MEMORANDUM

TO: City Council

FROM: Planning and Development Division

DATE: June 14, 2010

SUBJECT: Water Efficient Landscape Ordinance Responses to Resident David O. Powell letter dated June 7, 2010

Mr. David O. Powell, a Pasadena resident, has provided comments on the proposed Water Efficient Landscape Ordinance which is scheduled for second reading this evening. Attached please find Mr. Powell's comments and staff's responses to the issues raises.

As background, the State's Model Ordinance, under AB 1881, has been in effect since January 1, 2010 and requires implementation by all cities. Cities may choose to implement a more restrictive Ordinance, but cannot make the State's Model Ordinance less restrictive. The State's Ordinance is primarily intended to affect new development projects on previously undeveloped land. Very few existing single-family properties in the City (less than 200) would be affected by the Ordinance. Currently, new construction projects in the City are being reviewed for compliance with the State's Ordinance.

The Ordinance that has been presented to Council was developed over a period of one year and with the participation of several key City departments including Planning & Development, Public Works, Water & Power and the City Attorney's Office. Once implemented, staff will monitor its application and will return to the Council should any modifications become necessary in order to best carry out its intent.

COMMENTS ON LANDSCAPE ORDINANCE DAVID O. POWELL June 7, 2010

Set forth herein are comments on the proposed "Water Efficient Landscape Ordinance". They are based on a fairly detailed review. I would like to have discussed my concerns in detail with appropriate City staff and clarified some of my questions, but unfortunately time constraints and availability of City staff rendered this impracticable.

My focus is primarily on the effects on single family residences.

I recognize that your latitude in framing this ordinance is constrained by State mandates and by the model ordinance prepared by the State. Unfortunately, the State's model ordinance is flawed. It is convoluted, disjointed, ambiguous, internally inconsistent and lacking in adequate definition of the terms used. The model ordinance is in dire need of serious editing.

I recommend most strongly that you not adopt this ordinance until revisions have been made. I further recommend that after the ordinance is in its final form, it be made available for review by the public and that a public hearing before the City Council be held.

The balance of this document discusses in detail some of the more important of my concerns.

Comment: 2,500 vs. 5,000 square feet

Items 1, 2 and 3 on page 3 of the ordinance set forth the amount of landscape area necessary to fall under the dictates of the ordinance. For a single-family or two-family residence, Item 2 sets the trigger area at 2,500 square feet, while Item 3 specifies the area as 5,000 square feet. Which is correct?

Response: There is clear differentiation between #2 and #3. Item #2 requires that newly-installed or rehabilitated landscapes greater than 2,500 square feet that are <u>developer-installed</u> shall be subject to the Ordinance. Item #3 requires that all newlyinstalled or rehabilitated landscapes greater than 5,000 square feet (whether they <u>developer-installed or installed by a typical property owner</u>) are subject to the Ordinance. Because the Ordinance is generally intended to affect new developments, the differentiation between #2 and #3 allows a typical resident (not a speculative developer) to re-landscape up to 5,000 square feet of a yard under any circumstance without having to comply with the Ordinance.

Comment: Building permit requirement

The next to last paragraph on page 2 of the March 15, 2010 Agenda report on this ordinance indicates that landscape projects by themselves (without any building permit being required) do not fall under the ordinance. But Item BB on page 8 of the ordinance includes "new landscape...without an associated building" as "new construction." There is obviously a conflict.

Response: Whether or not a project is associated with construction of a building or structure, if it requires a building or zoning permit or design review and exceeds the landscape area threshold, the Ordinance is applicable to the project.

Comment: Re-landscaping as separate project from building project

The ordinance seems silent on the question what happens if a building modification requiring a permit is undertaken, and a separate re-landscaping project is undertaken either before or after the building project.

Response: Most new projects in the City require entitlements (e.g. Conditional Use Permits, Variances, and Hillside Development Permit) that already require a landscape plan to be submitted by a licensed architect or landscape architect. During the plan check process, staff will identify any other landscape projects that are required to comply with the Ordinance.

Comment: Extent of "landscape area"

Page 7 of the ordinance defines the term "landscaped area" (Item U) as used in the ordinance as the irrigated area subject to the "maximum applied water analysis calculation" defined in Item Z on page 8. Item Z is cross-referenced to Section 13.22.040 D. But I find nothing in said section (beginning on page 13) which enables one to define the boundaries of the "landscape area." Item LL on page 10 makes reference to a "modified landscape area" (undefined) 50 percent of the "total landscape area" (also undefined). So obviously it is intended that the landscape area covered by the ordinance be less than the total landscape area.

A related concern is the question of what re-landscaping is required as an accompaniment to modifications to existing structures. The ordinance appears to be completely silent on this question. I find nothing which would prevent an interpretation that pulling a building permit for roof replacement would trigger a requirement for complete re-landscaping of the property on which the building stands.

Response: "Landscaped Area," "Maximum Applied Water Allowance," and "Rehabilitated Landscape" are accurately defined under Items U, Z, and LL, respectively, which are consistent with the State Ordinance's definitions.

Comment: City review and approval or denial

Page 11 calls for City review and approval or denial of the "landscape documentation package" for the project. I fail to find any definition of the specific criteria on which such approval or denial will be based. Does it include any criteria other than the specific mandatory requirements of the ordinance? What about those elements which are identified as being "recommended" or "discouraged"?

Response: The intent of this Ordinance is to review projects as mandated by the State. Compliance is achieved by a new landscape project that shows that it meets the formula for water usage, which is clearly stated in the algebraic calculations stated in the Ordinance.

Comment: Maximum applied water allowance (MAWA)

Under the terms of the ordinance, the allowable average evapotranspiration (consumptive use) rate for <u>irrigation water</u> applied to a "landscaped area" is limited to 50 percent of the <u>total</u> evapotranspiration for a specified grass field (which is a fairly heavy water user). For Pasadena the current value for that base figure (referred to as "reference evapotranspiration") is 52.3 inches per year.

I would assume that a consideration in the selection of the 50 percent figure is the recognition that a portion of the evapotranspiration needs of the irrigated area is met from rainfall. The allowable amount of applied water in then computed as being sufficient to permit irrigation at a 71 percent irrigation efficiency. The net result is that the maximum <u>applied</u> water allowance is 70 percent of the <u>evapotranspiration</u> rate for the aforementioned grass field.

There are a couple of conceptual problems with the foregoing approach. It would appear obvious that the proportion of the evapotranspiration needs meet by rainfall is not the same in all areas. A value which might properly apply to Humboldt County is not going to be applicable to Imperial County. The second problem is that the proportion of consumptive use met from rainfall is not going to be the same in wet years as it is in dry years. I find nothing in the ordinance which recognizes these phenomena.

The validity of the method of calculation "maximum applied water allowance" is highly suspect.

Response: The calculation of the MAWA should be based on dry years since excessive consumptions of water are the concerns in these dry years. The MAWA is relative to every climatic condition in each respective City in California. The appendices of the Ordinance provide specific variables in order to calculate the MAWA in Pasadena.

Comment: Modification of existing landscapes

It is stated to be the intent that the ordinance not apply to modification of existing landscapes less than one acre in area where no new structural modifications are involved. As discussed previously in this document, there are some questions about whether the ordinance language actually accomplishes this. Assuming for the moment that it does, it raises the question as to what latitude the property owner has to modify the landscaping falling under the purview of the ordinance subsequent to the time that a certificate of completion is issued by the City.

Response: The Ordinance is applicable to all existing landscapes that were installed before January 1, 2010, and are over one acre in size regardless of any modifications. Pasadena Water and Power (PWP) has identified all commercial and industrial customers that consume large amounts of water and some of these properties are already in compliance with the proposed ordinance. PWP's water audit programs also are extended to residential large water users.

Any new or rehabilitated landscapes for above-mentioned properties are subject to the Ordinance. For these new projects, the applicant shall submit to the City a landscape documentation package to be reviewed by the Planning Department as part of the permitting process.

Comment: Costs

The March 15, 2010 Agenda report on the ordinance clearly indicates the staff view that the effect of the ordinance will be small. It will also be costly. The March 15 Agenda report estimates that just the City's fees could be in the \$1,000 to \$2,000 range. To this must be added the necessary costs of professional reports by landscape architects, soils scientists, and irrigation auditors and designers. And the direct costs of relandscaping and high-tech irrigation systems. Another cost is that associated with providing a separate meter for irrigation water.

The March 15 Agenda report, together with the Agenda report for the May 24 Council meeting, just sort of brush aside the cost considerations, on the basis that any City costs will be recovered by fees from the property owner. But the fact that the costs are borne by property owners does not mean that they are not real money. I think I can safely say that the current mood of the nation is not one that looks with great favor on being saddled with additional costs imposed by government fiat.

You owe it to your customers to provide an estimate of the costs which will be imposed on them by this ordinance. It ought to be expressed in terms of the annual costs, in dollars, of annual amortization of capital outlay and on ongoing operation and maintenance costs, and in terms of the costs per acre foot of water savings (as measured by reduction in consumptive use plus irrecoverable losses). I would not be surprised to find the cost for the water saved to be in the thousands of dollars per acrefoot. Response: The cost issue has been one of the main concerns for the City from the beginning. In new development projects, the costs associated with compliance with the Ordinance are relatively small (a few thousand dollars) relative to the overall construction cost of a new house or a large-scale development project.

Currently, most major institutions are familiar with the Ordinance and many are already revising their water usage in order to show compliance. PWP has a mapping system that will identify all single-family properties that will be subject to the Ordinance and they will be contacted. Over time, the Ordinance will save consumers money by conserving water, and it will encourage them to be more compliant with PWP's imminent revised water rate cost structure.



Ordinance Fact Sheet

TO: CITY COUNCIL

DATE: May 24, 2010

FROM: CITY ATTORNEY

SUBJECT: NEW CHAPTER 13.22: "WATER EFFICIENT LANDSCAPE"

TITLE OF PROPOSED ORDINANCE

AN ORDINANCE OF THE CITY OF PASADENA ADDING A NEW CHAPTER 13.22 TO THE PASADENA MUNICIPAL CODE ENTITLED "WATER EFFICIENT LANDSCAPE"

PURPOSE OF ORDINANCE

This ordinance implements and codifies the municipal code amendments related to water efficient landscaping approved by the City Council on March 15, 2010. The purpose of this ordinance is to regulate water use for landscaping purposes in the City, consistent with the Pasadena Water Waste Prohibitions and Water Supply Shortage Plan.

REASON WHY LEGISLATION IS NEEDED

This ordinance is needed to comply with Government Code Section 65595, which requires that every city in California regulate water use for landscaping purposes consistent with the State's model ordinance. The goal of this new Chapter 13.22 is to ensure that new landscaping projects and existing larger sites install more water efficient landscaping, thereby conserving the City's water resources.

PROGRAMS, DEPARTMENTS OR GROUPS AFFECTED

The Planning and Development Department, and the Water and Power Department, will implement the proposed ordinance.

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AGENDA ITEM NO. -1-4- -34-20

FISCAL IMPACT

There will not be an immediate fiscal impact as a result of these amendments to the municipal code. Appropriate fees will be collected by the Planning and Development Department from any landscaping project required to be reviewed pursuant to the new Chapter 13.22.

ENVIRONMENTAL

On March 15, 2010, the Council adopted a negative declaration for the proposed new Chapter 13.22.

Respectfully submitted,

City Attorney

Prepared by:

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Concurred by:

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