

**Agilent – Palo Alto  
CO-1**

*Site Location:*

395 Page Mill Road  
Palo Alto, CA

*Features:*

- Detention basin with native vegetation along banks
- Parking lot vegetated swales
- Roof downspouts draining to landscaping
- Promotes alternative transportation by providing bike racks and lockers, an onsite bus stop, and carpool/vanpool parking
- Structured parking lot (2 levels with top level draining to rock filter bed).



The detention basin, known as “The Swale” by Agilent employees, provides stormwater collection and treatment for the parking areas, visual amenities for employees, and a visual buffer for the neighboring residential community.

*Stormwater Benefits:*

- Reduced impervious surface area
- Natural treatment of runoff
- Reduced volume and velocity of runoff
- Reduced transportation related pollutants
- Reduced directly-connected impervious area (DCIA)



The parking lot is graded to drain into vegetated swales, shown here, and the detention basin.



Storm drains from the parking lot enter the detention basin through drains like this one.



The detention basin has two outlets to protect against localized flooding and to ensure that the basin drains within 72 hours for vector control.



Bike racks and showers encourage employees to bike to work. Additional bike lockers and a bus stop are located at the Page Mill Road entrance.



Agilent encourages employees to carpool by providing designated car/van pool areas. Reducing vehicle trips traveled reduces the amount of pollutants such as hydrocarbons and brake pad dust released to the environment.



Runoff from this parking structure drains to the filter bed, described below. The two-story parking structure allows for roughly twice the number of vehicles for the same area of a typical surface parking lot, while allowing enough room on-site for the detention basin.



The runoff drains from the top of the parking structure to this rock filter bed for treatment and then to the storm drain system via the detention basin.



This rocky swale is used to slow and treat rooftop runoff before draining to the storm drain. A minimum two percent (2%) slope away from the building protects the building foundation from water damage.



Storm drains are clearly labeled with an educational “no dumping” message.



The detention basin collects water from the parking lot. The concrete edging protects the asphalt from water damage while the bumper stops help prevent cars from traveling over the vegetated swales.

**Agilent – Palo Alto  
CO-1 (cont.)**

*Lessons Learned:*

- The irrigation heads originally installed for the retention basin caused some ponding for greater than 72 hours until they were modified to target areas requiring water. The local vector control agency brought mosquito fish for mosquito control while the irrigation challenge was being diagnosed and addressed.
- During the rainy cloudy days, the water in the parking lot catch basins may take longer than 72 hours to drain. Maintenance staff must periodically clean debris from catch basins.
- The detention basin has also served as a useful indicator for irrigation leaks for sprinklers within the parking lot biofilter landscaping. When maintenance staff sees ponded water in the detention basin during a dry spell, they investigate for potential leaks.
- The landscape service provider must carefully control the scheduling of irrigation system to prevent overwatering and water build up in the detention basin.
- Shredded bark was installed initially along the detention basin banks to hold the soils without clogging the system until vegetation became established.
- The site designer highly recommends checking after the first rain to make sure the entire system is working correctly. For the roof downspouts, the rainwater initially started pooling behind the header boards at the bottom of the roof downspouts. Notches cut in the header board ensure proper drainage away from building with a minimum 2% slope.
- Maintenance costs and effort are comparable to that for typical landscaping according to Agilent maintenance staff.

*Municipal Contact:*

**Joe Teresi**  
City of Palo Alto  
(650) 329-2129  
Joe.teresi@cityofpaloalto.org

*Designer Contact:*

**Bill Southard, ASLA**  
DES Architects and Engineers  
(650) 364-6453  
bsouthard@des-ae.com

*Environmental Site Contact:*

**Janice Nakao**  
Agilent Technologies  
(408) 553-7817

*Site Facility Contacts:*

**Joy Curl**  
Agilent Technologies  
(650) 752-5226  
*and*  
**Tom Flores**  
Agilent Technologies  
(650) 752-5409