



Drainage Report Checklist

Drainage Reports must show compliance with the La Paz County Floodplain Management Ordinance and Public Works Manuals.

- Protect drainage ways from grading and filling
- Hydrology calculations - SCS, rational, or other method approved in advance
- Runoff volume per 100-yr, 2-hr
- Off-site flows and quantities, determine 100-year flooding limits through site for all off-site flows.
- Basins drain with 5 days (note may be 3 days according to ADWR)
- Streets shall not be used to carry off-site drainage
- All existing drainage patterns shown
- Legal drainage way provided for floodplains
- Provide and show routing through project for 100-yr event
- No increase in peak discharges at lower end of development –provide calculations
- Provide 25% additional basin capacity in ret/det basins
- basins deeper than 4' fenced
- Basin max side slope 3:1 with bottom slope 0.5% with grass 0.3% non grassed
- Basins have vehicle ramp to bottom
- If basin is in residential and not fenced, irrigation and landscaping provided
- Basins dedicated for drainage and public use if water from public ROW
- Positive method to drain basin if capacity exceeded or system plugged
- Drywell and sump in all basins with bleeding or pumping facilities
- Open channels design for 100-yr storm based on Time of conc
- Open channels require dedicated drainage ways
- Storm sewers for 10-yr 2-hr event with max V of 15 fps
- Min storm drain pipe size 18"
- Min culvert size 18"
- Culverts designed for 50-yr 2-hr event and 2-feet below road CL elev
- Diversion of water at culverts to other drainage areas not allowed
- Dip crossings only allowed if approved
- 10-yr 10-min conveyed in streets below top of curb
- Flow in street not to exceed 0.5 ft deep and 5 fps velocity
- 100-yr storm contained between Prop lines
- Arterial and collector streets not more than 1/2 traffic lane flooded
- Residential streets, 5-yr 20-min storm, contained btwn top of curb, max V of 3 fps
- Maximum velocity in street should not exceed 10 fps in deepest part
- Roadside ditches designed for 10-yr 2-hr or storm drain
- Valley gutters minimum of 0.2% grade
- Post development runoff does not exceed pre development. Provide calculations.
- Location by T, R, S
- Subdivision name and lot
- Vicinity map



Drainage Report Checklist cont'd

- Total area of parcel
- Floodplain Zone
- Soil groups
- Off-site flow drainage area and map with USGS (or better) contours
- Topographic map of site
- Calculations
- Assumptions
- Cross sections and Vel, Q, WSE
- Tc path and calcs
- DA for pre and post development
- Hydraulic calc's for streets and channels
- Location of basins and dimensions
- Basin inflow and outflow rates
- Basin discharge method and rates
- Prepared by AZ Civil Engineer for public ROW
- Routing of water to retention basins
- Erosion control systems