

**Intel
CO-16**

Site Locations:

2200 Mission College Boulevard
Santa Clara, CA

Features:

- Reserved landscaped parking
- Gravel reserved parking areas allow for infiltration to occur.
- Multi-story buildings and parking garages reduce building footprint

Stormwater Benefits:

- Reduced impervious surface area



A section of a 1996 Site Map shows area in which landscaping was used in a parking area being reserved for future potential growth.



The area indicated in the map (shown at left) has since been converted into these parking spaces that were developed when parking area renovations were required for terrorism safety precautions.

**Intel
CO-16 (cont.)**



This off-site gravel lot is designated for overflow parking and allows infiltration to occur during the rainy season.

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Lessons Learned:

- Reserved landscaped areas can be used as a mitigating tool to help assuage fiscal lender fears when proposing site designs with reduced parking ratios. Although this reserved area was ultimately converted to pavement, temporary benefits occurred while the area was landscaped, and might still be occurring if not for extenuating circumstances.

Opportunities Missed:

- When the parking area was renovated, permeable pavement could have been used for the outlying parking stalls.

**Stanford West
MF-3**

Site Location:

700 Clark Way (off Sand Hill Road)
Palo Alto, CA

Features:

- Apartment development was planned with cul-de-sacs, but redesigned to use a grid system
- Area dedicated as a covered car wash area plumbed to the sanitary sewer
- Detention basin on the east end that also serves as a recreational playing field



Photograph courtesy of Joe Teresi (City of Palo Alto)

This covered car-washing area drains water to the sanitary sewer system. This prevents car wash water, soap, and pollutants from entering storm drains.

Stormwater Benefit:

- Washwater treatment
- Natural treatment of runoff in recreational area
- Reduced velocity of flows discharged to nearby creek
- Transportation-related pollution reduction (grid street system reduces vehicle miles traveled)



Photograph courtesy of Joe Teresi (City of Palo Alto)

A recreational play field also serves as a detention basin for runoff. The detention basin temporarily holds runoff, allowing for settling, infiltration and pollutant removal to occur, such as allowing fine sediments to settle out. The system releases runoff slowly to reduce downstream peak flows.

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Starbucks / Taco Del Mar
CO-17

Site Location:

361-365 California Ave.
Palo Alto, CA

Features:

- Disconnected downspouts drain to pervious area
- Permeable pavers used for front dining area and rear parking area
- Covered dumpster



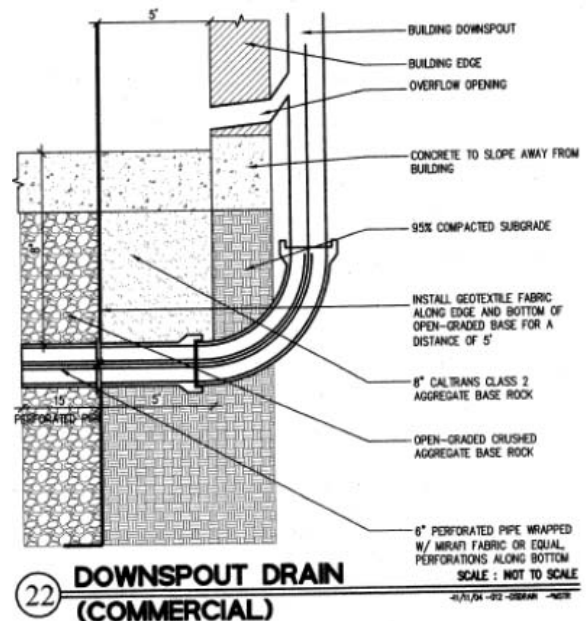
Permeable pavers were installed in the seating plaza in front of the restaurants. Permeable pavers allow storm runoff to infiltrate into the soil and reduce the amount of impervious surface.



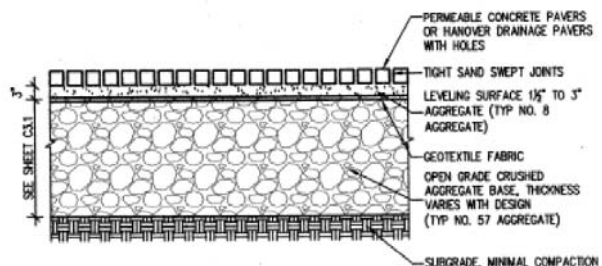
Close-up of permeable pavers.

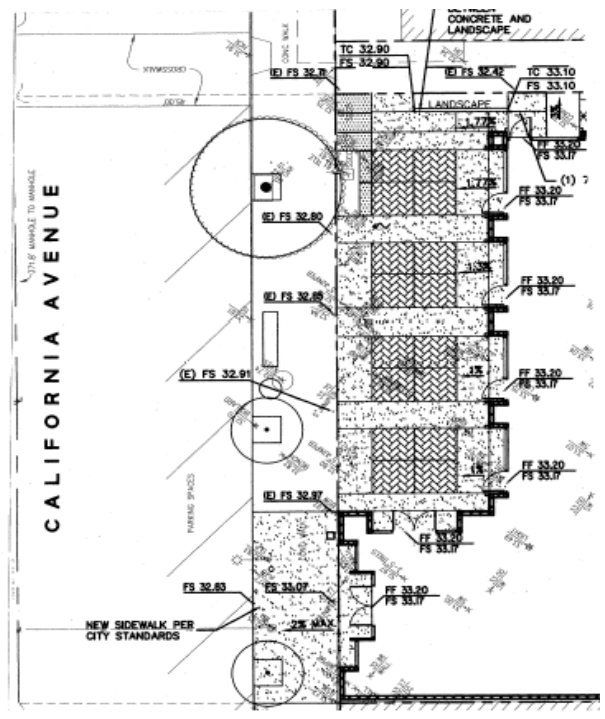
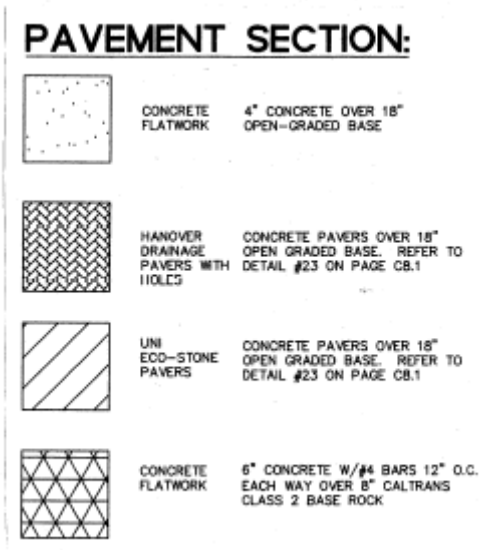
Stormwater Benefits:

- Natural treatment of runoff
- Reduced directly-connected impervious area (DCIA)
- Reduced impervious surface area
- Prevent stormwater from coming into contact with pollutants



The rainwater leaders from the building roof are routed directly into the reservoir of open-graded rock beneath the permeable pavers to allow for further infiltration of site runoff. There is an overflow to the gutter to drain the reservoir during larger storm events.





Site plan of 361 California Avenue



Covered trash enclosure reduces the potential for stormwater to come into contact with pollutants.

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Alum Rock Branch Library
PA-13

Site Location:

3090 Alum Rock Avenue
San Jose, CA

Features:

- Retention Pond
- Vegetated Bioswales
- Water-conserving Irrigation System

Stormwater Benefits:

- Natural treatment of runoff
- Reduced volume and velocity of runoff
- Reduced directly-connected impervious area (DCIA)
- Reduced dry weather flows



Roof runoff is directed to retention pond for natural treatment of stormwater.



Direction of water travel in retention pond



← and ↑
Curb cuts allow parking lot runoff to drain to vegetated bioswale.





Vegetated bioswales at rear of building collect runoff from roof downspouts and walkway.



Vegetated bioswale at front of building collects runoff from surrounding walkways.

Site plan of Alum Rock Branch Library



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**Tully Community Branch Library and Ball Fields
PA-14**

Site Location:

880 Tully Road
San Jose, CA

Features:

- Vegetated Bioswales
- Water-conserving Irrigation System
- Connects with Coyote Creek Trail, Allowing Bicycle and Pedestrian Access

Stormwater Benefits:

- Natural treatment of runoff
- Reduced Volume and Velocity of Runoff
- Reduced Directly-connected Impervious Area (DCIA)
- Reduced Dry Weather Flows



Runoff from surrounding impervious areas flows to vegetated bioswale.



Vegetated bioswale collects runoff from building



Walkway and roof runoff drain to vegetated bioswale



Runoff from parking lot drains to vegetated bioswale



Carex grasses in vegetated bioswale



Vegetated bioswale collects runoff from walkways (above and right)



Site plan of Tully Community Branch Library



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Mayfield (Stanford) Playing Fields
PA-15

Site Location:

2700 El Camino Real
Palo Alto, CA

Stormwater Benefits:

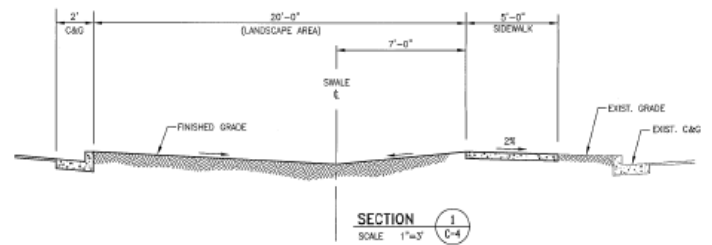
- Natural treatment of runoff
- Reduced impervious surface area

Features:

- Vegetated Swale
- Permeable Pavers
- Stormwater Infiltration System



Close-up of curb cut leading to vegetated bioswale.



Vegetated Bioswale section

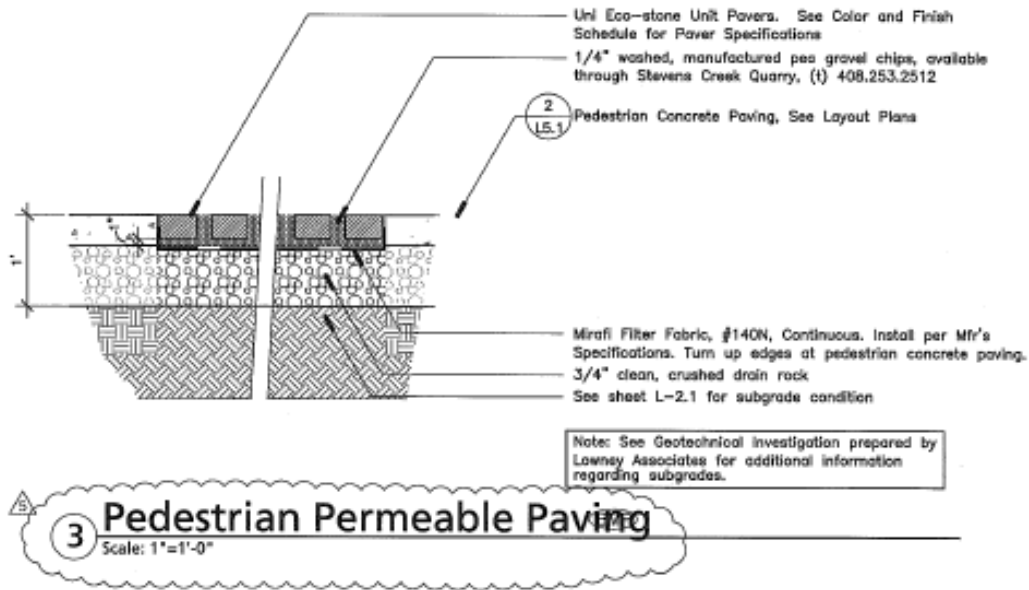
Parking lot runoff is routed through curb cuts into a vegetated bioswale which filters the runoff prior to discharge and promotes infiltration into underlying soils during smaller storms.



Underdrain system under synthetic playing field collects runoff and conveys it to a large, rock-filled sump where it slowly infiltrates into the underling soils. Sump contains an overflow to storm drain to handle runoff from larger storm events.



Permeable pavers allow stormwater to infiltrate into soil and reduce the amount of impervious surface.



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