In general, all new construction including additions requires drainage system improvements including roof drains, footing drains and driveway/parking area drains. Additionally, stormwater flow control may be required. Refer to the Storm Water Flow Control/Detention Design Requirements handout.

General Requirements
- Slope all drain lines at 2% minimum toward the outlet.
- Provide cleanouts or control structures as appropriate.
- All drainage piping and structures are subject to inspection prior to backfilling.
- Roof and footing drains may be combined beyond the lowest point of the footing drain.
- Use sand collars at CB connections to PVC pipe.

Roof Drains
- Number and size shall be in conformance with the Uniform Plumbing Code.
- Downspouts shall be tied into a non-perforated, rigid, smooth-bore pipe, which drains to an approved storm system.
- Pipe shall meet material standards for SDR35 for PVC pipe, N-12 for smooth-bore HDPE pipe.
- Provide cleanouts at the upper end of the system and at each cumulative change of direction in excess of 135 degrees.
- All pipe fittings shall be made of the same material as the straight pipe. Glued joints must use a bonding agent recommended by the pipe manufacturer.

Footing Drains
- Footing drains shall be installed around all foundations which enclose a crawl space, cellar, basement, garage or other building space.
- Drains shall be constructed of perforated pipe installed at the base of the footing.
- Drain pipe shall meet material standards for D2729 for PVC pipe, with the perforations directed downward.
- Granular backfill shall be placed around and above the footing drain to a depth of 2/3 of the height of the wall.
- Filter fabric shall be used to prevent soil particles from entering the footing drain. It is preferable that the fabric be placed between the granular backfill and the native soils.
- Clean-out at upper ends of system.
- The footing drain highline connection to the site drainage piping must be at an elevation that is lower than 12-inches below the bottom of the lowest footing.

Driveway/Parking Area Drains
- Large impervious areas used for parking or maneuvering of vehicles shall be sloped to drain to one or more catch basins.
- The basins shall be tied into the on-site storm drainage system using non-perforated pipe of the same materials.
- At least one catch basin shall have an oil separator to clean the water, oil and silt from the parking and driving surfaces prior to entering the approved storm system.
- In areas where the off-site storm system is inadequate, on-site detention of runoff may be required. (Contact the Development Engineer for more information).
Catch Basin (C.B.)
Depth & Volume are
Minimum Dimensions.
Minimum Volume = 24 gal.

6" & 12" Adjustment Riser

Pipe outflow directly
To approved
Drain system
Or watercourse

4" P.V.C. or P.E.
From roof & footing drains

Catch Basin with Oil Separator