

Cecil County Division of Development Plans Review

Roads and Storm Drains

Plans Review Checklist

Project Name: _____

Tax Map: _____ Parcel: _____

Owner's Name: _____

Contract Purchaser's Name: _____

Applicant's Address: _____

Engineer/Surveyor: _____

Contact Name: _____ Phone Number: _____

The following list of items are the minimum requirements for review and approval of Roads and Storm Drains Plans by the Division of Development Plans Review. Plans not meeting these minimum requirements will be deemed incomplete and returned to the applicant. Please complete and submit the checklist with the plan submittal.

- ___ 1. Road and Storm Drain review fees with checklist
- ___ 2. Plan Sheets standard 24"x36" size (unless approved by DPR)
- ___ 3. Title Sheet
 - ___ a. Vicinity Map (Tax Map and Parcel Number)
 - ___ b. Cecil County General Notes
 - ___ c. Owner/Developer and Engineer Certifications
 - ___ d. Geotechnical Certification, and as-built certification block
- ___ 4. Road Plan View
 - ___ a. Plan Scale 1"=50' minimum (plans to be clear and legible)
 - ___ b. Street Names
 - ___ c. Right-of-way, Pavement, and Easement widths (existing & proposed clearly defined)
 - ___ d. Bearing, distance, stationing of roadway centerlines, PCs, PTs and centerline PIs
 - ___ e. Horizontal Curve information: Angle of Intersection, Center Line Radius, Tangent Length, Length of Curve, Chord Bearing, and Chord Length
 - ___ f. Stationing along centerline in even fifty foot stations
 - ___ g. Points of Intersection of curb lines: Indicated by small linked crosses, and shall be identified as N.E., N.W., S.W., or S.E.
 - ___ h. Existing and Proposed Storm Drain clearly shown and labeled
 - ___ i. Stations of PCs and PTs of curb as well 25 foot stationing of curbs on circular portions of cul-de-sac and/or residential intermediate turnarounds
 - ___ j. A minimum of three (3) NAD 83m x, y coordinates
 - ___ k. Benchmark reference, description and elevation
 - ___ l. Show future roadway 200' beyond limit of work

5. Road Profiles

- ___ a. Profile scale must correspond with the Road Plan scale (vertical scale a factor of 10 smaller, example plan scale 1"=50' and vertical scale 1"=5')
 - ___ b. Existing grades at centerline of road and right and left of right-of-way limits
 - ___ c. Profile grade line: centerline of road or top of curb
 - ___ d. Existing and proposed elevations at 50' intervals, 25' intervals for vertical curves
 - ___ e. Label Elevations and Stations for PVs, PVRCs, PVCCs, PVTs, and PVIs
 - ___ f. Stopping Sight Distance
 - ___ g. Label elevations, stations of sumps, and crests along vertical curves
 - ___ h. Extend profile 200 feet beyond limits of work
 - ___ i. Horizontal intersection stations identified
 - ___ j. Linear profile of the cul-de-sacs and intermediate turnarounds (with existing and proposed grades at 25' intervals)
- ❖ The following note should be added on the Profile sheet in areas of fill;
"Fill material is to be controlled and compacted as certified by an approved Soils Engineer. Fill material is to be placed in no less than 4" and no greater than 8" lifts and rolled to 95 percent compaction within the top one (1) foot of the subgrade".

6. Storm Drains Profiles (attach signed & sealed hydraulic gradient, head loss, and spread calculations)

- ___ a. Scale must correspond with the Road Plan view (vertical scale a factor of 10 smaller, example plan scale 1"=50' and vertical scale 1"=5')
- ___ b. Crossings with existing and proposed utilities
- ___ c. Pipe size (15" minimum), Type, Slope, Q25 (cfs), V25 (fps), HGL-25 year storm event
- ___ d. Proposed and existing grades, inverts, structures clearly labeled to match the Road Plans view
- ___ e. Cross culverts designed for 25-yr storm event (show 2, 10 & 100 year flood elevations), rip rap upstream, rip rap with toe wall downstream with calculations
- ___ f. Outfall protection at all end walls/headwalls into existing storm drain systems
- ___ g. Structure Schedule providing: structure standard number, top of grate/cover, invert elevations, and comments
- ___ h. Drainage area map (existing and proposed storm drain system)
- ___ i. Open Section Roads provide: driveway culvert locations, sizes, calculations, ditch flow calculations (Flow Tabulation Form). Refer to MD SHA 61.1-405.0 for maximum ditch velocities permitted.
- ___ j. Special drainage details.