CPSA
California Pool & Spa Association

October 15, 2015

Michael Nearman, Deputy Executive Director
California Building Standards Commission
2325 Natomas Park Drive, Suite 130
Sacramento, CA 95833

RE: Proposed Building Standards – Model Water Efficient Landscape Ordinance

Deputy Executive Director Nearman:

The California Pool & Spa Association (CPSA) respectfully requests that the California Building Standards Commission (CBSC) consider the comments herein relative to the MWELO regulations (hereafter the Ordinance) being reviewed for adoption. CPSA generally supports the goal of water conservation and efficiency in landscape irrigation which are the hallmarks of this proposed Ordinance, especially in this time where the State of California is experiencing unprecedented drought conditions. Moreover, CPSA does not take issue with the proposed Ordinance with regard to new or rehabilitated commercial, multifamily, or public agency development projects. However, CPSA takes the position that the proposed Ordinance's application to homeowner provided or homeowner hired improvements, new or rehabilitated, is unclear and ambiguous; applies unevenly to homeowners; is highly discriminatory to the swimming pool and spa industry; and could encourage gamesmanship and use of the underground economy to avoid application or its provisions.

Despite the fact that MWELO has been in effect since 1992, the Ordinance has had no real application to individual owners of single family residences who wished to improve their property or hire a contractor to install new landscaping. MWELO was not included in the building code as now proposed, and the triggers for application of the Ordinance were so high for single family homes that they created a defacto exemption from the Ordinance for such projects. However, the current proposal will apply to owners of single family residential homes for both new construction and the remodeling of existing landscapes, as the threshold for application to new development projects is 500 square feet and 2,500 square feet for rehabilitated projects. Moreover, the proposed Ordinance only sets forth the minimum application of MWELO to these projects, while allowing other public entities the ability to reduce these triggers thus applying the Ordinance to a broader spectrum of single family homeowners.

The key issues CPSA is concerned with include: (1) When does the Ordinance apply to homeowners? (2) Is the application reasonable and consistent? (3) Does the effect of application of the Ordinance unfairly discriminate against the swimming pool and spa industry?

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When Does the Ordinance Apply to Homeowners?

For a new single family home that a homeowner has built or purchased from a developer where the landscaping has not been installed by the developer, the application of the Ordinance is unclear. Prior to the proposed amendments the only application of the Ordinance to a single family homeowner was set forth in Section 490.1(3), which only included new construction landscapes which are homeowner provided and/or homeowner hired in single family and multi-family residential projects with a total project landscape area equal to or greater than 5,000 square feet requiring a building or landscape permit, plan check or design review. That language has been stricken from the proposed Ordinance and the definition of "homeowner provided landscaping" in subparagraph (u) of Section 491 has been stricken as well.

The new Section 490.1 sets forth the applicability of the Ordinance. Subparagraph (a) paragraphs (1) and (2) identify the most common projects where the Ordinance applies. Paragraph (1) applies to new development projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review; paragraph (2) applies to rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, design review or plan check. There is no definition of "new development project" in the Ordinance, only a definition of "new construction" in paragraph (yy) of Section 490.1 which defines: "new construction" as: "for the purpose of this ordinance, a new building with a landscape or other new landscape such as a park, playground or green belt without an associated building." The question is which of these definitions apply to homeowner provided or homeowner hired landscape projects and, by association, swimming pools and spas?

Without additional clarification CPSA believes the proposed Ordinance is subject to inconsistent interpretation by building officials throughout the state, thus making application of the Ordinance unclear and ambiguous regarding homeowner provided or homeowner hired landscape improvements, including installation of swimming pools. If it was the intent of the Department to place emphasis on "development project" as opposed to "new projects" or "new construction" then the Department should have, at minimum, added a definition of "development projects" to indicate clearly that paragraph (a)(1) of the Ordinance, the 500 square foot threshold, was not intended to apply to homeowners, or, alternatively, maintained the language of the current Ordinance that specified when the Ordinance applies to homeowners. In the absence of such clarification, when the Ordinance applies to landscape projects by individual homeowners is anyone's guess.

Does Application of the Ordinance Unfairly Discriminate Against the Swimming Pool and Spa Industry?

Whether the trigger for the Ordinance to apply to homeowner provided or homeowner hired landscape improvements is 500 square feet or 2,500 square feet, the result of the application of the Ordinance to the swimming pool and spa industry are inconsistent and discriminatory. The Ordinance, by its terms, only applies to projects that require a building or landscape permit, plan check or design review. Most residential backyard landscape projects involve the installation of

hardscape, sprinklers, turf and plant material and do not require a building or landscape permit, plan check or design review. As such, the Ordinance will not apply to most of these projects.

However, swimming pools do require a building permit. Section 491(bbbb) sets forth a definition of "water feature" to mean: "a design element where open water performs an aesthetic or recreational function…including ponds, lakes, waterfalls, fountains, artificial streams, spas and swimming pools." The definition further indicates it is the surface area of a water feature that is included in the high water use hydro-zone of the landscape area. Lastly, paragraph (ii) provides that the the hardscape area of the backyard, which typically surrounds an in-ground pool or spa shall not be taken into account in the calculation of the maximum applied water allowance set forth in paragraph (tt) of Section 490.1.

The application of this formula to swimming pools and spas for the purpose of reaching the maximum applied water allowance for landscape projects where the Ordinance applies is contrary to long term water conservation and highly discriminatory to the swimming pool and spa industry. A square foot of turf and a square foot of water in a swimming pool use approximately the same amount of water annually for irrigation or evaporation. However, when a swimming pool and spa are taken as part of the total construction project, including hardscape, patio and and other elements that typically go into the construction of modern residential backyards, swimming pools and spas are more than two times as water efficient as the turf the pool most often replaces. In fact, once completed, a swimming pool takes about the same amount of water to maintain annually as drought resistant landscaping of the same size when considering the entire project. When a pool or spa is covered when not in use, it takes about half of the water to maintain than drought resistant landscaping as shown by the Santa Margarita Study (attached).

Despite these facts, the Ordinance would consider swimming pools as high water users and, as such, would be subject to disapproval of projects where the Ordinance applies. If the trigger for application of the Ordinance is determined to be Section 490.1(a)(1), equal to or greater than 500 square feet, the Ordinance would end up applying to the average residential backyard swimming pool and spa. Because lot sizes for residential single family homes has been reduced as the cost of land and improvements have increased in California, it is often the case that the swimming pool, spa and surrounding deck take up almost all of the backyard project, with very little landscape areas for plants and bushes. In these cases the swimming pool and spa would be the largest landscape element in the project, excluding the surrounding hardscape, and subject to disapproval as a high water user. (see Landscape A)

The application of the Ordinance could be even more adverse to the swimming pool and spa industry if the trigger for homeowner installed or contracted projects is Section 490.1(a)(2), equal to 2,500 square feet or more. As indicated above, paragraph (2) applies the Ordinance to rehabilitated landscapes with aggregate landscape area equal to or greater than 2,500 square feet requiring a building permit. There are several interpretive questions raised by this definition.

- Are virtually all swimming pools exempt from being covered, as the definition of "water feature" in the Ordinance measures only the water surface area of water features, and rarely would swimming pools meet the 2,500 square foot threshold?

- Or does the fact that a swimming pool and spa require a building permit, trigger application of the Ordinance to any owner provided or homeowner hired backyard landscape project where the total landscape area is 2,500 hundred square feet or more and the project includes a swimming pool?

The Ordinance is not clear on this point and would likely be subject to inconsistent application and interpretation by local building officials. It also appears that the elimination of the former Section 490.1(a)(3), restricting the application of the Ordinance to new construction landscapes of homeowner provided or homwowner hired single family homes, is intended to expand the application of the Ordinance to existing landscape remodeling projects that are homeowner provided or homeowner hired as well. CPSA believes it is the intent of the Department to apply the former interpretation to water features, not the latter, but the proposed Ordinance on this important point is unclear.

An example of the adverse outcome of applying the building permit requirement for the pool as a trigger to impose the Ordinance on a landscape project with a total project size of 2,500 square feet is as follows:

- A homeowner provided or homeowner hired backyard landscape project of 2,500 square feet or more could consist of a modest patio and walkway, storage shed, plants and bushes with a majority of the yard covered in turf (Landscape B). This project would not be subject to the Ordinance because no building or landscape permit would be required.

- A similar sized project consisting of a swimming pool and spa with an automatic cover, patio surround ratio 1.5% to 2.5%, perhaps with built-in BBQ or outdoor kitchen, planting area for bushes and trees and lawn for family recreation (Landscape C). Depending on interpretation of the Ordinance, Landscape C would be subject to the Ordinance and subject to disapproval because both the lawn and the pool would be considered high water users by the Ordinance.With no consideration of the hardscape included in the project or any credit for a pool cover, the project could well exceed the maximum applied water allowance of the proposed Ordinance and be disapproved. This would be an ironic and unfair result.

- Landscape B is a much higher water user and would not be subject to the Ordinance because no building or landscape permit would be required. Landscape C is a water efficient backyard compared to Landscape B and provides a place for family enjoyment and recreation, yet likely subject to disapproval under the proposed Ordinance.

Conclusion

As stated in the introduction to this testimony, CPSA supports the overall goal of MWELO. It makes sense to limit water intensive asthetic elements of landscapes surrounding commercial development, state agency and multifamily hosing projects, including water features such as reflecting ponds, waterfalls, lakes and ponds. However, application of the Ordinance to homeowner provided or homeowner hired backyards of single family homes is another matter. Backyards are intended to be a gathering place for family and friends. They are expected to be a

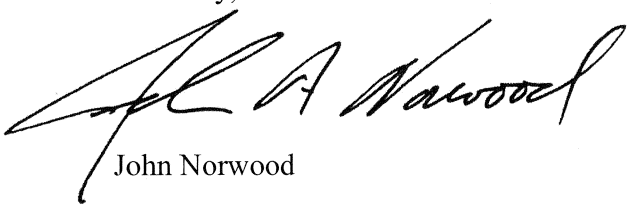
place where the family can enjoy time to relax, maybe spend time in a spa, and participate in recreational activities like swimming or the opportunity to play, or even "beat the heat" by floating in the pool. Swimming pools and spas are not water wasters. New pool installations take a de minimis amount of water, approximately .0058 of 1% of the state's annual urban water use and existing pools are competitive with drought resistant landscaping for annual water use. According to recent studies, the pool, spa and hot tub industry provides a $5 billion dollar annual impact on the state's economy while producing almost 55,000 jobs in California. These businesses consist almost exclusively of small and family operated businesses that hire and purchase their building products and materials from other local businesses.

There are serious questions as to whether swimming pools and spas were ever intended to be covered by MWELO. There is not a single comment in the legislative history that would suggest the intent to include water features in the Ordinance. The swimming pool and spa industry was not designated in the authorizing legislation to be a part of the affected industries represented by the advisory committee to develop this Ordinance. Of the 80 plus definitions included in this Ordinance, not a single one other than the definition of water features applies to swimming pools and spas. Heretofore, swimming pools and spas were excluded from application of the Ordinance by virtue of the definitions and triggers for applications of the Ordinance. All of that having been said, the swimming pool and spa industry would not be adversely affected by the application of the proposed Ordinance if it is appropriately clarified.

As indicated above, CPSA believes the proposed ordinance is unclear and ambiguous as to its application to homeowner installed or contracted landscape improvements like swimming pools and spas. Inconsistency in MWELO's application and enforceability will have an unfair effect on the swimming pool and spa industry unless further clarified. In addition, the shortcomings of the proposed Ordinance identified in this proposal will result in homeowners gaming the system or utilizing the underground economy to avoid application of the proposed Ordinance unless the application of the Ordinance is made clear and not subject to different interpretations.

For all of the above reasons CPSA urges the CBSC to reject the proposed Ordinance unless the issues identified above are addressed. Should you have any questions or concerns please feel free to contact us.

Sincerely,



John Norwood

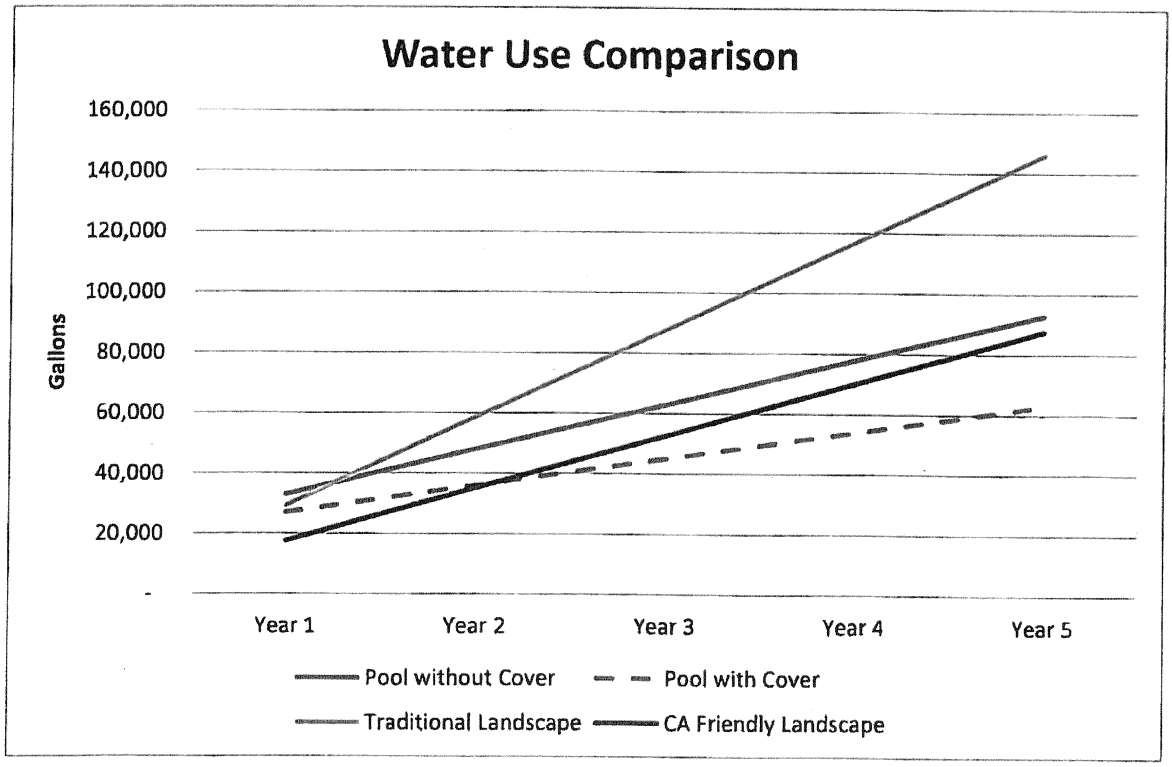
Santa Margarita Water District Data: Average Pool Installation

Enter data in shaded cells.

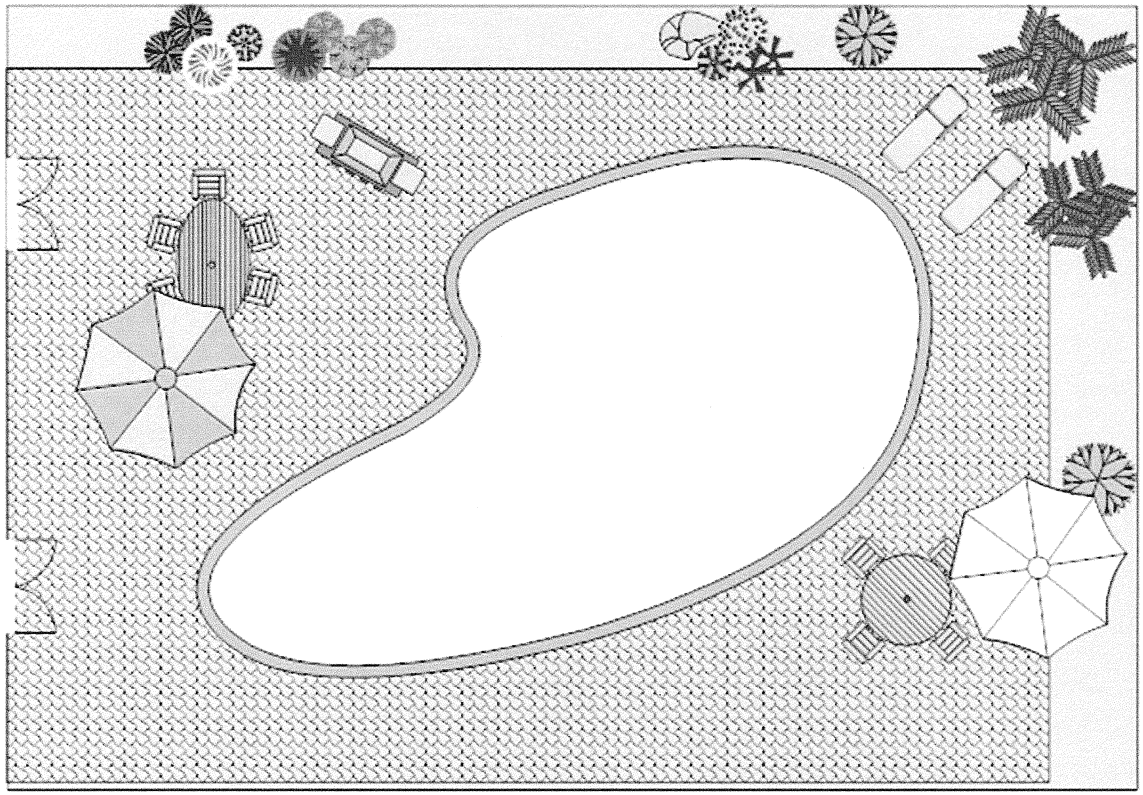
5	Enter Average depth of Pool (Feet)
480	Enter Pool area (Square Feet)
769	Enter area of hardscape and decking (Square Feet)
1,249	Area of traditional landscaping being removed or not installed due to pool install (Sq.Ft.)

17,952 Initial Pool Fill Volume (Gallons)
14,952 Annual Pool Water Use without Cover (Gallons)
8,971 Annual Pool Use with Cover (Gallons)
29,180 Annual Water Use of Efficient Landscape (Gallons)
17,508 Annual Water Use of CA Friendly Landscape (Gallons)

Cumulative Water Use Comparison (Gallons)				
	Pool without Cover	Pool with Cover	Traditional Landscape	CA Friendly Landscape
Year 1	32,904	26,923	29,180	17,508
Year 2	47,856	35,894	58,360	35,016
Year 3	62,808	44,866	87,539	52,524
Year 4	77,760	53,837	116,719	70,031
Year 5	92,712	62,808	145,899	87,539
5 Year Water Cost	**$ 310**	**$ 210**	**$ 488**	**$ 293**



Landscape A



Key:

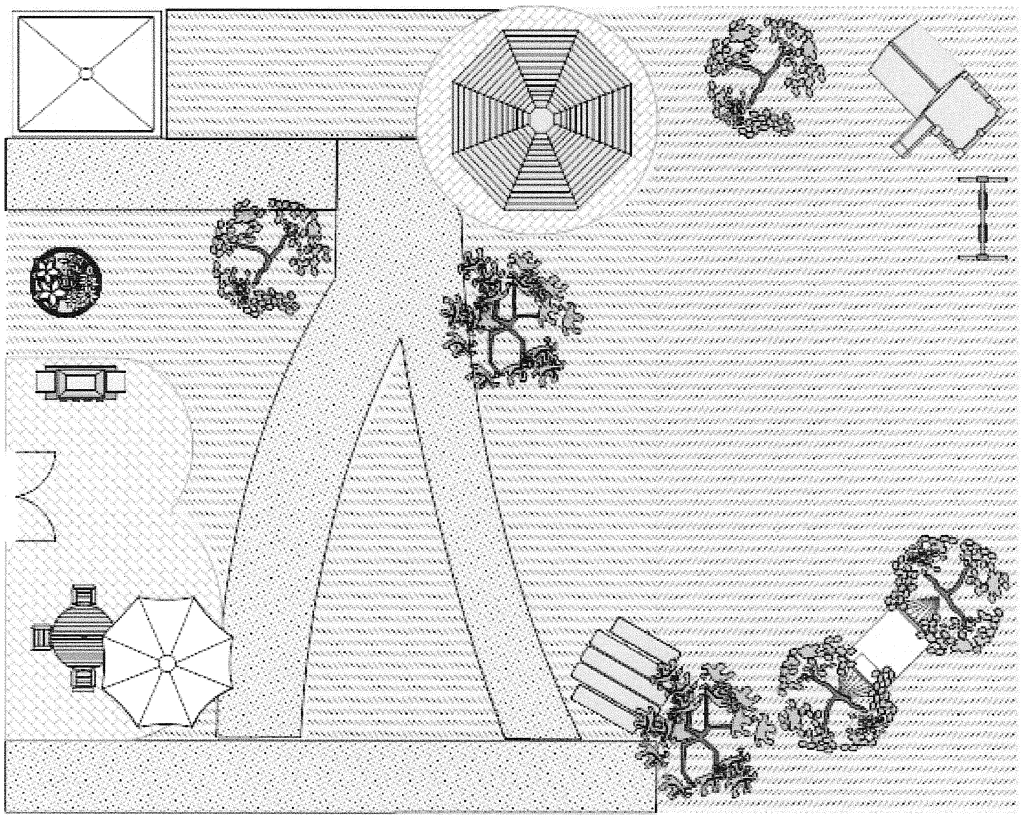
Pavers/Deck

Drought Resistant Landscape

Pool: 622 square feet (25%)
Pavers/Deck: 1,468 square feet (59%)
Drought Resistant Landscape: 410 square feet (16%)

Total Square Feet: 2,500

Landscape B



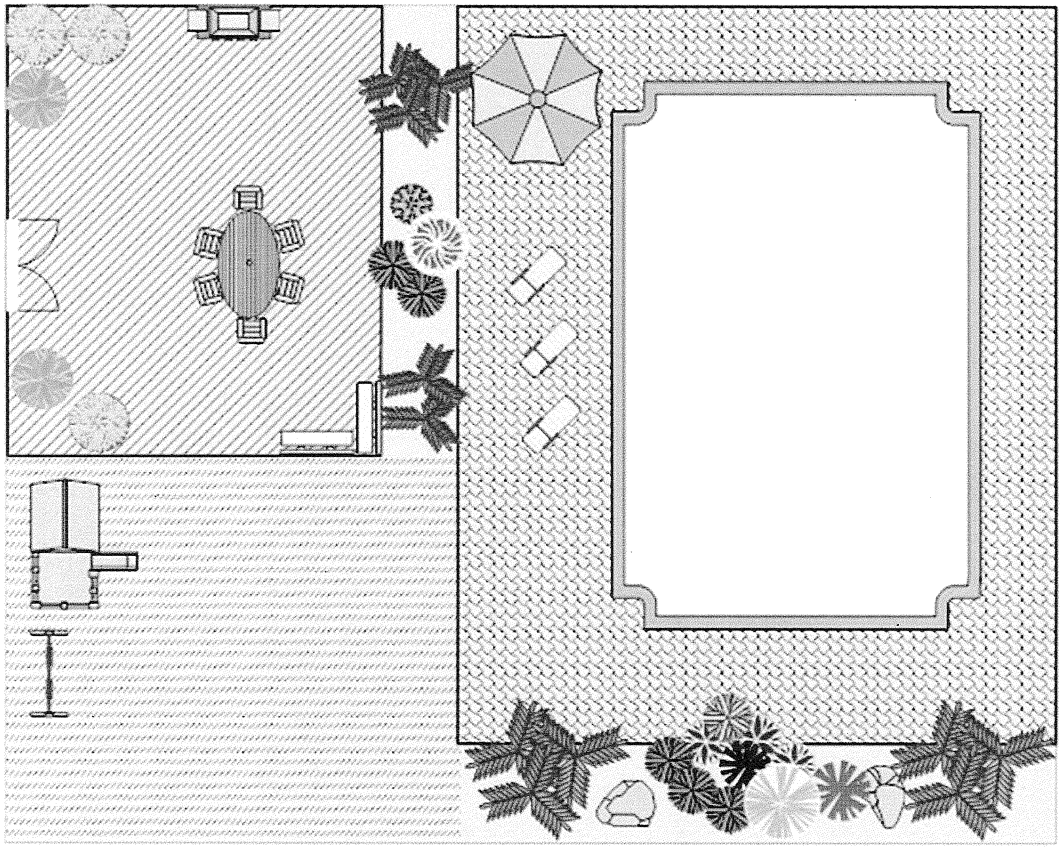
KEY:

- Deciduous Trees
- Planter
- Gazebo
- Shed
- Patio
- Walkway
- Lawn with Grass

Patio: 348 square feet (14%)
Walkways: 501 square feet (20%)
Shed: 56 square feet (2%)
Lawn with Grass: 1,595 square feet (64%)

Total Square Feet: 2,500

Landscape C



KEY:

Palm Tree

Drought Resistant Plants

Planters

Pavers

Deck

Lawn with Grass

Pool: 500 square feet (20%)
Pavers: 750 square feet (30%)
Deck: 480 square feet (19%)
Lawn with Grass: 500 square feet (20%)
Drought Resistant Landscape: 270 square feet (11%)

Total Square Feet: 2,500