

## STORM DRAIN PLAN SUBMITTAL

1. Engineer's construction cost estimate
2. Plan check fee in accordance with the latest fee schedule
3. Drain transfer fee in accordance with the latest fee schedule.
4. Document preparation fee in accordance with the latest fee schedule (if easements are required)
5. Electronic copy of storm drain plans
6. All plans must be per County standards. AutoCAD and Microstation versions of plan sheets are available for download at <http://ladpw.org/general/cad>. Plans must contain the following:
  - a. Vicinity, key maps, Thomas Guide page, and grid number
  - b. Bench mark
  - c. Storm water pollution control requirements
  - d. Hydraulic element table
  - e. Natural and finished ground surfaces including approximate limits and depth of removal and recompaction of unsuitable soils, per the Soils Engineer of record.
  - f. D-loads
  - g. Hydraulic grade lines, reach Qs, and reach velocities
  - h. Inlet and outlet facilities with complete details
  - i. Easement exhibit sheet with one continuous view (similar to key map)
  - j. All recommended mitigation measures, per the Soils Engineer of record
  - k. Total length of pipe contained within project
  - l. Total area to be dedicated to Los Angeles County Flood Control District (not including public right-of-way)
7. Stamp and signature of registered civil engineer on storm drain plans
8. Electronic copy of hydraulic calculation report containing:
  - a. Debris Production volumes and basin capacity calculations
  - b. WSPG input and output files for all lines and laterals
  - c. Catch basin capacity and v-depth calculations
  - d. Stamp and signature of registered civil engineer on hydraulic calculation report
9. Electronic copy of all analysis computer program files (e.g. WSPG files, plan files not required)
10. Electronic copy all supporting plans (if plans have already been submitted, provide date of most recent plans):
  - a. Grading Plan
  - b. Street Plans
  - c. Final Tract/Parcel Map
  - d. Storm Drain Soils report (Note: Approval from Geotechnical and Materials Engineering Division required prior to Storm Drain approval)
11. The Soils report submitted must specifically address the proposed storm drain. It must include sufficient subsurface exploration data, pertinent test results and analyses, which address and evaluates the site and the proposed storm drain plans. The report must comply with the provisions of "Manual for Preparation of Geotechnical Reports" prepared by County of Los Angeles, Department of Public Works. The Manual is available on the Internet at the following address: <http://dpw.lacounty.gov/gmed/manual.pdf>. (Note: Tract grading reports are not sufficient. An addendum soils report which specifically addresses the latest storm drain plans is required. This addendum report may utilize and compile results of previous subsurface exploration, as applicable.)
12. Stamp and signature of the Soils Engineer and Geologist of record on storm drain plans and hydraulic calculation report
13. Signed copy of "Attachment C"
14. Copy of all maintenance permits (if required)