRED to be part of all street construction permits to avoid disputes between developer and builders.
- 16) Show driveway culvert sizes for rural sections if not typical.
- 17) Provide tie to existing street centerline and centerline of commercial driveway entrances.
- 18) Clearly show all golf cart, equestrian, hiker/biker, etc. crossings with labels identifying type of crossing (eg, at-grade crossing, tunnel crossing, bridge crossing, etc.). Mid-block crossings are NOT permitted.
- 19) Provide sidewalks along all roadways, existing and proposed, within the property limits in accordance with Sections 23-105 and 23-136 of the County Road Ordinance.
- 20) At the quadrant of each intersection where there is sidewalk or a pedestrian accessible pathway on the other side of the road, provide sidewalk ramps at the mid-point of the curve. In the cases of arterial and major collector roadways, sidewalk ramps may be considered at each fillet point.
- 21) Sidewalks should follow fillet offset (ie, the curb curve from PC to PT at the intersection), not the right-of-way line at the intersection.
- 22) Provide crosswalks where applicable.
- 23) Provide paving, curb and gutter and sidewalk replacement note, where applicable.
- 24) Station the beginning point of road improvements from where the existing road ends. Additionally, the road improvements should always terminate with a construction joint that is PERPENDICULAR to the roadway centerline.
- 25) Show pavement section for all townhouse courts.

- 26) Show cross-sections every fifty feet where any road widening occurs or as directed by DPW&T. Cross-sections are required to show the following: the existing road, the proposed widening, and the future road section. As a minimum, cross-section should be for full-width of ultimate right-of-way and any additional width to show the grade tie-outs.
- 27) With regards to the cross-sections, show and label side-slopes (eg, 4:1 slope or % Slope) on cross-sections for all embankments and pavement, both existing (to remain) and proposed.
- 28) With regards to the cross-sections, label key elevations (eg, where proposed pavement meets existing pavement, proposed edge of pavement, invert of slope, tie-out elevation to existing grade, top of curb, etc.). All key elevations should be identified with dimensioned offsets relative to the centerline.
- 29) With regards to the cross-sections, show and label existing and proposed right-of-way. The right-of-way line locations should be identified with dimensioned offsets relative to the centerline.
- 30) Provide traffic barrier (eg, guardrail) with related traffic barrier end treatment, where applicable. Setback of posts from top of slope to meet MSHA criteria for selected end treatment.
- 31) If providing guard rail between curb and sidewalk, then provide rail on both sides of post.
- 32) Ensure that the proposed entranceways do not create any sight-distance hazards per AASHTO requirements. Traffic Division Review may be necessary.
- 33) Where applicable, provide acceleration/deceleration, bypass lane and/or turning lanes at connections to existing County roadways. Traffic Division Review may be necessary.
- 34) Provide post barricade (if street ends) or remove barricade (if extending existing street).
- 35) Where applicable, provide raised and reflectorized pavement markers (RPM) per the DPW&T RPM Placement standard detail.
- 36) Culvert and bridge crossings may need to meet national bridge criteria. Contact the DPW&T Bridge Engineer at the Office of Project Management at 301-883-5642 to confirm whether this is the case and ask for the checklist on these requirements. If this is the case, significant review time is necessary by the DPW&T Bridge Engineer.
- 37) Coordination with the Division of Transit at 301-883-5700 should occur to ensure that all required transit appurtenances (eg, shelter, bus stop signs, etc.) are constructed.

C. Cul-de-sac and Fillet Profiles

a. Cul-de-sacs ****

- 1) Provide cul-de-sac profiles which shows the following minimum information:
 - a) Approach grades and TC's match street grade at PC and PT;
 - b) Cul-de-sac profile number matches plan view;
 - c) Highpoint or low point TC's provided;
 - d) Smooth curve throughout;

- e) Datum elevation provided;
 - f) Street name provided
 - g) Property line intersection stationing with related TC or flowline elevation;
 - h) PC, PT and PRC stationing with related TC or flowline elevation;
 - i) High-point, Low-point or Mid-point station with related TC or flowline elevation;
 - j) Percentage slope specified on profile line.
- 2) An alternative to cul-de-sac profiles is the following method:
- a) In plan view, provide elevation at fillet point, along with station and offset;
 - b) In plan view, provide high or low point, along with the station and offset;
 - c) In plan view, provide a minimum of 4 elevation points along cul-de-sac bulb (in addition to the fillet points) with station and offset information;
 - d) In plan view, provide flow arrows WITH PERCENTAGES SPECIFIED along flow line.

b. Fillet Profiles ****

1. Provide fillet profiles which show the following minimum information:
- a) Approach grades and TC's match street grades at PC and PT;
 - b) Fillet profile number matches plan view;
 - c) Datum elevation provided;
 - d) Start and end stationing with related TC or flowline elevation;
 - e) High point, Low point or Midpoint station with related TC or flowline elevation;
 - f) Percentage slope specified on profile line;
 - g) Smooth curve throughout;
 - h) Street name provided at PC and PT.
2. An alternate to fillet profiles is the following method:
- a) In plan view, provide elevation at fillet point, along with station and offset;
 - b) In plan view, provide elevation of mid point along fillet or high or low point, along with station and offset;
 - c) In plan view, provide spot elevation at centerline intersection;
 - d) In plan view, provide flow arrows WITH PERCENTAGES SPECIFIED along flowline.

**** Provide this if this information is not already on the applicable street grade establishment plans)

D. Utilities

- 1) Provide UPDATED Utility Certification signed, sealed and dated by a Professional Engineer licensed in the State of Maryland.
- 2) Show existing and proposed water and sewer lines and related appurtenances.
- 3) Show existing and proposed water and sewer house connection for storm drain crossings.
- 4) Show existing storm drain lines.
- 5) Show existing gas lines with size.
- 6) Show existing utility pole with pole numbers.
- 7) Show any other existing utilities, including underground utilities (eg, cable, fiber optic, etc.).

- 8) All utility poles are to be moved to the ultimate right-of-way line within the project limit (this includes the frontage with all existing roads of the subject property).
- 9) If applicable, show mill and overlay of 25 (100 feet for 5-year moratorium roadways) feet on both sides for proposed utility cuts (including storm drain) and add a note that the "MILL AND OVERLAY AS PER STANDARD H4 OF THE POLICY AND SPECIFICATIONS FOR UTILITY INSTALLATION AND MAINTENANCE". PLEASE BE SURE TO REFERENCE THE POLICY AND SPECIFICATIONS FOR UTILITY INSTALLATION AND MAINTENANCE to make sure the limits of mill and overlay are correct. Also, clearly show the limit of proposed utility work INTO the EXISTING ROADWAY.

E. Street Lighting Plans

F. Traffic Control Plans

G. Signing and Pavement Marking Plans

H. Rights-of-Ways

- 1) Show existing and proposed water, sewer, storm drain and stormwater management right-of-ways (easements).
- 2) Show Ingress and egress easement for isolated channel(s), storm drain systems, and storm water management facilities.
- 3) Show 100 year flood plain easements.
- 4) Show public utility easements.

III. Storm Drain Conveyance System Information

- 1) NOTE THAT THE DEPARTMENT OF ENVIRONMENTAL RESOURCES PERFORMS THE DETAILED REVIEW OF THE STORM DRAIN. PLEASE UNDERSTAND THAT DPW&T HAS THE AUTHORITY TO REQUIRE MODIFICATIONS TO THE STORM DRAIN DESIGN IF THE IMPLEMENTATION OF THE DESIGN COULD CREATE A HAZARD OR NUISANCE, OR IS OTHERWISE NOT IN COMPLIANCE WITH COUNTY CODE OR THE DESIGN AND CONSTRUCTION STANDARDS OF DPW&T. THIS IS PER ROAD ORDINANCE SECTION 23-105.
- 2) DER STORM DRAIN TECHNICAL APPROVAL REQUIRED ON THE STORM DRAIN & PAVING PLAN.
- 3) Storm drain structures located for ultimate development of street system.
- 4) Underdrain is required for the full length of all proposed and modified roadways for the limits of the permit. This needs to be reflected in plan view, the pavement section and as a bold note on the plan. Add a note in plan view stating the following: "INSTALL UNDERDRAIN FOR THE FULL LENGTH OF ALL PROPOSED ROADWAYS FOR THE LIMITS OF THE PERMIT IN ACCORDANCE WITH DPW&T STD. DTL. NO. 300.11".
- 5) Brick channelization in all public DPW&T storm drain structures is required. Concrete channelization is not acceptable.
- 6) Storm drain cover should be at least three (3) feet in the areas of trees.

- 7) On the storm drain profile, label private versus public system where applicable, show limits above profile run. Differentiate between "DER BONDED AND INSPECTED" and "DPW&T BONDED AND INSPECTED"
 - 8) On the storm drain pipe and storm drain structure schedule, differentiate between "DER BONDED AND INSPECTED" and "DPW&T BONDED AND INSPECTED".
 - 9) Provide concrete pilot channel or underdrain treatment, where applicable, when the flow in an open-section ditch is less than 2%.
 - 10) Label proposed slope along all ditch lines when not part of typical section regardless of whether they are being disturbed or not (extend this to at least 50 feet beyond the property lines).
 - 11) Show flow, depth and velocity in ditch at points where flow leaves your frontage.
 - 12) Show existing and proposed topography for entire channel reach. *
 - 13) Label channel with material, length, bottom width and side slope. *
 - 14) Show sod note for drainage right-of-way or easements. *
 - 15) Show ties for improved channels. *
 - 16) Show curve data for horizontal curves including radius, arc, delta, tangent, chord and beginning and ending stations. *
- * Only necessary if providing ditches and improved channels outside of swale per typical section.