

Drainage Report Checklist



Project Name:

The purpose of this checklist is to assist the applicant's Engineer with developing a drainage report that supports the intent of the Weld County Code using commonly accepted engineering practices and methodologies.

Is the project in the **MS4**? ☐ Yes ☐ No If yes, the following requirements in blue apply. See Chapter 8, Article IX of the Weld County Code.

Report Content

- ☐ Weld County Case Number
- ☐ Certificate of Compliance signed and stamped by a Colorado Licensed PE
- ☐ Description/Scope of Work
- ☐ Location (County Roads, S-T-R)
- ☐ Nearby water features and ownership
- ☐ Total acres vs. developed acres
- ☐ Hydrological soil types/maps
- ☐ FEMA Flood Zones
- ☐ Urbanizing or non-urbanizing
- ☐ Methodologies used for report & analysis (full spectrum is not accepted)
- ☐ Base Design Standard used for permanent control measure design in the MS4
- ☐ Discussion of offsite drainage routing
- ☐ Conclusion statement indicating that the design will adequately protect public health, safety, and general welfare and have no adverse impacts on public rights-of-way or offsite properties

Hydrology and Hydraulic Analysis

- ☐ Design Storm / Rainfall Information (NOAA Atlas or Local Data)
- ☐ Release Rate calculations
- ☐ Post construction site imperviousness
- ☐ Hydrologic calculations (historic & developed basins)
- ☐ Hydraulic calculations for proposed drainage improvements (swales, culverts, riprap, pond, outlet, spillway, WQCV outlet, etc.)
- ☐ Detention/WQCV calculations

Comments:

Construction Drawings

- ☐ Stamped by PE
- ☐ Engineering scale & north arrow
- ☐ Property lines, rights-of-way, and easements
- ☐ 1' Contours & elevations (existing & proposed)
- ☐ Pre- and post-development drainage basins
- ☐ Arrows depicting flow direction
- ☐ Time of concentration critical path
- ☐ Drainage design points
- ☐ Improvements labeled
- ☐ Permanent control measure and associated drainage features labeled 'No Build/No Storage', include design volume
- ☐ Cross sections for open channels, profiles for pipes
- ☐ Elevations for inverts, flow lines, top of grates, orifice(s), etc.
- ☐ Pipe specs (size, material, length, slope)
- ☐ Outlet and spillway details

Maintenance Plan

- ☐ Frequency of onsite inspections
- ☐ Repairs, if needed
- ☐ Cleaning of sediment and debris
- ☐ Vegetation maintenance
- ☐ Manufacturer maintenance specifications, if applicable

Other Required Documents (If Applicable)

- ☐ Variance Request and documentation— explain hardship, applicable code section, and proposed mitigation. Variances will not be granted for the Base Design Standard requirement in the MS4.