



## Grading and Drainage Plan Checklist

A grading and drainage plan is required for certain permits. An aerial photograph background allowed but not required.

- ✓ North arrow and scale
- ✓ Property lines and dimensions
- ✓ Identifying landmarks and existing structures, both above and below ground.
- ✓ Existing and proposed grades. Grades and elevations shall be provided for all proposed improvements.
- ✓ Existing culverts and drain pipes.
- ✓ Watercourses and channels including proposed facilities for control of storm waters.
  - Note FEMA floodplain limits, if any ([www.msc.fema.gov](http://www.msc.fema.gov))
- ✓ Land subject to overflow, inundations or flood hazards. Legal drainage way provided for floodplains.
- ✓ Existing and proposed contours with maximum interval as follows:
  - Slope                      Interval
  - 0 – 2%                      2 feet
  - 3 – 9%                      5 feet
  - 10% plus                      10 feet
- ✓ Clean Water Act 401/404 permitting requirements if any fill within OHWM of jurisdictional washes
  - State one of the following:
    - No fill within OHWM of jurisdictional washes, or
    - Fill within OHWM of jurisdictional limits is within Nationwide permitting limits; nationwide permit will be obtained, or
    - Fill within OHWM of jurisdictional washes exceeds Nationwide permitting thresholds, individual permit will be obtained.
- ✓ All existing drainage patterns shown (3.3)
- ✓ Provide and show routing through project for 100 yr event (3.4)
- ✓ Stormwater Basins and slopes, ramps, spillways, etc.
- ✓ Open channels
- ✓ Culverts, dip crossings, pipes, etc. (all proposed drainage infrastructure)
- ✓ Prepared by AZ Civil Engineer for public ROW
- ✓ Existing building locations and dimensions from property lines
- ✓ Existing fences
- ✓ Existing accessory structures such as sheds, propane tanks, storage tanks, etc.
- ✓ Washes or watercourses
  - Note FEMA floodplain limits, if any ([www.msc.fema.gov](http://www.msc.fema.gov))
  - All drainage ways need to facilitate water flow through site, regardless of size. Natural wash depressions as well as large watercourses. Enter and exit at same point, no adverse impact to surrounding properties
- ✓ Utilities, including water, wells, septic and setbacks from property lines
- ✓ Erosion control measures