

Vicinity Map

ZONE ATLAS PAGE B-I3

DRAINAGE INFORMATION

LEGAL: Tract A, Cottonwood Pointe

AREA: 10.79 acres

BENCHMARK: The entire site was surveyed previously by Community Sciences when Phase 1 was constructed. This phase is using the same topographic datum (NAVD 1929) used for the earlier development.

SURVEYOR: CST, Inc. dated June 2011

FLOOD HAZARD: From FEMA Panel 108 (dated 9/26/08), this site is identified as being within Zone 'X' which is an area of 0.2% annual chance flood. The defined floodplain is limited to the Calabacillas Arroyo which abuts the site to the north.

EXISTING CONDITIONS: The phase 1 area of this site was developed from 2002 to 2004. This portion of the site sits above and to the west of the first phase. A storm drain system was installed (see B-13/D2B) along the west side of Phase 1 to pick up flows from this future phase. This storm drain line was constructed to its outfall point in the Calabacillas Arroyo. Designed to accept developed flows from phase 2, it easily carries the existing undeveloped runoff from this same area.

PROPOSED IMPROVEMENTS: The proposed improvements include buildings 28 through 39. An Administrative Amendment was required to revise the original site to enlarge building 39 and modify the outdoor recreational area north of that building. The majority of the phase 2 site remains as previously proposed. This plan proposes only a minor revision to the previously approved plan.

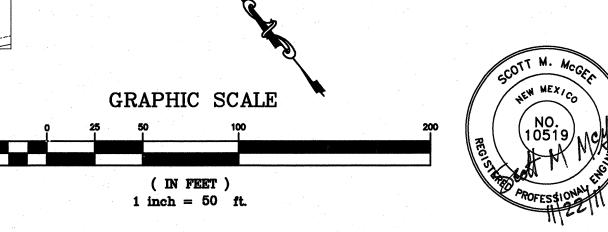
DRAINAGE APPROACH: The proposed drainage plan continues to follow the earlier plan. There are three drainage sub-basins which closely correspond to the previous basin areas. The only minor change affects Basin 201C where building 39 is slightly larger and the outdoor recreation area to the north has been slightly revised.

Basin 201A is the south bank of the Calabacillas Arroyo and remains unchanged. No development is proposed within this basin which contains 4.413 acres with a discharge rate of 9.09 cfs.

Basin 201B also remains unchanged from the earlier approved plan. It is 2.114 acres with a proposed discharge rate of 7.62 cfs. This runoff will be intercepted by two new proposed inlets and an onsite private storm drain extension. This drain ties to an existing storm manhole as previously approved.

Basin 201C will drain as previously proposed. The change in building 39 increases that building footprint from 5,100 sf to 10,500 sf. The previously proposed land treatment for this basin was 20% B, 20% C, and 60% D. Using the area of 8.676 acres, the previous area D was (0.60)(8.676 ac.) = 5.206 acres (226,755 sf). The added 5,400 sf from the larger building footprint increases the type D land area to 232,155 sf (5.33 acres) which equates to 61.4% D. The site discharge based on Zone 1 would then be: Q = [(.186)(2.03) + (.20)(2.87) + (.614)(4.37)](8.676) = 31.5 cfs > 31.25 cfs

The proposed changes to building 39 and the outdoor recreation area to the north will have a negligible impact on the total site runoff from the Phase two area. The previous total of 47.96 cfs will now be 48.21 cfs which will not adversely impact any property downstream.



10/10/2011

REVISED DATE

SHEET

C1.0