

DRAINAGE

The drainage design for the Boulder Creek Commons development will be prepared in accordance with the City of Boulder's "Design and Construction Standards". The development of the property will maintain the existing drainage patterns on the site. The property will continue to discharge to Dry Creek Ditch No. 2 at the existing outfall point at the northwest corner of the site. A proposed stormwater detention pond at the outfall will reduce developed stormwater discharge rates to at or below existing levels.

In accordance with the City of Boulder's "Design and Construction Standards", water quality measures will be provided by the combination of grass lined swales, directly connected impervious areas and an extended dry basin as a component of the detention pond. Further, temporary erosion control will be implemented during construction in an effort to prevent adverse impacts on downstream properties and drainage facilities.

FLOODPLAIN MITIGATION

A portion of the property is located within a regulatory FEMA floodplain, Zone AE (Base Flood Elevations Determined) for South Boulder Creek as shown on the Flood Insurance Rate Map Number 08013C0555 G effective date 04 October 2002. The affected portion of the property is east of 55th Street. The City of Boulder is currently in the process of developing revised floodplain mapping for South Boulder Creek. The most recent floodplain mapping dated December 2006 show that the majority of the site is in Zone X (500-year floodplain) or not in a floodplain. The areas of Zone AE are expanded to include the areas in immediate proximity to Dry Creek Ditch No. 2 along the western property line and the area east of 55th Street which was included in previous regulatory mapping.

Floodplain mitigation for this project is feasible and can be achieved within the requirements prescribed by the City of Boulder Floodplain Regulations (Chapter 9-3, B.R.C. 1981). Mitigation measures that may be taken include, but not limited to:

- Limiting floodwater depths within the subdivision's roadways to allow for emergency access during the event of a flood.
- Restricting basement construction.
- Flood proofing proposed utility systems.
- Grading for the proposed development will be largely dependent upon the required flood proofing elevations for each of the affected lots. In order to provide flood proofing, portions of the subdivision will require additional fill material to raise the lots.

- Flood proofing all proposed residential structures by raising the finish floor elevations of each of the homes a minimum of 2.0-ft above the base flood elevation.