



CITY OF
HAYWARD
HEART OF THE BAY

CITY COUNCIL SUSTAINABILITY COMMITTEE MEETING

Hayward City Hall – Conference Room 2A
777 B Street, Hayward, CA 94541-5007

September 3, 2008
4:30 p.m. – 6:00 p.m.

A G E N D A

- I. Call to Order
- II. Roll Call
- III. Public Comments: *(Note: For matters not otherwise listed on the agenda. The Committee welcomes public comments under this section, but is prohibited by State Law from discussing items not listed on the agenda. Items brought up under this section will be taken under consideration and referred to staff for follow-up as appropriate. Speakers will be limited to 5 minutes each; organizations represented by more than one speaker are limited to 5 minutes per organization. All public comments are limited to this time period on the Agenda.)*
- IV. Approval of Minutes of July 2, 2008
- V. Green Building Ordinance Schedule
Susan Daluddung, Director of Community & Economic Development
- VI. Proposed Hayward Environmentally Friendly Landscape Guidelines and Checklist for Private Development Projects
Michelle Koo, Landscape Architect
- VII. Next Meeting: Wednesday, October 1, 2008

Climate Action Plan Update
Erik Pearson, Senior Planner, and Consultants John Deakin, HDR, and Steve Coyle, Town Green
- VIII. Adjournment



Assistance will be provided to those requiring accommodations for disabilities in compliance with the Americans with Disabilities Act of 1990. Please request the accommodation at least 48 hours in advance of the meeting by contacting Katy Ramirez at 510/583-4234 or by calling the TDD line for those with speech and hearing disabilities at 510/247-3340.

Department of Community and Economic Development

777 B Street, Hayward, CA 94541-5007
Tel: 510/583-4250 Fax: 510/583-3650

CITY COUNCIL SUSTAINABILITY COMMITTEE MEETING
Hayward City Hall – Conference Room 2A
777 B Street, Hayward, CA 94541-5007

July 2, 2008
4:30 p.m. – 6:00 p.m.

MEETING MINUTES

I. Call to Order-4:30 pm

II. Roll Call

Members:

- Michael Sweeney, Mayor
- Olden Henson, Councilmember
- Bill Quirk, Councilmember
- Rodney Loché, Planning Commissioner
- Julie McKillop, Planning Commissioner
- Al Mendall, Planning Commissioner

Staff:

- Fran David, Assistant City Manager
- Susan Daluddung, Community and Economic Development Director
- Bob Bauman, Director of Public Works
- Tiffany Roberts, Planning Intern (Recorder)

Others:

- Doug Grandt, Volunteer and Resident
- Ron Reese, Balch Enterprises, Inc.
- David Stark, Bay East Association of REALTORS®
- Jim Wieder, Hayward Chamber of Commerce

III. Public Comments

David Stark thanked staff for outreach commenting that anything we can do together to encourage home ownership is welcome.

IV. Approval of Minutes of June 4, 2008-Approved noting additional comments by Doug Grandt

V. Green Building Ordinance – Discussion

Discussion of the Green Building Ordinance continued from last month's meeting.

David Rizk provided a brief overview of a matrix which contained recommendations for the municipal green building ordinance.

City Council Member Bill Quirk asked why StopWaste.org's new energy standard was not included. He recommended having maximum energy requirements, possibly 20% above Title 24. He posed the possibility of carbon neutrality, at least for municipal projects. He also recommended placing an emphasis on water efficiency, introducing ideas such as double piping and waterless urinals.

Commissioner McKillop followed up by suggesting a carbon neutral policy.

Commissioner Mendall echoed the statements of Council Member Quirk and added that he did not want to delay the implementation of an ordinance.

Council member Olden added that the language of the ordinance should indicate that there is not a ceiling placed on the requirements of the municipal ordinance. Rather if the City wished to go above and beyond LEED Silver, it may do so. For example, if the City would like to build a LEED Platinum building, nothing in the ordinance would prevent it from doing so.

Council Member Quirk indicated that the language should state that LEED Silver is the minimum requirement for municipal projects.

Mayor Sweeney recommended that the committee accept the municipal recommendations as a minimum and next discuss the recommendations for private new construction.

Commissioner Mendall commented that, for the most part, the recommendations for private new construction are good.

Commissioner Rodney Loché reminded the committee that it should also be looking at incentives.

Discussion ensued about requiring measures which go beyond Title 24 which would require an application to the California Energy Commission.

Mayor Sweeney stated that the committee could move forward with the Green Point Rating system for now and then in future, staff could return with recommendations on carbon neutrality.

Council Member Quirk pointed out that should bear in mind the cost implications of carbon neutrality.

David Rizk commented that this is an evolving process and that the City won't be able to produce a "perfect" ordinance, therefore making it necessary to include in the ordinance language which calls for periodic review in order to ensure that the ordinance remains current.

Mayor Sweeney agreed adding that the City should be looking at ways to make energy efficiency and solar installation as easy as possible citing Berkeley's solar program.

The group agreed that these types of measures could be evaluated in the future.

Commissioner Mendall commented that he liked that in-house verification component of the ordinance stating that it seems practical and straight forward.

Commissioner McKillop questioned the cost to staff in term of time.

David Rizk stated that he estimates approximately 8 hours of additional time will be needed for each project.

Council Member Quirk asked if it makes sense to look for maximum energy conservation from big box stores and warehouses.

Ron Reese indicated that unconditioned structures such as these have some exceptions in terms of Title 24, however their lighting must comply.

Mayor Sweeney asked the group if everyone is in agreement that residential remodels not be required to comply, rather that they only be encouraged. The committee agreed, emphasizing that the more incentives that the City could provide, the better. He stated that the committee seems to be at a consensus on staff's recommendations, language about an annual review should be included in the ordinance, and in the future the committee could look further into greater energy and water efficiency measures. He then recommended that the committee move the ordinance forward to a council work session on September 16th.

- VI. Next Meeting: September 3, 2008 – Climate Action Plan and Bay Friendly Landscaping.
- VII. Adjournment – 6:03 p.m.



CITY OF
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DATE: September 3, 2008

TO: City Council Sustainability Committee

FROM: Director of Community and Economic Development Department

SUBJECT: Proposed Hayward Environmentally Friendly Landscape Guidelines and Checklist for Private Development Projects

RECOMMENDATION

That the Sustainability Committee reviews and comments on this report and attachments.

SUMMARY

Staff is recommending that Hayward ultimately utilize the Stopwaste.org Bay Friendly Landscaping system for private developments, and adopt an ordinance requiring compliance with such system. However, because Stopwaste.org is still developing its system, which is not expected to be in place until next summer, and because Stopwaste.org is advising its member agencies not to adopt mandatory ordinance requirements for private developments at this time, staff is recommending that Hayward adopt the attached Hayward Environmentally Friendly Landscape Guidelines and Checklist for Private Developments (Exhibit B) as guidelines via a resolution, rather than an ordinance, until next summer. Staff believes doing so will provide an interim set of user-friendly standards that incorporate what is anticipated to be in the updated Stopwaste.org guidelines and the State's updated Model Water Efficiency Ordinance, and provide the basis for a subsequent ordinance adoption for next summer that incorporates Stopwaste.org's Bay Friendly Landscaping measures. The attached Guidelines and Checklist are more user-friendly than the current Stopwaste.org set of guidelines, include some measures that are not in the current Bay Friendly scorecard, such as shading requirements, and are structured to be more specific to Hayward.

A matrix is included as Exhibit A that identified project requirements related to the Guidelines and Checklist. In summary, staff is recommending that submittal of the Checklist and incorporation of the checklist items into projects be required for single-family projects that are more prone to erosion in the hillsides, for multi-family projects encompassing new developments or more than 2,500 square feet of additions/remodels, and for commercial projects encompassing more than 1,000 square feet of tenant improvements or 2,500 square feet of landscape and irrigation updates. For other less significant projects, staff is recommending that incorporation of the checklist items only be encouraged.

Staff is recommending that compliance with the recommended measures be mandatory by January 15, 2009, after holding a community meeting to receive feedback from the development community and after conducting a work session with the City Council before a subsequent public hearing. Staff anticipates bringing forth a proposed ordinance to the Committee and Council in spring of next year for consideration.

BACKGROUND

In January of 2008, the City Council adopted a Bay-Friendly Landscape Ordinance for civic projects to promote sustainability and economic and environmental health in the City. Such ordinance is based on Stopwaste.org's model Bay-Friendly Landscape Ordinance and associated scorecard (see scorecard, Exhibit C). That ordinance was developed by Stopwaste.org for civic and commercial projects. The adoption of a companion landscape ordinance for private development projects has been delayed in anticipation of updates from Stopwaste.org of its Guidelines and Checklist, as well as development of a third party rating system for these guidelines and checklist; and from California Department of Water Resources (DWR) of its Model Water Efficient Landscape Ordinance. Stopwaste.org recommends that local agencies wait until summer of 2009 to adopt fully developed and tested Bay-Friendly landscape ordinances for private development projects.

A revised Model Bay-Friendly Landscape Ordinance and new rater program for private development projects are currently being developed by Stopwaste.org, and the estimated completion date for the ordinance and the rater program is spring of 2009. The model ordinance will be ready for local agencies to adopt in the summer of 2009. The California Department of Water Resources is currently working to adopt an updated Model Water Efficient Landscape Ordinance by January 1, 2009, and local agencies, as required by law, will adopt the updated model ordinance or one that is "at least as effective" by January 1, 2010.

Rather than waiting for the release and adoption of Stopwaste.org's revised Model Bay-Friendly Landscape Ordinance and rater program for private development projects, a scorecard for smaller (less than 3 units) residential projects, and an updated Model Water Efficient Landscape Ordinance by DWR, the attached Guidelines and Checklist have been developed to expedite energy efficiency and water conservation through landscape practices by updating the existing City of Hayward landscape checklist.

In 2006, two Bay Area cities, Union City and Albany, adopted Bay-Friendly landscape ordinances for private development projects, and both Cities are experiencing limited success and difficulties due to lack of clarity in the ordinances.

Union City requires proponents for projects subject to planning site development review to complete a Bay-Friendly landscape scorecard as part of the required green building and landscaping documentation (GBLD) submittal when applying for a building permit. The GBLD must then be submitted to "the appropriate certification authority," as stated in Union City's Green Building and Landscaping Practices Ordinance. The identity or the function of "the appropriate certification authority" is not stated in the ordinance. Union City, however, developed a comprehensive handout providing examples of Bay-Friendly landscaping measures

and a plant species list for public.

The City of Albany's private Bay-Friendly landscape provisions are addressed in its Green Building and Bay-Friendly Landscape regulations, which incorporate the Stopwaste.org's current Bay-Friendly Landscape Ordinance provisions. Also, Albany only "encourages" private projects to include green building and Bay-Friendly landscaping elements. There is no reference to project types or scale that would be "encouraged," or requirements for completing scorecards.

DISCUSSION

A holistic approach to landscape design, construction and maintenance must be practiced in order to support the integrity of the San Francisco Bay watershed, conserve energy and water, reduce waste, and protect air quality, wildlife habitats, and the health of the community. The most recognized program in the region that addresses these concerns is Bay-Friendly Landscaping by Stopwaste.org, a program funded by the Alameda County Waste Management Authority and the Alameda County Source Reduction and Recycling Board. Council Member Henson serves as a Director on both boards.

What is Stopwaste.org's Bay Friendly Landscaping Program?

"Bay-Friendly Landscaping" is a whole systems approach to the design, construction, and maintenance of the landscape in order to support the integrity of the San Francisco Bay watershed. The Bay-Friendly Landscaping Guidelines, Checklist and Scorecard for the landscape professional and a Bay-Friendly Gardening Guide for residents have been developed by Stopwaste.org.

The Bay-Friendly Landscape Guidelines, which were revised in January of this year, are based on seven principles for protecting the environment: landscape locally, landscape for less to the landfill, nurture the soil, conserve water, conserve energy, protect water and air quality, and create and protect wildlife habitat. A well-designed and maintained Bay-Friendly landscape can cost less to maintain in the long run by consuming fewer resources.

The Bay-Friendly Program encompasses a number of tools to plan, implement, and evaluate bay-friendly landscapes; and Stopwaste.org is currently developing additional tools to help with implementation of the design practice for private development projects. Current tools are the Scorecard for Commercial & Civic Landscapes, Model Policies & Ordinances, a Site Analysis Form, Maintenance Specifications, and Soil Specifications. The tools in development are a revised Model Bay-Friendly Landscape Ordinance, Rater Verification Manual, Rater Training, and a Scorecard for single-family homes, with the estimated completion date for spring of 2009. The recommended adoption date of the model ordinance is summer of 2009 for local agencies.

Current Status of Stopwaste.org's Bay Friendly Landscape Program:

- The Scorecard has been designed to guide the evaluation of landscape design and construction plans for Stopwaste.org's Bay-Friendly features and to tally current and possible Bay-Friendly landscaping points. Another scorecard is being created for landscapes around single family homes.

- The Site Analysis Form is designed to assist in the review of existing conditions at a project site, and evaluation of opportunities to maximize the benefits of incorporating Bay Friendly Landscaping practices. Such conditions include climate, microclimate, solar exposure and orientation, wind patterns, soil, watershed, flora, fauna, etc.
- The Maintenance Specifications provide maintenance practices to minimize waste, protect air and water quality, conserve energy and water, and protect natural ecosystems.
- The Soil Specifications provide a list of best practices for insuring healthy soil, the cornerstone of a Bay-Friendly landscape.
- The Rater Verification Manual *will* define each Bay-Friendly practice and the submittals required to verify each practice in the commercial and civic landscape scorecard.
- The Rater Training *will* train third party raters of landscapes. The target audience will be landscape professionals and city planners and staff.

California Department of Water Resources: The California Department of Water Resources (DWR) is also currently working to adopt an updated Model Water Efficient Landscape Ordinance, to be released by January 1, 2009. Local agencies are required by law to adopt the updated ordinance, or one that is “at least as effective as” it, by January 1, 2010. Although the revised Stopwaste.org Model Bay-Friendly Landscape Ordinance will incorporate upcoming updates from DWR, the details in the model ordinance are not fully identified at this time.

What is in the Hayward Environmentally Friendly Landscape Guidelines and Checklist?

The Hayward Environmentally Friendly Landscape Guidelines and Checklist (The Guidelines and Checklist, Exhibit B) incorporates the nine required practices for Stopwaste.org’s Bay-Friendly Landscape, and incorporates the updates in the State’s draft Model Water Efficient Landscape Ordinance.

The purpose of the attached Guidelines and Checklist is to provide the public with a comprehensive and concise checklist format that is easy and efficient to follow. The Guidelines and Checklist will ensure optimum sustainable landscape and irrigation practices that will assist the City of Hayward in achieving energy and water conservation, as well as waste and pollution reduction goals.

The Guidelines and Checklist incorporate measures from the City’s Stormwater Management and Urban Runoff Control Ordinance that have significant impacts in landscape design. The Guidelines and Checklist also provide clarity to certain ordinance sections that are undefined, which will eliminate ambiguities. Such added clarifications are landscape guidelines for front yard setback area and street tree requirements for single-family residential projects, shade requirements for parking lot landscaping, parking lot screening, curbs, types of tree bubblers, insulation and security devices for irrigation backflow prevention devices, a tree mitigation option, and updating the street tree standard detail and the document of final acceptance form.

The Guidelines and Checklist will be applied to all private development projects, with more substantial projects required to incorporate checklist measures, and other projects encouraged to do

so. Exhibit A provides a summary of those projects where checklist items are required and those where items are encouraged to be incorporated.

Staff's Recommendation

Staff is recommending that the City adopt the attached Guidelines and Checklist as guidelines via a resolution as an implementing tool to promote sustainable and environmentally friendly landscape practices associated with private development construction in Hayward. Staff is recommending delaying adopting an ordinance until the Bay Friendly documents are released and an associated rating system is developed. It is anticipated that such system will be in place, including a checklist/scorecard, by the summer of next year. Staff will also be working with the Stopwaste.org staff as it revises components of its system, and will encourage incorporation of measures included in the attached Guidelines and Checklist that are not currently in the Bay Friendly Landscape Guidelines.

Should the Committee wish to recommend adoption of an ordinance that encompasses the attached Guidelines and Checklist, staff will of course forward such recommendation to the Council. Adoption of an ordinance will require revisions to the existing provisions in the City's Off-Street Parking Regulations and Zoning Ordinance for each zoning district, in that some of the Guidelines/Checklist measures conflict with such provisions. Given the level of effort in doing so, in anticipation of a revised model ordinance and associated upgrades to Stopwaste.org's Bay Friendly Landscaping system, the expected release of the State's revised Model Water Efficiency Ordinance in January of 2009, and because it is been encouraged by the development community to have consistent standards in place in various jurisdictions, staff recommends against such approach.

FISCAL IMPACT

The fiscal impacts to the City associated with the Guidelines and Checklist are not identified. Additional staff time will be required to review submittals of the newly required Landscape Design Checklist, as well as to prepare and process amendments to existing ordinances and develop new City standard details. City ordinances that will require amending are the *Off-Street Parking Regulations* for parking lot landscaping, *Tree Preservation Ordinance* provisions for optional tree mitigation measures, each zoning district's provisions related to landscape minimum design and performance standards in the *Zoning Ordinance*, and the *Water Efficient Landscape Ordinances*. Staff estimates 200 hours annually will also be required to periodically review and update the Guidelines and Checklist to keep it current and reflective of current laws and trends, which will involve participating in workshops, seminars and discussion sessions with other local agencies and Stopwaste.org. Costs associated with relying on Stopwaste.org's Bay Friendly Landscaping program would be less, since the City would rely on that system being updated by Stopwaste.org staff. Also, a third party rater system being developed, whose utilization may prove to be desirable, which would reduce staff time and associated costs in ensuring scorecard measures are implemented.

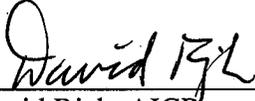
The cost impacts to the development community due to differences between traditional and recycled landscape materials such as recycled wood, organic compost, organic fertilizer, and mulch, are becoming minimal. There also will be significant long-term cost savings due to importing less topsoil by stockpiling more material on site, hauling less material to landfills, and reduced costs for

maintenance and water use. The immeasurable benefits will be healthier soil for plants that will result in enhanced landscaping, improved air quality, and a healthier environment for the community and natural habitats.

NEXT STEPS

Staff will incorporate any direction from the Sustainability Committee and present such recommendation to the City Council and Planning Commission at a joint work session in early November, which would soon be followed by a community meeting, prior to public hearings before the Planning Commission and City Council in December of this year. Such process would occur prior to Stopwaste.org and California Department of Water Resources release of their updated ordinances in 2009.

Prepared by:

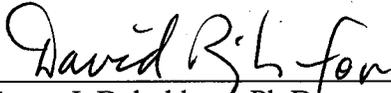


David Rizk, AICP
Planning Manager



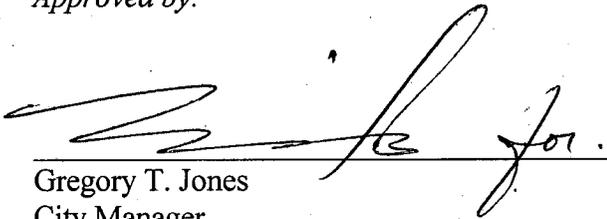
Michelle Koo, RLA, ASLA
Landscape Architect

Recommended by:



Susan J. Daluddung, Ph.D.
Director of Community and Economic Development

Approved by:



Gregory T. Jones
City Manager

Attachments:

- Exhibit A: Summary of Staff Recommendations for Requirements for Private Developments
- Exhibit B: Draft Hayward Environmentally Friendly Landscape Guidelines and Checklist
- Exhibit C: Bay-Friendly Scorecard for Commercial and Civic Landscapes

**SUMMARY OF REQUIREMENTS FOR PRIVATE DEVELOPMENTS
HAYWARD ENVIRONMENTALLY FRIENDLY LANDSCAPE GUIDELINES AND CHECKLIST**

Project Type	Staff's Recommendation	Anticipated Sustainability Committee, PC & CC Meeting Dates	Anticipated Date of Ordinance Adoption that Incorporates StopWaste.org's Bay Friendly Landscaping
Single-Family Residential in Hillside¹: includes new construction, and remodels and additions exceeding 25% expansion over existing building footprint	Checklist submittal is required, and checklist items are to be incorporated into the project	9/3/08 – Introduce the Guidelines and Checklist to Sustainability Committee 11/4/08 – Introduce the Guidelines and Checklist to PC & CC at a joint work session	July of 2009
All other Single-Family Residential	Checklist submittal is not required, but incorporating the checklist items into the project is encouraged	Mid-November – Community meeting 12/4/08 – PC recommends adoption of the Guidelines and Checklist to the CC 12/16/08 – CC adopts the Guidelines and Checklist	
New Multi-Family Residential (3 or more units per building)	Checklist submittal is required, and items are to be incorporated into the project	9/3/08 – Introduce the Guidelines and Checklist to Sustainability Committee	July of 2009
Multi-Family Remodels and Additions	For remodels and additions encompassing less than 2,500 square feet of landscape and irrigation updates, incorporation of checklist	11/4/08 – Introduce the Guidelines and Checklist to PC & CC at a joint work session	

¹Areas in the hills of Hayward, as designated in the City of Hayward Hillside Design and Urban/Wildland Interface Guidelines

Project Type	Staff's Recommendation	Anticipated Sustainability Committee, PC & CC Meeting Dates	Anticipated Date of Ordinance Adoption that Incorporates StopWaste.org's Bay Friendly Landscaping
	items is encouraged	Mid-November – Community meeting 12/4/08 – PC recommends adoption of the Guidelines and Checklist to the CC 12/16/08 – CC adopts the Guidelines and Checklist	
New Commercial and Tenant Improvements	Checklist submittal is required, and items are to be incorporated into the project; For Minor Tenant Improvements encompassing less than 1,000 square feet, incorporation of checklist items is encouraged	9/3/08 – Introduce the Guidelines and Checklist to Sustainability Committee 11/4/08 – Introduce the Guidelines and Checklist to PC & CC at a joint work session	July of 2009
Commercial Remodels and Additions	Checklist submittal is required, and items are to be incorporated into project; For remodels and additions encompassing less than 2,500 square feet of landscape and irrigation updates, incorporation of checklist items is encouraged	Mid-November – Community meeting 12/4/08 – PC recommends adoption of the Guidelines and Checklist to the CC 12/16/08 – CC adopts the Guidelines and Checklist	



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**HAYWARD ENVIRONMENTALLY FRIENDLY LANDSCAPE
GUIDELINES AND CHECKLIST**

September, 2008



✓ *Purpose of Guidelines and Checklist?*

Hayward Environmentally Friendly Landscape Guidelines and Checklist (The Guidelines and Checklist) is provided to assist landscape architects and designers in preparing landscape and irrigation plans that will comply with the City's landscaping standards, guidelines, and submittal requirements. The Guidelines and Checklist incorporates the nine required practices for Bay-Friendly Landscape by StopWaste.Org, and incorporates the updates in Model Water Efficient Landscape Ordinance from California Department of Water Resources. The Guidelines and Checklist serve both as the design guidelines and checklist. Submission of the landscape design checklist depends upon the type and size of the projects. All private development projects would be required to meet various levels of requirements. Private developments consist of new single-family residential and commercial projects, single-family and commercial remodels and additions, new multi-family residential projects and remodels.

The Guidelines and Checklist is derived from the City's Zoning Ordinances which include Water Efficient Landscape, Tree Preservation, Off-Street Parking Regulations, Security; and Traffic Code, Design Review Guidelines, Landscape Beautification Plan, Hillside Design and Urban/Wildland Interface Guidelines, Bay-Friendly Landscape Guidelines*, and upcoming updated Model Water Efficient Landscape Ordinances AB 1881 by the Department of Water Resources. Certain items may not pertain to some projects. Please contact the City Landscape Architect at (510) 583 4208, or go to www.hayward-ca.gov/municipal for additional information.

*Bay-Friendly Landscape Guidelines are established by StopWaste.Org, a program funded by the Alameda County Waste Management Authority and the Alameda County Source Reduction and Recycling Board. Bay-Friendly Scorecard is an integral part of its guidelines; however, it is not required at this time. For more information, go to www.StopWaste.org.

Department of Community and Economic Development

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✓ ***Who can prepare landscape plans?***

Landscape plans shall be prepared by a licensed landscape architect with expertise to prepare plans that comply with water efficient landscape design principles in accordance with State laws and the above mentioned ordinances and guidelines. Landscape plans consist of layout, landscape grading, planting, irrigation and landscape construction detail plans. Different project types will require varying level of completion. All required plans shall be wet stamped to include signature and license number of the landscape architect preparing the plans.

✓ ***When are landscape plans and checklist submitted?***

If planning approval is required for a project (i.e., site plan review, use permit, planned development or single-family hillside projects), *conceptual* landscape and irrigation plans are required when development plans are submitted to the Planning Division. Minimum standards for conceptual landscape and irrigation plans are as follows:

- The conceptual landscape plans shall be prepared on an accurately surveyed plan that matches the architectural, site or civil plan.
- The landscape plan shall indicate the botanical name, common name, size, location and massing of different plant types; provides all existing trees shown on the survey plan; and trees designated to be preserved or removed.
- A comprehensive arborist report prepared by a certified arborist shall be required when any protected tree is proposed to be removed for development. See the Tree Preservation Ordinance (HMC Chapter 10, Article 15) for guidelines in preparing an arborist report.
- The conceptual irrigation plan shall include designation of landscape zones per water use, proposed water meter location, static water pressure (psi) at point of connection, performance standards, and backflow prevention device locations.

Following planning approval, submit *detailed* landscape and irrigation plans prepared by a licensed landscape architect, and completed landscape design checklist and attachments in the Guidelines and Checklist to the Building Division for building permit, unless otherwise specified in the planning approval. Detailed landscape and irrigation plans are also required for all new single family and existing single family homes expanding over 25% of the existing building footprint located within the designated City of Hayward Hillside and Urban/Wildland Interface areas.

The landscape design checklist submittal is required for new multi-family residential with more than 4 units; new commercials; multi-family and commercial remodels and additions with more than 2,500 and more Square Feet of landscape and irrigation system updates. Issuance of a building permit is contingent on approval of landscape plans by the City Landscape Architect.

✓ ***What is required at completion of landscaping?***

A landscape inspection and approval by the City Landscape Architect is required upon completion of landscape installation prior to issuance of a Certificate of Occupancy. An irrigation schedule and Attachment C: Document of Final Acceptance must be submitted to the City Landscape Architect prior to requesting an inspection. The document of final acceptance shall be prepared by the project landscape architect or licensed landscape contractor when permitted by the City Landscape Architect.

LANDSCAPE IMPROVEMENT PLAN GUIDELINES AND CHECKLIST

Please check and circle all applicable items.

- Project Type: Single Family Residential: new / remodels / additions / hillside / flat
 Multi-Family Residential for more than 4 units: new / remodels
 Commercial: new / remodels

Project Size: Total Construction _____ sq. ft. Landscaping _____ sq. ft.

Project Name: _____ Building Permit No.: _____

Project Address: _____ Planning Permit No.: _____

Required Landscape Statement Submittal: address the followings and provide the statement on the plan

- Outdoor spaces, pathways, and edges defined with landscaping.
- Adjacent land uses buffered with landscaping.
- Landscaping complements adjacent landscaping.
- Landscaping complements architectural style and form of building, accentuates building features and entrances, and is compatible with building colors and materials.
- Limit the use of impervious paving types, and use porous paving whenever possible with porous concrete and asphaltic paving, interlocking pavers and pavers.
- Maximize usage of recycled material in all aspects of construction material.
- Parking, loading, and service areas, utilities, solid building surfaces, retaining and masonry walls, and fences are screened with landscaping.
- Plants preserve required vehicular and pedestrian clearances, 13'-6" for trucks and 8'-6" for pedestrians.
- Mature plants will fit space and will not cause damage to pavement or underground utilities.
- Plants shall be selected to preserve sight distance at site entries/exits and internal circulation routes without shearing.
- Deep-rooted plants on slopes for erosion control; jute mesh netting or a comparable erosion control material on slopes 3:1 or steeper or on slopes showing signs of erosion.
- Plants display variations in texture and form, with attention to flowering shrubs and seasonal color.
- For projects located along the arterial streets, street frontage landscaping is consistent with guidelines in ***Landscape Beautification Plan*** (LBP).

Comment: Arterials covered by the LBP consist of Jackson Street, "A" Street, foothill Boulevard, Hesperian Boulevard, Mission Boulevard, Winton Avenue, Harder Road, Tennyson Road, Industrial Boulevard, /Parkway, "B" Street, Second Street, Fairview Avenue, and Hayward Boulevard. Obtain a copy of the guidelines from the Planning Department.

- Projects located in Hayward hills to conform with **Hillside Design Guidelines**.

Comment: The Hayward hills are generally defined as the area east of Mission Blvd and south of "D" Street. Obtain a copy of the guidelines from the Planning Department.

- Projects located at urban/wildland interface must comply with **Urban/Wildland Interface Guidelines**.

Comment: Properties subject to the guidelines are designated by the Hayward Fire Department and typically include sites that abut open space or riparian corridors. Contact the Planning Department for a copy of the guidelines.

Submittal Requirements

Detailed Landscape Improvement Plan (Construction Documents):
please check all applicable items

- Show property lines and street names.
- Provide existing and proposed buildings, structures, retaining walls, fences, above and underground utilities, meters, paved areas, and other site improvements.
- Provide contour lines and/or spot elevations where landscaped areas exceed 10 percent slope as necessary for the proposed finished grade.
- Provide legend summarizing botanical and common name, quantity, size, and spacing of all plant materials.
- Show location of all proposed plant materials.
- Show all existing trees and plant materials to be removed or retained.
- When applicable, recycle minimum 50% of landscape construction and green waste.
- Where applicable, specifications for stockpiling and reapplying site topsoil and/or imported topsoil.
- Specify California native, Mediterranean or other climate adapted plants that require occasional, little or no summer watering for 75% of all non-turf plants.
- Limit using plant species require shearing.
- Do not specify species listed by Cal-IPC (California Invasive Plant Council) as invasive in the San Francisco Bay Area.
- Plants well-suited to microclimate and soil conditions at site, require minimal water once established, are relatively free from pests and diseases, and are generally easy to maintain.*

*Comment: Refer to EBMUD's **Water-Conserving Plants and Landscapes for the Bay Area, and the latest publication from EBMUD Plants and Landscapes for Summer-Dry Climate of the San Francisco Bay Region, or Bob Perry's Trees and Shrubs for Dry California Landscapes for recommended water-conserving plants.***

- Plants with similar water needs to be grouped together (See example, Attachment D).

- ❑ Turf should not be proposed on slopes exceeding 10 percent or areas narrower than 8 feet.
- ❑ Limit the use of turf to 25 percent of the total landscaping area for all projects including single family residential homes unless used for sport or recreational function.
- ❑ Where turf is proposed, a drought tolerant Tall Fescue or variety with similar water requirement should be specified.
- ❑ Provide Tree Mitigation Summary Chart: All removed protected trees must be mitigated per Tree Preservation Ordinance (HMC Chapter 10, Article 15). The summary chart must provide the method of meeting the mitigation goal. Tree mitigation method includes, but not limited, to transplanting existing specimen trees, up-sizing required trees, and replacement above and beyond required trees.
- ❑ Details and specifications for tree staking, soil preparation, and other planting work. City Standard Street Tree Staking Detail SD-122 is required for street tree planting and is recommended for other trees on the project.
- ❑ Promote integrated and/or organic pest control practice for weed control.
- ❑ Jute mesh netting or a comparable erosion control material on slopes 3:1 or steeper or on slopes showing signs of erosion.
- ❑ Minimum three-inches of recycled chipped wood mulch in Dark Brown color or greenwaste in all planting areas except in turf areas.
- ❑ Replace nitrified soil conditioner and commercial fertilizer with minimum 9 cubic yards of organic compost per 1,000 square feet (1:4 ratios) of all planting areas and rototill thoroughly into minimum top 9 inches of soil.
- ❑ Prepare planting holes to be two times of a root ball. Backfill mix shall be 1 part organic compost and 2 parts native soil.
- ❑ Trees shall be planted a minimum of 5 feet from sewer, water, gas, cable, and electrical lateral services lines as well as from any paving and structures. Trees shall also be located a minimum of 7 feet from utility boxes, 15 feet from a light pole, and a minimum of 30 feet from the face of a traffic signal, or as otherwise specified by the City. Provide root barriers when a tree is located within 7 feet of a structure or edge of paving.
- ❑ Root barriers shall be installed along the edge of structure or paving or curb.
- ❑ Minimum planting area shall be five feet measuring from back of the curb to back of the curb, or from any hard surfaces to all directions.
- ❑ **Soils Report** (if required by City Landscape Architect) – Report shall be prepared by a qualified soil and plant laboratory. Recommendations for soil amendment with organic compost and organic fertilizers shall be indicated on planting plan.
- ❑ **Document of Final Acceptance** – See Attachment C. Submit Document of Final Acceptance when landscaping is completed, prior to issuance of a Certificate of Occupancy.
- ❑ **Setbacks** – Required front, side street, side and rear yards to be fully landscaped and irrigated except for permitted paved areas and other approved encroachments. When landscape setback areas are used for Stormwater Treatment such as bio-swale, the setback areas shall be increased to meet required screen tree planting.

Comment: Confirm with property owner/applicant or Planning Division regarding required setbacks for development. The use of decorative rocks, decomposed granite, or wood mulch for the sole purpose of landscaping is not permitted.

- **Street Trees** – Minimum one 24"-box tree shall be provided for every 20 to 40 lineal feet of street frontage for all commercial and multi-family residential projects depending on tree species and as directed by City Landscape Architect. Minimum of one 15 gallon tree shall be planted within the required front and side yard setback for every 50 feet or fraction thereof frontage for all single family residential projects regardless of construction type: new, additions or remodels. Any missing, dead, or dying street trees shall be replaced with 15 gallon trees for all single family residential projects regardless of construction type: new, additions or remodels. Mitigating street trees for non-single family residential project, see Tree Preservation Ordinance.

Comment: Refer to City's List of Recommended Street Trees. City Landscape Architect may also specify a tree for certain streets: _____

- **Parking Lot Landscaping** – All parking lot shade trees shall be medium to large size tree types. A parking lot shade tree shall be provided at every six spaces, or provide 50% shades to total paved areas including driving aisles and/or driveways in 15 years. All parking rows shall be capped with landscape islands. The end capped landscape islands shall have minimum two trees. Shade trees can be planted in finger islands, or continuous landscape medians. Minimum tree size shall be 15-gallon. All landscaping shall be completed with trees shrub and groundcover planting. Alternative shade structure such as carports or solar panel roofs or trellis can be used for providing minimum 50% shading of entire parking lot including parking aisles and/or driveways. Continuous planting islands are encouraged to allow for multiple tree plantings and increased rootable soil volume. Combining a row of compact car parking spaces with a row of standard car parking spaces is encouraged to create central landscape medians. The landscape medians can incorporate vehicle overhangs into landscape areas to create deeper landscape areas.
- **Tree Wells in Parking Lot** – Tree well design may be allowed when adequate rootable soil volume (min. 85 cubic feet) is incorporated into the tree well planting.
- **Soil Volume** – Tree wells in parking lots should be excavated to a depth of 3 feet or greater before being backfilled. The use of structural soil mixes is encouraged to promote root growth and to reduce the potential for root invasion into parking lot paving especially where irregular tree wells are proposed.
- **Parking Lot Screening** – parking areas screened from neighboring residents, businesses, or street with low shrubs, and/or walls; maximum 30 – 36 inches high per City's Security Ordinance; shrubs will create a continuous 30 – 36 inches high screen at mature growth. The height is measured from the top of the curb.
- **Parking Lot Lighting** – Light standards no greater than 16 feet in height are strongly encouraged to minimize conflicts with required shade tree locations or growth.
- **Masonry Walls and Fences** – buffered with shrubs or vines where facing a street or driveway.
- **Parcels Abutting BART Tracks (or within 500 feet and in direct view of BART tracks)** – 10' wide landscape strip provided along property line, with minimum one 15-gallon tree every 20 lineal feet.
- **Commercial or Industrial Use Abutting Residential** – minimum one 15-gallon tree provide for every 20 lineal feet within required side or rear yards.
- **Curbs** – landscape areas adjoining driveways and/or parking areas separated by 6" high Class "B" Portland Cement concrete curb unless flush curb or slotted curb are proposed for Stormwater Treatment and approved by the City staff. Cobblestones shall be placed behind each slotted curb to prevent soil erosion. Refer to City of Hayward Standard Details for Standard Sidewalk, Curb and Gutter, Island Curb and Curb Ramp Sections SD-108.
- **Drive-in Establishments** (e.g., service stations, car washes, fast-food restaurants, etc.) – contact Planning Division for specific landscaping standards.

- Security** – landscaping will not obstruct building or parking lot light fixtures, address signs, building entrances, and windows.
- Sight Distance** – for corner lots, shrubs kept to maximum 3 feet high (measured from gutter line) and tree branches kept to minimum 8 feet above the grade at the center of the intersection. (Not applicable to intersections controlled by signs or signals.)

Other Landscaping Requirements (e.g. conditions of approval for planning permit):

- _____
- _____
- _____

Detailed Irrigation Improvement Plan (Construction Documents):
 please check all applicable items

- A separate water meter is required for projects with 5,000 Square Feet or more of irrigated landscaped area.
- Recycled or re-circulating water for water features and irrigation is encouraged.
- Submit Landscape Water Use Statement** – See Attachment A.
- Submit Irrigation Schedule** – See Attachment B. Submit Schedule when landscaping is completed, prior to issuance of Certificate of Occupancy.
- Estimated Landscape Water Use (ELWU) does not exceed Landscape Water Allowance (LWA). See Attachment A.
- Layout of the irrigation system, (i.e. water meter, backflow prevention device, pressure regulator, automatic controller, main and lateral lines, valves, sprinklers, bubblers, drip emitters, quick couplers, and filters where applicable.
- Legend summarizing the manufacturer name, model number, and size of all components of the irrigation system.
- Static water pressure (psi) at the point of connection. (Water pressure at City main available from Utilities Administration, 583-4727.)
- Flow rate (gallons per minute) and design operating pressure (psi) for each valve; and precipitation rate (inches per hour) for valves with sprinklers.
- Installation details for irrigation components.
- Automatic controller shall be equipped with multiple programs and repeat cycle capabilities with a flexible calendar program.
- Adopt Smart Water Application Technology and irrigation equipment including, but not limited to, controllers, moisture sensors, emission devices and valves.
- On slopes over 25 percent, or 4:1 grade, irrigation system shall consist of drip emitters, bubblers or sprinklers with maximum precipitation rate of 0.85 inches per hour.
- Each valve shall irrigate an area with similar site, slope, and soil conditions and plants with similar watering needs.
- Turf and non-turf areas shall be irrigated on separate valves.

- Drip emitters and sprinklers shall be on separate valves.
- Drip emitters or two flood or pop-up type bubbler are provided for each tree; bubblers shall not exceed 1.5 gallons per minute per device. Bubblers for trees shall be on separate valve, unless otherwise permitted by City Landscape Architect. Bubblers are not to be placed inside of aeration tubes.
- Two aeration tubes per each tree are required: the tube shall be 30 inches long and 4 inches in diameter PVC perforated drainpipe with slotted cover, and drain rocks shall be filled in and around the pipe.
- Sprinklers shall have matched precipitation rate on each valve.
- Drip or subsurface irrigation is to be specified for planting including turf area within 24" of hard surface.
- Check valves are to be specified where low-head drainage may occur due to elevation differences.
- Pressure compensating valves and sprinklers are specified where significant variation in water pressure could occur.
- Sprinklers spaced at maximum 1.0 times radius of head for square and maximum 1.2 times radius of head for triangular spacing.
- Rain shut-off device specified.
- Pressure regulator provided where static water pressure exceeds maximum recommended operating pressure.
- All irrigation lines to be underground, including drip systems, except for temporary installations.
- Lateral (non-pressure) irrigation lines are to be 12" minimum below grade. Main (pressure) irrigation lines are to be 18" below grade, minimum, and 24" under drivable surfaces. All lines under pavement must be sleeved.
- Backflow prevention device shall be mounted on a concrete pad and provided with a strong box type enclosure painted in black or dark green with a lock, and a polar blanket type freeze protection.

----- end of the checklist -----

Tree Preservation

- See Tree Preservation Ordinance (HMC Chapter 10, Article 15).
- All trees and large shrubs on the site should be shown on a salvage/demolition plan. Trees to be preserved, trimmed, or removed must be indicated on the plan. Trees in good health that are proposed to be removed shall be replaced with a tree of equal size and value.
- When tree mitigation goals can't be achieved through allowed tree mitigation method as described in Tree Preservation Ordinance, cash mitigation is recommended as an option to a designated City tree fund.
- A minimum replacement tree size shall be 36"-box tree except for single family residential homes and exceptions as stated in the ordinance. A minimum replacement tree size shall be 24"-box tree for a single family home.

Comment: Indicate location, trunk diameter, species, and approximate dripline of trees. Retain significant trees and native vegetation that are in good condition, and avoid grading and paving within the dripline of the trees. The City Landscape Architect may require an arborist report.

- Tree Protection measures shall be noted on the grading, site, and landscaping plans, if applicable. See below for recommended minimum tree protection measures.
- A separate tree removal permit must be obtained in person prior to removing any tree designated as protected per Tree Preservation Ordinance; the permit must be signed by the City Landscape Architect.

Comment: Replacement trees are typically required for trees authorized for removal, which will be specified by City Landscape Architect based on condition, size, species, and location of tree(s) to be removed. Show required replacement trees on planting plan.

TREE PROTECTION NOTES

1. Tree branches interfering with construction equipment shall be properly pruned **prior** to commencement of construction. Pruning shall be as approved by the City and shall comply with City approved practices.
2. A protective fence shall be placed at the dripline of the existing trees during the entire construction period. No work shall occur within the dripline except under the direct supervision of a certified arborist approved by the City.
3. Soil compaction and grading shall be avoided within the dripline of the trees. Maintain a positive drainage away from tree trunk. Irrigation shall be avoided under native oak trees.
4. No storage of materials or equipment shall occur within 25 feet of the dripline of trees.
5. All roots 1" or larger that must be severed shall be cut manually to produce a clean cut and treated with a tree sealant. Boring, rather than trenching shall be required where it is unavoidable for piping to cross through the dripline of a tree.
6. Contractor shall be responsible for providing comparable replacement trees for any existing trees that are found by the City to be irreparably damaged due to construction activity.

STREET TREE PLANTING SPECIFICATIONS

1. Refer to City of Hayward Standard Details for Street Tree Planting SD-122.
2. Tree shall be healthy, disease and insect-free, well-rooted, and properly trained with a straight trunk that can stand upright without support. Tree shall exhibit a central leader, or a main branch that can be trained as a central leader. Branches shall be well-developed and shall be evenly and radially distributed around the trunk. Root ball shall not exhibit kinked or circling roots. After planting, no roots shall be left exposed.
3. Tree shall comply with federal and state laws requiring inspection for plant diseases and pest infestation. Clearance from the county agricultural commissioner, as required by law, shall be obtained before planting trees delivered from outside the county.
4. Prior to planting tree, determine the location of existing or future underground utilities. Locate the tree a minimum of 5 feet from lateral service lines and driveways. Locate the tree a minimum of 15 feet from light pole, and a minimum of 30 feet from the face of a traffic signal, or as otherwise specified by the City.
5. Tree pit shall be tested for proper drainage prior to planting tree. Fill pit with water. If water remains after a 24-hour period, auger three (3) 4-inch diameter by 3-foot deep holes at the bottom of the tree pit. Backfill with drain rock.
6. Set tree in an upright and plumb position. As much as possible, tree shall be positioned such that dominant branches are parallel to the roadway and are oriented away from potential conflicts.
7. If required by the City, a pressure-compensating bubbler, or drip emitters, shall be provided to each tree.
8. Depending on the planter strip width, or the tree well size and the tree species being planted, a 24 inch deep root-barrier may be required by the City to be placed between the root-ball and the curb and/or sidewalk. Length of strip barrier or size of box will be specified by the City.
9. Stakes are to be removed when the tree trunk diameter meets or exceeds the diameter of the stake.

ATTACHMENT A LANDSCAPE WATER USE STATEMENT

General Instructions:

This statement shall be submitted with the planting and irrigation plans and is the basis for achieving a water efficient landscape design. Part One should generally be completed before preparing the planting plan. Part Two should be completed after preparing a preliminary planting plan. The Landscape Water Allowance (LWA) calculated in Part One shall not exceed the Estimated Landscape Water Use (ELWU) calculated in Part Two.

For design purposes, the LWA establishes an "annual water budget" for the landscaped area within a project. It is based on evapotranspiration data (ET) for the Hayward area and the total square footage of irrigated landscaped area.

The ELWU is determined from the planting and irrigation plans for a project and provides an estimate of the water annually needed to keep the landscaping healthy and attractive.

A sample Landscape Water Use Statement for a hypothetical project is attached for illustration.

Preparing landscaping plans that do not exceed the LWA or "annual water budget" requires an emphasis on water-conserving plants, although a modest amount of turf or other non-drought tolerant plants will still be possible. Following are suggestions for modifying the planting and irrigation plans to reduce the landscaping water use for a project, if found to be necessary:

- Group plants with similar water needs, thereby allowing for a more efficient irrigation design.
- Reduce the amount of turf or other non-drought tolerant plants. Concentrate these plants in highly visible areas or areas targeted for pedestrian or recreational activities.
- On less visible and more remote areas of a site, specify extra-drought tolerant plants that can survive with minimal water after two years. Refer to EBMUD's *Plants and Landscapes for Summer-Dry Climates of the San Francisco Bay Region* for suggestions.
- Where appropriate, change spray sprinklers to stream sprinklers, bubblers, or drip emitters to improve irrigation efficiency.
- In narrow planter strips (less than 8 feet wide), use drip or subsurface irrigation and do not specify turf.

Specific Instructions:

Part ONE

Box A- Enter the total square footage of irrigated landscaped area within the project.

Box B- Calculate the Landscape Water Allowance (LWA) for a project by multiplying the number in Box A by 20.8.

Part TWO

First, designate "landscape zones" on the preliminary planting plan. Each landscape zone should consist of plants with similar water needs, area with similar microclimate (i.e., slope exposure, wind, etc.) and soil conditions, and areas that will be similarly irrigated. A landscape zone can consist of an area served by one or several valves.

Next, complete the table in Part TWO as follows:

- Landscape Zone** Enter symbol corresponding to the designation on the planting plan.
- Area (LZ)** Enter square footage of the landscape zone.
- Plant Factor (PF)** Enter the PF from Table A below that most closely describes the type of plants in the landscape zone.
- Irrigation Efficiency (IE)** Enter the IE from Table B below that describes the predominate type of irrigation in the landscape zone.
- ELWU** Calculate the Estimated Landscape Water Use (gallons per year) for each landscape zone using the following formula:

$$ELWU = \frac{LZ \times PF \times 26}{IE}$$

- Totals**
 - a) Total the square footage of all landscape zones, which should equal the total irrigated landscaped area shown in Part One, Box A.
 - b) Total the ELWU for all landscape zones, which shall not exceed the LWA shown in Part One, Box B.

TABLE A - Plant Factors		TABLE B - Irrigation Efficiency	
<i>Plant Type</i>	<i>PF</i>	<i>Irrigation Type</i>	<i>IE</i>
Fescue Turf	0.7	Bubblers	0.85
Non- Drought Tolerant Plants	0.7	Drip Emitters	0.85
Water-Conserving Plants	0.5	Stream Sprinklers (in planter strips 8 feet or wider)	0.75
Extra Drought Tolerant Plants	0.2	Spray Sprinklers (in planter strips 8 feet or wider)	0.625
		Drip Emitters or Subsurface (in planter strips less than 8 feet wide)	0.85

EXAMPLE

City of Hayward

LANDSCAPE WATER USE STATEMENT

Project Name: Fashion Elite Commercial Building

Project Address: 21215 Main Street
Hayward, CA 94541

Prepared by:

Creative Landscape Designs

CLA: #1956

Name

License or Cert. No. (if applicable)

195 Garden Lane

(510) 786-5678

Address

Telephone Number

Hayward, CA 94541

July 15, 1992

Date

PART ONE Landscape Water Allowance

Total Irrigated Landscaped Area
(square feet)

Box A

8,873

X 20.8

Landscaped Water Allowance
(Gallons per Year)

Box B

184,558

PART TWO Estimated Landscape Water Use

*ELWU = $\frac{LZ \times PF \times 26}{IE}$

Landscape Zone	Area (LZ) (square feet)	Plant Factor (PF)	Irrigation Efficiency (IE)	ELWU (Gallons/Year)
A	3,113	0.2	0.85	19,044
B	1,943	0.5	0.85	29,716
C	2,592	0.5	0.75	44,928
D	1,112	0.7	0.625	32,381
E	113	0.7	0.625	3,291
TOTAL	8,873			129,360

**LANDSCAPE WATER USE
STATEMENT**

Project Name: _____

Project Address: _____

Prepared by:

Name

License or Cert. No. (if applicable)

Address

Telephone Number

Date

PART ONE *Landscape Water Allowance*

Total Irrigated Landscaped Area
(square feet)

Box A

x 20.8

Landscape Water Allowance
(Gallons per Year)

Box B

PART TWO *Estimated Landscape Water Use*

*ELWU = $\frac{LZ \times PF \times 26}{IE}$

Landscape Zone	Area (LZ) (square feet)	Plant Factor (PF)	Irrigation Efficiency (IE)	ELWU (Gallons/Year)
TOTAL				

ATTACHMENT B IRRIGATION SCHEDULE

General Instructions:

A monthly irrigation schedule shall be prepared to cover the initial 90-day plant establishment period and the following one-year period. The irrigation schedule shall be prepared by a landscape architect or designer, an irrigation designer, or a licensed landscape contractor. Attached is a suggested form for the irrigation schedule. The preparer may use this form or follow another appropriate format.

The irrigation schedule shall rely on the Estimated Landscape Water Use (ELWU) that was calculated for the project during the preparation of the landscaping plans. The schedule should also rely on monthly reference evapotranspiration (ET) data for the Hayward area, which is provided below. Once established, Tall Fescue turf can be maintained in an attractive manner at approximately 70 percent of the ET rate under normal weather conditions. Water-conserving plants typically need 50 percent or less of the ET under normal weather conditions. The amount of water applied for valve should also be adjusted for irrigation efficiency, local rainfall, specific site conditions, (e.g., exposure, slope, etc.) depths of root zone, and soil conditions, (e.g., water holding capacity, and infiltration rate). Ultimately, the amount and frequency of irrigation will need to be monitored regularly to adjust for plant growth, climatic changes, and site conditions.

For valves with overhead spray or stream sprinklers, set valves to operate between 9 p.m. and 8 a.m. to reduce water loss from wind and evaporation. Early morning irrigation is recommended for turf and ground cover. On slopes and soils with slow infiltration rates, program valves for multiple repeat cycles to reduce run-off.

Estimated Monthly ET for Hayward Area* (inches per year)												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann ET.
1.5	1.5	2.8	3.9	5.1	5.3	6.0	5.5	4.8	3.1	1.4	0.9	41.8

- Based on historical data, extrapolated from 12-month normal year ET maps and U.C. publication 21246.

SPECIFIC INSTRUCTIONS:

- A. **Valve or – Station Number** Shall correspond to irrigation plan.
- B. **Plant Type-** *Indicate either:*
T - Trees Only
WC - Water-conserving trees, shrubs, and/or groundcover
ND - Non-drought tolerant trees, shrubs, and/or groundcover
GC - Groundcover only
L - Turf
- C. **Irrigation Type-** *Indicate either:*
SP - Spray Sprinklers
ST - Stream Sprinkler
B - Bubblers
D - Drip Emitters
- D. **Flow Rate-** Indicate total gallons per minute or hour flowing through Valve during normal operation (available on irrigation plan).
- E. **Precipitation-Rate** For valves with spray or stream sprinklers *only*, indicate the average precipitation rate in inches per hours (available on irrigation plan, from irrigation manufacturer, or through field test.)
- F. **Month-** Begin irrigation schedule with the month that landscaping work is completed.
- G. **Run Time-** Indicate total minutes per day valve will be operating.
- H. **Number of-Day/Week** Indicate number of days per week valve will be scheduled to operate.



CITY OF HAYWARD
ATTACHMENT C
DOCUMENT OF FINAL ACCEPTANCE

Project Name: _____

Project Address: _____

Building Permit No. _____ Planning Permit No.: _____

I/We hereby certify the following:

1. The landscape work for the above project has been completed in full compliance to the City approved planting and irrigation plans and specifications;
- | | |
|---|---|
| <input type="checkbox"/> Soil Amendment/Organic Compost | <input type="checkbox"/> Staking of Trees: 2 sets of rubber ties & horizontal bracing |
| <input type="checkbox"/> 3" deep Bark Mulch: recycled | <input type="checkbox"/> Irrigation Head Review |
| <input type="checkbox"/> Organic Fertilizer | <input type="checkbox"/> Irrigation Coverage |
| <input type="checkbox"/> Quality of Plant Material | <input type="checkbox"/> Water Pattern |
| <input checked="" type="checkbox"/> Spacing of Plant Material | <input type="checkbox"/> Required Revision or Substitutions (explain in comments) |

_____ Date of Final Acceptance for Conformance to Prepared Plans.

2. The automatic controller has been set according to the approved irrigation schedule for the plant establishment period;
3. The irrigation system has been adjusted to maximize irrigation and minimize overspray and runoff; and
4. A copy of the irrigation schedule had been given to the property owner.

COMMENTS: _____

This documentation was prepared by: (check whichever applies)

- Landscape Architect (for projects having plans prepared by a Licensed Landscape Architect).
- Licensed Landscape Contractor or Single-Family Homeowner not on hillside (for projects where no Licensed Landscape Architect is involved).

Signature: _____

Date: _____

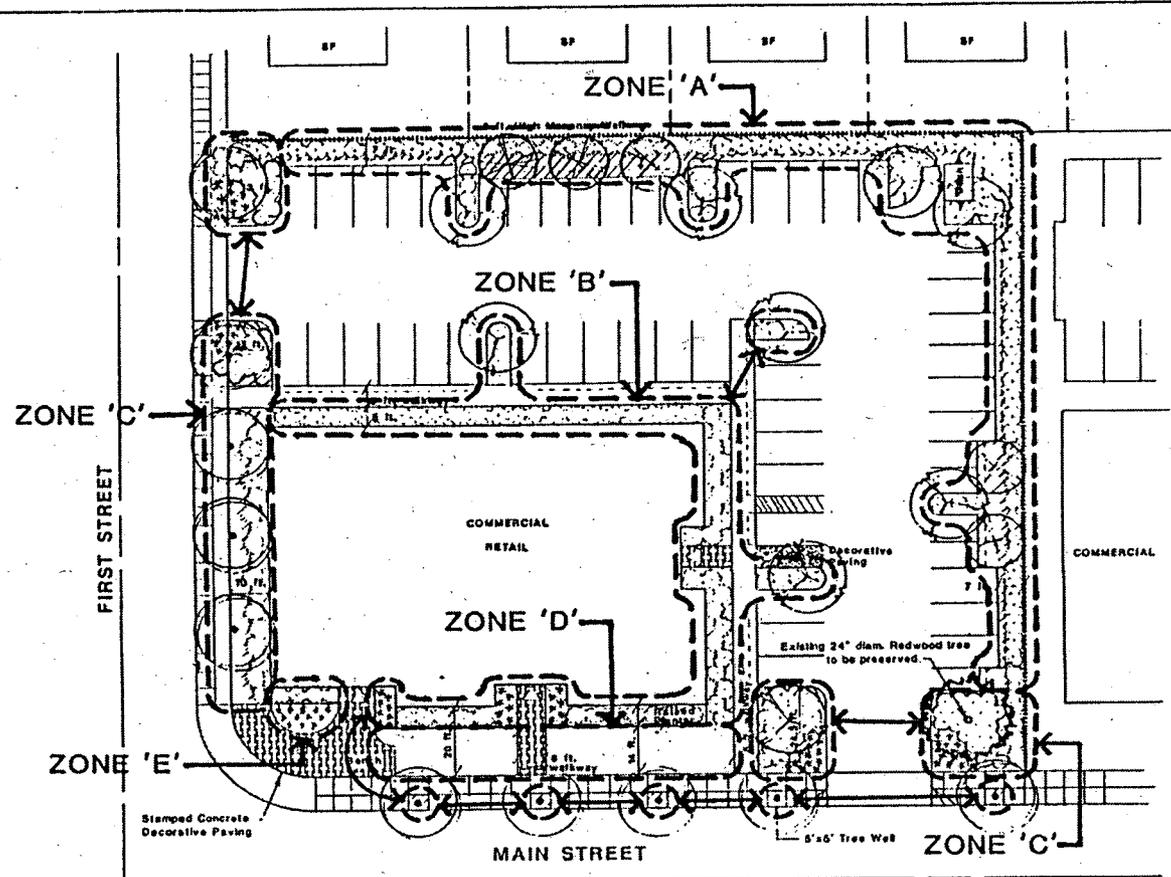
Address: _____

Phone: _____

License No.

PLANT PALETTE

- STREET TREES (24" Dia):**
- Platanus occidentalis 'Yarwood'/ Sycamore (Main Street)
 - Pyrus calleryana 'Aristocral'/ Aristocral Pear (First Street)
- PARKING LOT TREES (15 gallon):**
- Fraxinus 'Moraine'/Moraine Ash
 - Lagerstroemia x. 'Tuscarora'/Crape Myrtle
- MEDIUM SHRUBS (5 gallon):**
- Abelia grandiflora/Glossy Abelia
 - Escallonia exoniensis 'Frades'/ Escallonia
 - Photinia fraseri/Fraser Photinia
 - Viburnum suspensum/ Sandankwa Viburnum
 - Xylosma congestum/Shiny Xylosma
- LOW FOUNDATION SHRUBS (5 gallon):**
- Cistus hybridus/White Flockrose
 - Pittosporum tobira 'Wheeler's Dwarf'/Dwarf Tobia
 - Thymifolius indica 'Clara'/ India Hawthorn
- FLOWERING ACCENT SHRUBS (1 gallon):**
- Asperanthus africanus 'Queen Anne'/Lily-of-the-Nile
 - Heimerocallis hybrids/Daylily
 - Salvia leucantha/Mexican Sage
- GROUND COVER:**
- Casaria Mitsuwa Yellow/Gozania (Ilois, 12" O.C.)
 - Ceanothus gloriosus 'Anchor Bay'/ Point Reyes Ceanothus
- TURF:** (Drought-tolerant Fescue blend)



EXAMPLE: Landscape Water Use Statement

Landscape Zones:	
"A"	- Extra-drought tolerant plants with drip emitters
"B"	- Water-conserving plants with bubblers
"C"	- Water-conserving plants with stream sprinklers
"D"	- Fescue turf with spray sprinklers
"E"	- Non-drought tolerant plants with spray sprinklers

OWNER:
Fashion Elite
29937 Farmingdale Lane
Newberg, MO 67582
Phone Number: 722/516-9999

APPLICANT:
Same as Owner

LANDSCAPE ARCHITECT:
Creative Landscape Designs, Inc.
195 Garden Lane
Hayward, CA 94541
Phone Number: 415/786-5678

CONTACT PERSON:
Fred Church
Project Manager

Minimum Scale 1" = 20'

CONCEPTUAL PLANTING PLAN

Commercial Building for Fashion Elite

21215 Main St.
Hayward, CA

Date: _____
Rev: _____

Bay-Friendly Scorecard for Commercial & Civic Landscapes



This scorecard tracks Bay-Friendly features incorporated into the design and construction of new landscapes. The recommended minimum requirements for a Bay-Friendly Landscape are: earn a total of 60 points or more and complete the 9 required practices indicated by the red "R" in the columns labeled "Possible Points".

Date:

Current Point Total:

Enter Project Name Here		Points Achieved	Landscape Locally	Less to Landfill	Nurture the Soil	Conserve Water	Conserve Energy	Water and Air Quality	Create Wildlife Habitat
A. Site Planning			Possible Points						
1. Select and evaluate the site carefully									
<input type="checkbox"/>	a. Submit the completed Bay-Friendly Site Analysis form before 100% design development documents	0	5						
<input type="checkbox"/>	b. The site is located within an urban growth boundary and avoids environmentally sensitive sites	0	3						
<input type="checkbox"/>	c. The site development results in the clean up of a contaminated site (i.e. brownfield) or is in a designated redevelopment area	0						3	
2. Consider the potential for fire									
<input type="checkbox"/>	a. For sites adjacent to fire sensitive open space or wildlands only: Submit a Fire Mitigation Plan	0	5						
3. Keep plant debris on site									
a. Produce mulch from plant debris									
<input type="checkbox"/>	i. Design documents specify areas under tree & shrub canopies and at least 10 feet away from hard surfaces and storm drains, to be used as a leaf repository for mulch	0		1					
<input type="checkbox"/>	ii. Construction documents specify that of the trees identified for removal, some are chipped for use as mulch onsite	0		1					
b. Produce compost from plant debris									
<input type="checkbox"/>	i. A site for composting is included in landscape plans. Systems for composting up to and including 3 cubic yards at one time	0		1					
<input type="checkbox"/>	ii. Systems for composting more than 3 and up to 10 yards at one time (total 2 points)	0		1					
<input type="checkbox"/>	iii. Systems 10 cubic yards or larger (total 3 points)	0		1					
4. Reduce and recycle waste									
<input type="checkbox"/>	a. An easily accessible area is dedicated to the collection and storage of materials for recycling	0		2					
5. Minimize site disturbance									
<input type="checkbox"/>	a. On greenfield sites, limit site disturbance to protect topography, vegetation and hydrology (total 3 points)	0	1					1	1
<input type="checkbox"/>	b. On previously developed sites, restore vegetation and hydrology (total 3 points)	0	1					1	1
<input type="checkbox"/>	6. Provide water and/or shelter for wildlife such as birdhouse, bathhouses, boulders, logs, wood piles, large native shrubs or trees	0							1
7. Conserve or restore natural areas & wildlife corridors									
<input type="checkbox"/>	a. The landscape is designed to preserve 80% of existing mature healthy trees and penalties for destruction of protected trees are included in construction contract	0							2
<input type="checkbox"/>	b. The landscape is designed to increase open space compared to its previous use and/or to connect it to other open space or wildlife corridors	0							2
<input type="checkbox"/>	c. Create or protect a diverse plant buffer of low maintenance vegetation along creeks, shorelines or monocultured landscaped areas	0							2
Site Planning Subtotal, out of possible 33 points:		0							

Enter Project Name Here		Points Achieved	Landscape Locally	Less to Landfill	Nurture the Soil	Conserve Water	Conserve Energy	Water and Air Quality	Create Wildlife Habitat
B. Stormwater and Site Drainage			Possible Points						
1. Minimize impervious surfaces									
a. Permeable paving, gravel or other porous surfaces are installed for									
<input type="checkbox"/>	i. 25% OR	0						1	
<input type="checkbox"/>	ii. 33% (total 3 points) OR	0						2	
<input type="checkbox"/>	iii. 50% of the paved area (total 5 points)	0						2	
<input type="checkbox"/>	b. No impervious surfaces directly connect to the storm drain	0						2	
2. Design a system to capture and filter storm water									
<input type="checkbox"/>	a. Capture and filter runoff from parking lots into landscape beds, vegetated swales or other landscape stormwater bmps	0						2	
<input type="checkbox"/>	b. Incorporate landscape measures, including vegetated swales, infiltration planters, detention basins and/or stormwater wetlands, that are designed to capture and filter 85% of average annual stormwater runoff OR	0						2	
<input type="checkbox"/>	c. Designed to capture and filter 100% of average annual runoff (total 4 points)	0						2	
<input type="checkbox"/>	d. Bioswales specify flat bottoms of at least 18 inches across and/or rock cobble at points of concentrated flow	0						1	
<input type="checkbox"/>	e. Turf is not specified in bioswales	0						1	
<input type="checkbox"/>	f. Direct rain water from all down spouts to planters, swales or landscaped areas	0						1	
Stormwater and Site Drainage Subtotal, out of possible 16 points:		0							
C. Earthwork and Soil Health			Possible Points						
1. Assess the soil and test drainage									
<input type="checkbox"/>	a. Submit laboratory soil analysis results and recommendations for compost and natural fertilizers (total 3 points)	0	2		1				
2. Remove and store topsoil before grading									
<input type="checkbox"/>	a. The removal, temporary storage, and re-spreading of topsoil is specified in the landscape design documents AND specifications include a maximum topsoil pile height of 6 feet, as well as measures to protect the stored topsoil from erosion	0			2				
3. Protect soil from compaction									
<input type="checkbox"/>	a. Grading specifications and construction plans call for the installation and maintenance of fencing to prohibit parking or materials staging in areas identified for protection	0			2				
<input type="checkbox"/>	b. Design documents specify that soil is not worked when wet	0			1				
4. Aerate compacted soils									
<input type="checkbox"/>	a. Design documents include specification to alleviate compacted soils to a depth of at least 8 inches, before planting, for all landscaped areas that can not be protected during construction	0			1				
<input type="checkbox"/>	b. Design documents include specification to alleviate compacted soils to a depth of at least 12 inches, before planting, for all landscaped areas that can not be protected during construction (total 2 points)	0			1				
5. Feed soils naturally & avoid synthetic fertilizers									
<input type="checkbox"/>	a. Fertilizers or soil amendment materials prohibited by Organic Materials Research Institute in its generic materials list are prohibited in construction of the project	0			1				
6. Mulch									
<input type="checkbox"/>	a. Required: Planting specifications and plans indicate that after construction, all soil on site is protected with a minimum of 3 inches of mulch				R				

Enter Project Name Here

Points Achieved	Landscape Locally	Less to Landfill	Nurture the Soil	Conserve Water	Conserve Energy	Water and Air Quality	Create Wildlife Habitat
7. Amend the soil with compost before planting							
a. Quality compost is specified as the soil amendment, at the rates indicated by a soil analysis, to bring the soil organic matter content to a minimum of:							
<input type="checkbox"/>				R			
<input type="checkbox"/>	0			1	1		
<input type="checkbox"/>	0			1			
8. Use IPM design and construction practices to prevent pest problems							
<input type="checkbox"/>	0		1			2	
<input type="checkbox"/>	0					2	
9. Keep soil & organic matter where it belongs							
<input type="checkbox"/>	0		1			1	
Earthwork and Soil Health Subtotal, out of possible 21 points: 0							
D. MATERIALS				Possible Points			
1. Use salvaged items & recycled content materials							
a. Non-plant landscape materials are salvaged or made from recycled content materials or FSC certified wood:							
<input type="checkbox"/>	0	1					
<input type="checkbox"/>	0	2					
<input type="checkbox"/>	0	2					
<input type="checkbox"/>	0	1					
<input type="checkbox"/>	0	1					
<input type="checkbox"/>	0	2					
<input type="checkbox"/>	0	1					
<input type="checkbox"/>	0	2					
c. Replace Portland cement in concrete with flyash or slag							
<input type="checkbox"/>	0	1					
<input type="checkbox"/>	0	1					
d. Purchased compost and/or mulch is recycled from local, organic materials such as plant or wood waste							
<input type="checkbox"/>	0	1					
<input type="checkbox"/>	0	1					
2. Reduce and recycle landscape construction waste							
<input type="checkbox"/>			R				
<input type="checkbox"/>	0	2					
<input type="checkbox"/>	0	2					
<input type="checkbox"/>	0	1					
3. Reduce the heat island effect with cool site techniques							
<input type="checkbox"/>	0				2		

Enter Project Name Here

Points Achieved	Landscape Locally	Less to Landfill	Nurture the Soil	Conserve Water	Conserve Energy	Water and Air Quality	Create Wildlife Habitat
4. Design lighting carefully							
<input type="checkbox"/>					2		
a. Low energy fixtures are specified for all site lighting							
b. Photovoltaic is specified for site lighting							
<input type="checkbox"/>					1		
i. all path lighting is solar powered							
<input type="checkbox"/>					2		
ii. 50% of all other site lighting is solar powered							
<input type="checkbox"/>					2		
iii. 100% of all other site lighting is solar powered (total 4 points)							
<input type="checkbox"/>					1		
c. Reduce light pollution and trespass: exterior luminaries emit no light above horizontal or are Dark Sky certified							
<input type="checkbox"/>					1		
d. The site and exterior building lighting does not cast direct beam illumination onto adjacent properties or right of ways							
5. Choose and maintain equipment for fuel conservation							
<input type="checkbox"/>					1		
a. Specify solar powered pump(s) for water features							
6. Specify low embodied energy products							
<input type="checkbox"/>					2		
a. 100% of any stone and non-concrete hardscapes materials are produced within 500 miles of the project site							
7. Use integrated pest management							
<input type="checkbox"/>						2	
a. Design documents include construction specifications that require integrated pest management							
8. Use organic pest management							
<input type="checkbox"/>							2
a. Design documents include construction specifications that prohibit the use of pesticides that are not allowed by OMRI in its generic materials list (total 4 points)							
Materials Subtotal, out of possible 39 points:				0			
E. PLANTING				Possible Points			
1. Select appropriate plants: choose & locate plants to grow to natural size and avoid shearing							
<input type="checkbox"/>			R				
a. Required: No species will require shearing							
<input type="checkbox"/>		1					
b. Plants specified can grow to mature size within space allotted them							
2. Select appropriate plants: do not plant invasive species							
<input type="checkbox"/>			R				
a. Required: None of the species listed by Cal-IPC as invasive in the San Francisco Bay Area are included in the planting plan							
3. Grow drought tolerant CA native, Mediterranean or climate adapted plants							
<input type="checkbox"/>					R		
a. Required: Specify California native, Mediterranean or other climate adapted plants that require occasional, little or no summer water for 75% of all non-turf plants							
<input type="checkbox"/>					2		
b. Specify California native or Mediterranean or other climate adapted plants that require occasional, little or no summer water for 100% of all non-turf plants							
<input type="checkbox"/>					3		
c. 100% of the non-turf plant palette need no irrigation once established (total 5 points)							
4. Minimize the lawn							
<input type="checkbox"/>					2		
a. Turf is not specified in areas less than 8 feet wide or in medians, unless irrigated with subsurface or low volume irrigation							
<input type="checkbox"/>					2		
b. Turf shall not be installed on slopes exceeding 10%							
<input type="checkbox"/>					R		
c. Required: A maximum of 25% of total irrigated area is specified as turf, with sports or multiple use fields exempted.							
<input type="checkbox"/>					2		
d. A maximum of 15% of total landscaped area is specified as turf, with sports or multiple use fields exempted							
<input type="checkbox"/>					3		
e. No turf is specified (total 5 points)							
5. Implement hydrozoning							
<input type="checkbox"/>					2		
a. Group plants by water requirements and sun exposure and select plant species that are appropriate for the water use within each zone and identify hydrozones on the irrigation plan (with separate irrigation valves for differing water needs, if irrigation is required)							

Enter Project Name Here

Points Achieved	Landscape Locally	Less to Landfill	Nurture the Soil	Conserve Water	Conserve Energy	Water and Air Quality	Create Wildlife Habitat
6. Provide shade to moderate building temperatures							
<input type="checkbox"/>					2		
7. Plant trees							
<input type="checkbox"/>					2		
<input type="checkbox"/>					1		1
8. Diversify							
a. Landscapes less than 20,000 square feet shall have a minimum of:							
<input type="checkbox"/>							1
<input type="checkbox"/>							2
b. Landscapes with 20,000 to 43,560 square feet (1 acre) shall include a minimum of:							
<input type="checkbox"/>							1
<input type="checkbox"/>							1
<input type="checkbox"/>							2
c. Landscapes of greater than 1 acre shall include a minimum of 40 distinct plant species AND							
<input type="checkbox"/>							2
<input type="checkbox"/>							2
9. Choose California natives first							
<input type="checkbox"/>							2
Planting Subtotal, out of possible 36 points: 0							
F. IRRIGATION				Possible Points			
1. Design for on-site rainwater collection, recycled water and/or graywater use							
<input type="checkbox"/>					3		
<input type="checkbox"/>	b. Design a system that can store and use rainwater and/or graywater to satisfy a percentage of the landscape irrigation requirements:						
<input type="checkbox"/>					3		
<input type="checkbox"/>					1		
<input type="checkbox"/>					1		
2. Design and install high efficiency irrigation systems							
<input type="checkbox"/>	a. Required: Specify weather based (automatic, self adjusting) irrigation controller(s) that includes a moisture and/or rain sensor shutoff						
<input type="checkbox"/>	b. Required: Sprinkler and spray heads are not specified for areas less than 8 feet wide						
<input type="checkbox"/>					2		
<input type="checkbox"/>					3		
<input type="checkbox"/>	e. For all turf areas: Specify and install equipment with a precipitation rate of 1 inch or less per hour and an operational distribution uniformity of 70% or greater						
<input type="checkbox"/>					2		
<input type="checkbox"/>	f. Design and install irrigation system that will be operated at 70% of reference ET						
<input type="checkbox"/>					3		
3. Install a dedicated meter for landscape water use or install a submeter							
<input type="checkbox"/>					2		
Irrigation Subtotal, out of possible 20 points: 0							

Enter Project Name Here

Enter Project Name Here		Points Achieved	Landscape Locally	Less to Landfill	Nurture the Soil	Conserve Water	Conserve Energy	Water and Air Quality	Create Wildlife Habitat
G. MAINTENANCE			Possible Points						
1. Keep plant debris on site									
a. Grasscycle									
<input type="checkbox"/> i. Ongoing maintenance includes grasscycling (grass clippings left on the lawn after mowing) for all lawns from April through October, or longer. Sports turf may be excluded "in season" when clippings will interfere with play	0	2							
b. Produce mulch from plant debris									
<input type="checkbox"/> i. Ongoing maintenance requires that leaves and/or plant debris less than 4 inches (including cut or chipped woody prunings) be re-incorporated into the mulch layer of landscaped areas away from storm drain	0	2							
c. Produce compost from plant debris									
<input type="checkbox"/> i. Ongoing maintenance includes composting plant debris on site	0	3							
2. Separate plant debris for clean green discounts									
<input type="checkbox"/> a. Ongoing maintenance requires all exported plant debris be separated from other refuse and taken to a facility where it will be used to produce compost or mulch	0	3							
3. Protect soil from compaction									
<input type="checkbox"/> a. Ongoing maintenance requires that soil is not worked when wet, generally between October and April	0	1							
4. Feed soils naturally & avoid synthetic fertilizers									
<input type="checkbox"/> a. Ongoing maintenance includes topdressing turf with finely screened quality compost after aeration 1-4 times per year	0	1							
<input type="checkbox"/> b. Ongoing maintenance uses compost, compost tea or other naturally occurring, non-synthetic fertilizers as the plant and soil amendment for all landscape areas	0	1							
<input type="checkbox"/> c. Ongoing maintenance prohibits fertilizers that are prohibited by Organic Materials Research Institute are prohibited in the project	0	1							
5. Mulch Regularly									
<input type="checkbox"/> a. Ongoing maintenance requires regular reapplication of organic mulch, to a minimum depth of 3 inches (total 2 points)	0	1	1						
6. Manage and maintain irrigation system so every drop counts									
<input type="checkbox"/> a. Ongoing maintenance includes a schedule for reading the dedicated meter or submeter and reporting water usage	0	1							
<input type="checkbox"/> b. At completion of the installation, the contractor shall provide the property owner with 1. precipitation rate for each valve zone, 2. area calculations for each irrigation zone and the irrigation plans which include the location of irrigation supply shut off, 3. internet address for watering index information	0	2							
<input type="checkbox"/> c. Ongoing maintenance includes regular checking of irrigation equipment, and/or checking soil moisture content before watering AND/OR immediate replacement of broken equipment with equal or superior materials	0	1							
7. Use IPM as part of maintenance practices									
<input type="checkbox"/> a. Ongoing maintenance includes integrated pest management specifications	0							2	
<input type="checkbox"/> b. At least one landscaping staff member or contractor is trained in the use of IPM or is a Bay-Friendly Qualified Professional	0							2	

Enter Project Name Here		Points Achieved	Landscape Locally	Less to Landfill	Nurture the Soil	Conserve Water	Conserve Energy	Water and Air Quality	Create Wildlife Habit
8. Choose and maintain your materials, equipment & vehicles carefully									
<input type="checkbox"/>	a. Ongoing maintenance requires that all oil leaks are repaired immediately and that repairs are not done at the landscape site	0						1	
<input type="checkbox"/>	b. Landscape maintenance equipment uses biobased lubricants and/or alternative fuels.	0						2	
9. Use organic pest management									
<input type="checkbox"/>	a. Ongoing maintenance prohibits the use of pesticides that are not allowed by Organic Materials Research Institute in its generic materials list for the maintenance of the landscape	0							2
Maintenance Subtotal, out of possible 29 points:		0							
II. INNOVATION			Possible Points						
<input type="checkbox"/>	1. Bay-Friendly Landscape Guidelines and Principles are defined and referenced in the construction bid documents	0	3						
2. Design & install educational signage									
<input type="checkbox"/>	a. Provide instructional signs and other educational materials to describe the landscapes Bay-Friendly design, construction and maintenance practices	0	4						
3. Create a Bay-Friendly Maintenance task list									
<input type="checkbox"/>	a. Provide a detailed Bay-Friendly maintenance task list and/or use the BF Maintenance Specification Guidelines as an official reference document in the the landscape maintenance contract and/or with on site landscape staff (total 7 points)	0	1	1	1	1	1	1	1
4. Employ a holistic approach									
<input type="checkbox"/>	a. Site analysis is submitted AND 65% of landscape construction waste is diverted AND planting plan includes a diverse palette AND 50% of non-turf plants are California native species AND none of the landscape area is in turf AND compost is specified for amending the soil during installation AND natural fertilizers are specified as the exclusive source of nutrients AND integrated OR organic pest management is specified (total 7 points)	0	1	1	1	1	1	1	1
5. Innovation: Design your own Bay-Friendly Innovation									
a. Enter description of innovation below, and enter up to 4 points at the right. Points will be evaluated by a Bay-Friendly rater.									
<input type="checkbox"/>	i. Innovation description:	0	0	0	0	0	0	0	0
Innovation Subtotal, out of possible 25 points:		0							
Summary									
Total Possible Points:		215	25	41	18	45	22	36	28
Total Points Achieved:		0	0	0	0	0	0	0	0

Project has not yet met the following recommended minimum requirements:

- Total Project Score of At Least 60 Points
- Required Measures:
 - C6a: Mulch
 - C7ai: Amend the soil with compost before planting
 - D2a: Reduce and recycle landscape construction waste
 - E1a: No Species Will Require Shearing +
 - E2a: Do Not Plant Invasive Species
 - E3a: Grow Drought Tolerant, CA Native, Mediterranean or Climate Adapted Plants
 - E4c: Minimize the Lawn +
 - F2a&b: Specify Weather-Based Irrigation Controllers +
 - F2b: Spray Heads Are Not Specified For Areas Less Than 8 Feet Wide +