



January 27, 2011

Mr. Dale Bowyer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Ste. 1400
Oakland, CA 94612

Re: Proposed Special Projects Proposal / LID Treatment Reduction Credits MRP Provision C.3.e.ii. (2)

Dear Mr. Bowyer,

Thank you for the opportunity to comment on the Special Projects Proposal submitted by BASMAA on December 1, 2010. We at HMM fully support all provisions of the proposal, particularly the proposed allowance of tree box-type biofilters and vault-based media filters to fulfill stormwater treatment requirements, and the creation of Special Projects categories as proposed.

HMM is one of the largest and most well established civil engineering firms in Santa Clara County. We have provided civil engineering, surveying, utility trench design, landscape architecture and stormwater compliance services to public and private sector clients for the past 35 years. We have worked in most of the South Bay communities included within the Municipal Regional Permit jurisdictional area, and have particular expertise in land planning and stormwater compliance issues in the City of San Jose. We have participated directly in the formulation of City post-construction stormwater management policies and development review protocols, conducted LID workshops and field tours, and given numerous stormwater conference presentations. We are active participants in various subcommittees and ad-hoc groups of Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and CASQA, and are included on several Qualified Consultants lists, including BASMAA, SCVURPPP and the City of Sunnyvale. The stormwater compliance services we provide to clients include the design of NPDES Permit-compliant drainage systems and post-construction BMP design. We consider ourselves well qualified to speak on behalf of our residential and commercial developer clients, as well as for our fellow design and engineering firms in support of the Special Projects Proposal.

Among the significant issues that cause us to seek a more reasonable middle ground on the LID treatment requirements of Provision C.3.c. are: 1) the predominance of clay soils and high groundwater elevations in the South Bay that restrict the use of infiltration-based treatment controls; 2) the impracticability of storage and reuse solutions on larger development projects due to the limited seasonal rainfall characteristics of the area, and the plumbing and pumping infrastructure requirements of storage and reuse systems; 3) reluctance on the part of local governments to develop adequate public street and park design standards that incorporate LID treatment facilities due to maintenance concerns; and 4) lack of existing or planned regional offsite facilities that could allow compliance under the Alternative Compliance provisions of C.3.

The other, and perhaps more onerous issue as it relates to LID requirements, is the intensification of land uses proposed by the local jurisdictions, in particular the City of San Jose.

Future Land Use Controls

The City of San Jose is moving forward with a General Plan update, Envision 2040, which, when approved later this year, will focus all future growth in identified Village areas, and effectively preclude large scale development in areas not so identified. The Village areas are located primarily along transportation corridors and the downtown area, and were designed in coordination with new policies that emphasize compact, mixed-use development and transit-oriented development. The new land use designations contained in Envision 2040 include Mixed Use Neighborhood, Urban Residential, Transit Residential, Urban Village, Downtown, and Mixed Use Commercial. The residential densities for these designations range from up to 30 units per acre (Mixed Use Neighborhood) to up to 350 units per acre (Downtown). To accommodate this more compact, high density development on smaller parcels, the Floor Area Ratios (FARs) for these designations have been increased from current ratios, with the Downtown designation allowing an FAR of up to 15.0. The increased emphasis on high unit densities and vertical building design in the Villages will certainly reduce the amount of space available to accommodate LID-based drainage systems on future development sites.

From a design and engineering standpoint, tree box filters and vault-based media filters are advantageous on high-density projects with little available open space or landscaping because they allow for the capture and treatment of relatively large tributary drainage areas, have the capacity for internal bypass of higher flows (flows exceeding the required water quality treatment flows), and occupy little (tree box filters) or no (vault-based media filters) land area. Maintenance usually consists of bi-annual inspections and changing of media approximately every two years. These types of media filters are more effective at removing sediment and finer pollutants than the hydrodynamic separator-type devices that have been permitted throughout the Bay area previously, and are readily available from local distributors.

Special Projects Categories

The Special Projects categories identified in the BASMAA proposal would facilitate future development in areas of San Jose that fall under the new higher density General Plan land use designations. The proposed Project Category A (Maximum One Acre, Lot Line-to-Lot Line) would apply to many redevelopment projects on small lots located within the City's Downtown district, as well as some of the small commercial strips located in the older neighborhoods. Project sites such as these typically would have no opportunity to provide LID-based treatment controls other than green roofs, which can be cost-prohibitive for small property owners. Project Category B (Maximum Two Acres, Higher Density) would accommodate a greater variety of projects – residential, commercial and mixed use - on a slightly larger scale, at densities and FARs that are consistent with the majority of the new land use designations. The exclusion of projects that contain surface parking assures that impervious surface area is limited for projects in this category. The proposed criteria of Project Category C (Transit Oriented Development) reflect typical characteristics of projects that would be developed in San Jose's future Transit Residential or Transit Employment Center designations. The City has located these designations in proximity to future BART stations, as well as existing and future light rail stations and bus lines. Project Category D (Retrofit of Existing Development) is important because it addresses a very real engineering constraint on development sites. It would specifically allow the use of vault-based media filters to treat runoff from existing or non-developed portions of



sites where gravity flow to an LID facility cannot be accomplished. Gravity flow plays a large part in the selection of appropriate landscape-based BMPs, so this exception provides a reasonable alternative. The vault-based media filters can be designed to work in situations where existing and proposed surface grades make gravity flow impossible. Project Category E (Street Widening with Additional Lanes) addresses the long-standing problem of including landscape-based treatment controls within street rights-of-way. This category acknowledges the lack of space and allows treatment controls that fit within the constrained space.

In conclusion, we feel that the proposed Special Projects Proposal represents a reasonable compromise that would achieve the Regional Board's objectives for implementing LID in the Bay Area, while providing the flexibility necessary to allow new and redevelopment projects to be constructed in conformance with future land use regulations imposed by the Co-permittees. The Proposal reflects careful consideration of site planning and physical engineering issues associated with new construction and development, and we strongly urge the Regional Board to adopt it without further modification.

Sincerely,

HMH

A handwritten signature in black ink that reads "Mike Campbell". The signature is written in a cursive, flowing style.

Mike Campbell, AICP, CPSWQ
Stormwater Compliance Manager

CC:

