AGENDA
LAND USE AND DESIGN REVIEW COMMITTEE

November 12, 2009
9:00 A.M.

Laguna Woods City Hall
Council Chambers
24264 El Toro Road
Laguna Woods, CA 92637122

AGENDA DESCRIPTION: The Agenda descriptions are intended to give notice, to members of the public, of a general summary of items of business to be transacted or discussed.

Any person wishing to address the Land Use and Design Review Committee on any matter, whether or not it appears on this agenda, may do so under the appropriate section of the agenda. Whenever possible, lengthy testimony should be presented to the Committee in writing (12 copies) and only pertinent points presented orally. Requests to speak to items on the agenda shall be heard at the appropriate point on the agenda; requests to speak about subjects not on the agenda will be heard during the **Public Comment** section of the meeting.

I. CALL TO ORDER

II. ROLL CALL

III. COMMITTEE BUSINESS

A. City Centre Park

RECOMMENDED ACTION: Recommend that the City Council approve:

1. The conceptual design for City Centre Park; and

2. Negative Declaration 09-02 for City Centre Park.

B. Temporary Signs

RECOMMENDED ACTION: Discuss proposed modifications to temporary real estate and banner sign regulations and recommend approval to the City Council.

C. Water Efficient Landscape Regulations

RECOMMENDED ACTION: Discuss proposed water efficient landscape regulations and recommend approval to the City Council.

D. Conditional Use Permit application CUP-580 -Sprint/Nextel wireless expansion at 24141 Moulton Parkway, filed by Sprint/Nextel.

RECOMMENDED ACTION: Review the proposed cellular site modifications and recommend approval of Conditional Use Permit Application CUP 580 to City Council subject to the recommended conditions of approval.

IV. PENDING PROJECTS UPDATE

A. Saddleback Golf Cars
B. Moulton Parkway and El Tor Road Construction

RECOMMENDED ACTION: Staff will provide an update on the above projects; there may be committee discussion and requests for future action, but no action will be taken at this meeting on these items.

V. COMMITTEE MEMBER COMMENTS

VI. PUBLIC COMMENTS

VII. ADJOURN

Next regularly scheduled meeting will be at 9:00 a.m., Thursday, December 10, 2009.

RECAP
LAND USE AND DESIGN REVIEW COMMITTEE

October 8, 2009
9:00 A.M.

Laguna Woods City Hall
Council Chambers
24264 El Toro Road
Laguna Woods, CA 92637

I. CALL TO ORDER

Meeting called to order by Chair Miller at 9:30 a.m.

II. ROLL CALL

Present: Miller, Morton, Muennichow, Preli, Sortino, Vogt
Absent: DeBelles, Heilbronner, Joss, Lindstrom

III. COMMITTEE BUSINESS

A. San Sebastian Sign Variance

The Committee discussed the proposed variance for additional square footage of temporary banner signage. The applicant is also requesting an exception to the 30 day limit on banner signs, which cannot be approved with a variance. Upon a motion, the Committee unanimously approved the request for additional square footage and expressed their support for additional signage for this project.

B. Building Permit Fee Reductions for Environmental Improvements to Residential Units

The Committee discussed the proposed recommendations and upon a motion unanimously approved the proposal for reduced building permit fees for certain environmental projects.

IV. PENDING PROJECTS UPDATE

A. Saddleback Golf Cars
B. New Landscape Regulations

Staff provided an update on the above projects and answered questions about San Sebastian and the Moulton Parkway Smart Street improvements.

V. COMMITTEE MEMBER COMMENTS

None

VI. PUBLIC COMMENTS

None

VII. ADJOURN

The meeting was adjourned at 10:00 a.m.; the next meeting is scheduled meeting will be at 9:00 a.m., Thursday, November 12, 2009.

City of Laguna Woods
Agenda Report

FOR: November 12, 2009 Land Use and Design Review Committee Meeting

TO: Chair and Members of the Land Use and Design Review Committee

FROM: Douglas C. Reilly, Assistant City Manager

Agenda Item: City Centre Park

Recommendation:

Recommend that the City Council approve:

1. The conceptual design for City Centre Park; and

2. Negative Declaration 09-02 for City Centre Park.

Background

In 2002, the Ralphs supermarket company gave the City a two-thirds acre parcel on Moulton Parkway located 1,200 feet north of El Toro Road on the west side of the street. The parcel is bounded by properties owned by the El Toro Water District, Golden Rain Foundation and Ayres Hotel in Town Centre. The land was purchased from the Golden Rain Foundation (GRF) in the mid-1990s for truck access to a future Smith's Food market that was to be an anchor tenant in the new Town Centre. Plans for the center changed, the market was eliminated from the project, and the remnant parcel became a recurring maintenance problem for the owner until deeded to the City.

In spring 2003, as part of its annual work plan, the Community Services Committee proposed that the parcel become City Centre Park, which was approved by the City Council in June 2003. The park was included in the City's park master plan in December 2003. The City Council approved funds for phase one work on

the park in the Fiscal Year (FY) 09-10 budget. If the City does not initiate work on the park project before June 30, 2010, it will lose a minimum of $360,000 in state park bond funds and park in-lieu fees.

Discussion

Phase I of the planned City Centre Park is approximately 60 feet wide near Moulton Parkway and 120 feet wide near Town Centre, and is intended for use as a passive recreational area by the general public. The site is currently vacant and slopes downward in a northeasterly direction. It contains various trees and shrubs for erosion control, although no native vegetation.

City Centre Park's conceptual design includes the following features:

- Small parking area that accommodates three or four vehicles and includes a handicapped space.
- 10-foot wide path that is American with Disabilities Act (ADA) compliant that connects to the existing concrete sidewalk on Moulton Parkway and to an entrance pathway at Town Centre.
- Lawn terraced areas at the top of the park near Town Centre.
- Restroom facilities.
- Shrubs, trees and ground cover.
- Bioswale and onsite bio-retention basin to improve runoff water quality.
- Drought-tolerant demonstration garden with informational placards.
- Furnishings that will include benches, trash receptacles, tables and a drinking fountain.
- Trellis adjacent to the wall bordering Town Centre.

Phase I of the project will include contracting with a landscape architect to provide more detailed plans for consideration by the Land Use and Design Review Committee, the Landscape Subcommittee and the City Council before final bid documents are prepared and a bid released sometime next year. There may not be sufficient funds available to build all of the features planned for the park in Phase I. Future funding will allow completion of remaining features and additional amenities.

California Environmental Quality Act (CEQA)

If a project is not considered exempt from CEQA, the law requires completion of an initial study of the project's environmental impacts. An initial study of City

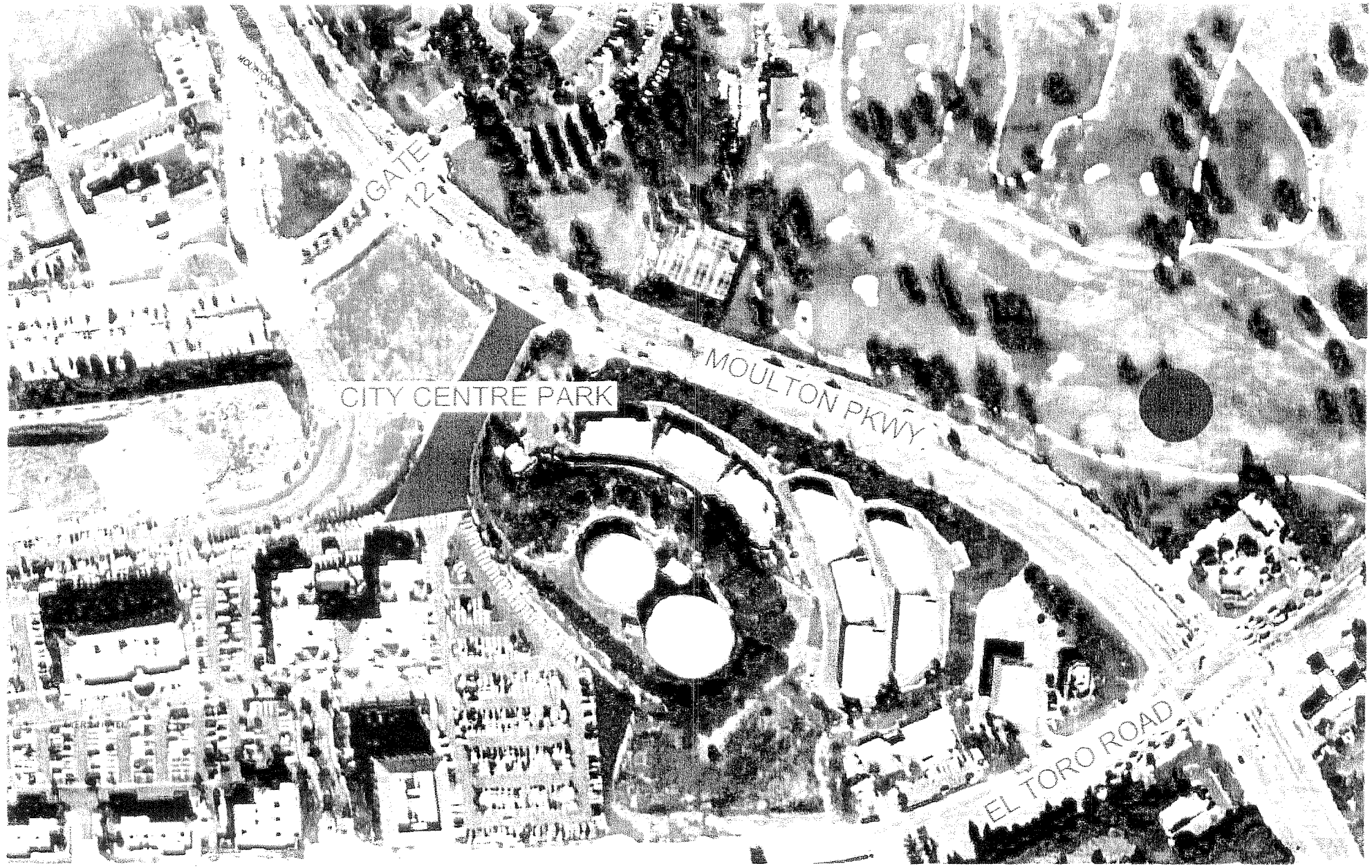
Centre Park was conducted by staff who determined that there were no impacts and is recommending a Negative Declaration.

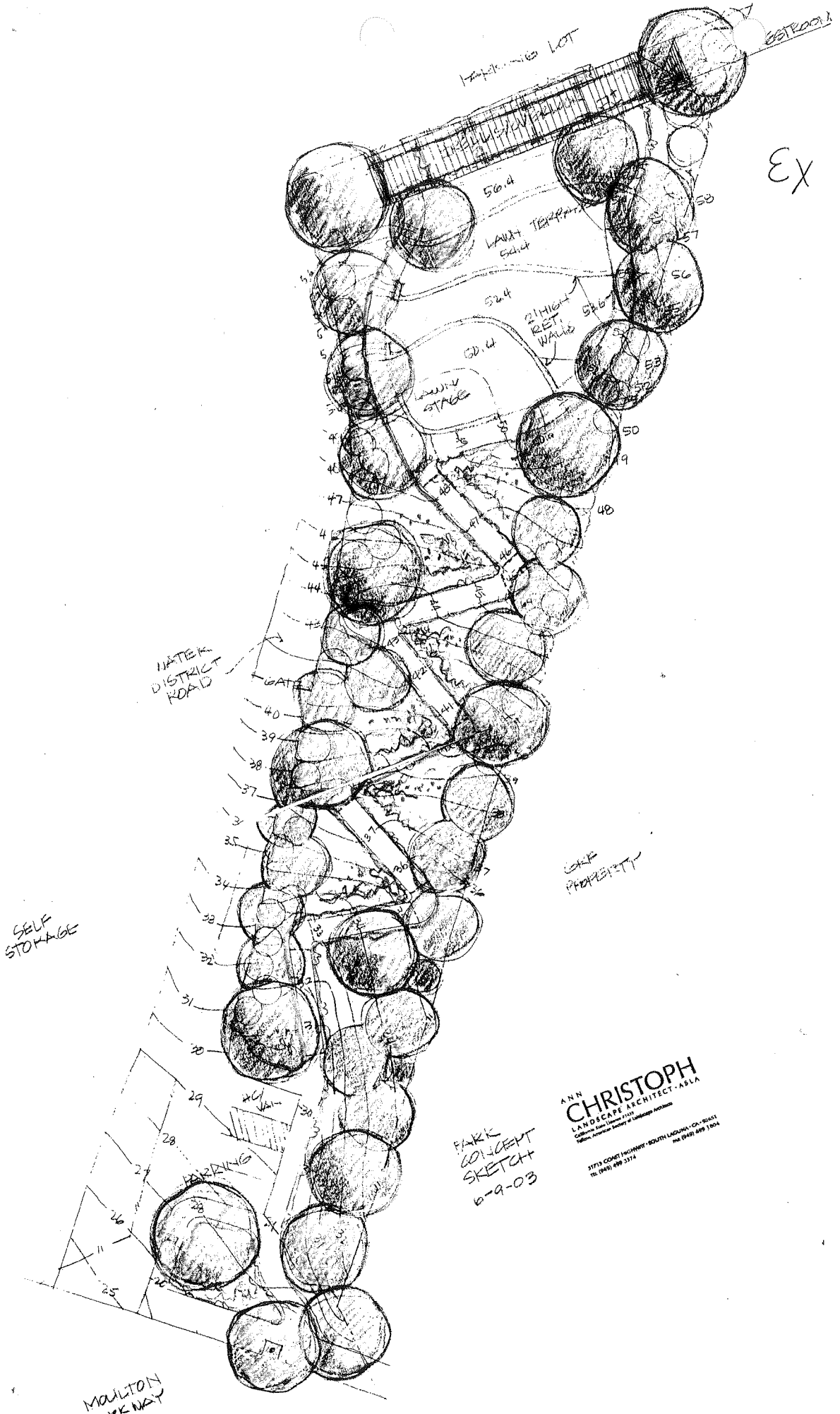
Conclusion

The City was given a two-thirds acre parcel on Moulton Parkway north of El Toro Road in 2002 that the City Council agreed to designate for parkland use. Funds were budgeted in FY 09-10 to design and build Phase I of City Centre Park to meet a June 30, 2010 deadline to avoid losing a minimum of $360,000 in state park bond funds and park in-lieu fees. A conceptual plan has been designed and an initial study completed in conformance with CEQA. The Committee's recommendations will be forwarded to the City Council for consideration at its November 18, 2009 meeting.

Attachment: Exhibit A – Aerial Map
Exhibit B – Concept Plan

Ex A




PARKING LOT
GAZEBO
56.4
LAWN TERRACE
56.4
52.4
21" HIGH RET. WALLS
50.4
LAWN STAGE
WATER DISTRICT ROAD
GATE
CORP PROPERTY
SELF STORAGE
HC RAMP
PARKING
MOULTON PARKWAY
PARK CONCEPT SKETCH 6-9-03
ANN CHRISTOPH
LANDSCAPE ARCHITECT · ASLA

Ex B

City of Laguna Woods
Agenda Report

DATE: November 12, 2009 Land Use and Design Review Committee Meeting

TO: Chair and Members of the Land Use and Design Review Committee

FROM: Leslie Keane, City Manager

AGENDA ITEM: Modifications to Temporary Real Estate Sign Regulations

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Recommendation

Discuss proposed modifications to existing temporary real estate sign regulations and recommend approval to the City Council.

Background

The City's Zoning Code contains regulations for temporary signage, adopted in 2003. These regulations have been amended from time, with the last modification adopted by the Council on August 19, 2009, with an effective date of mid-September. At its October meeting, the Land Use and Design Review Committee reviewed and approved a variance for temporary signage at the San Sebastian Condominium project. During the discussion on the project, the Committee asked staff to consider additional modifications to the Zoning Code for residential real estate signage.

Discussion

Based on a discussion with representatives of the Regency, Los Palmas and San Sebastian, staff is proposing the following change to existing regulations:

1. Allow newly constructed multifamily for-sale residential developments and new and existing residential for-lease developments to substitute a banner sign for a free standing real estate sign.

2. Establish a one year timeframe for real estate signs, with the possibility of renewal based on vacancies.

3. Approval of a real estate banner signs would preclude the applicant from applying for promotional or special event banner signs, until such time as the real estate banner was removed.

In addition, the Committee should consider whether or not to recommend a minimum number of units for temporary real estate banner banner eligibility and/or a percent of vacancies for renewal.

Since incorporation, staff has declined to allow banners signs that contain telephone numbers, website or email addresses as a matter of public safety. In addition, banner signs have been limited to no more than three colors as an aesthetic issue. I t should be noted, that some communities further restrict banners to only certain colors. Recently, a transition planner approved a banner sign with a telephone numbers since that is not specifically prohibited by the Municipal Code. The Committee should consider whether public safety and aesthetic considerations are appropriate for banner signs and whether they should be formalized in the municipal code.

The attachment provides a redline of proposed changes to current regulations.

Conclusion

If approved by the Land Use and Design Review Committee, this matter would be agendized for first reading at the City Council's November 18th meeting, with a public hearing and second reading scheduled for December.

Proposed Changes to Temporary Sign Regulations

Text in red represents changes to existing regulations; **text in blue indicates a decision points.**

Sec. 13.20.050. Permitted signs

(b) *Temporary signs.*

(3) *Real estate signs.* In any area, one free standing real estate sign shall be permitted on any building site, subject to the following conditions:

a. Permits for real estate signs shall be valid for one year, but may be renewed if units are vacant.

b. Real estate signs require a permit which may be obtained from the Community Development Department; permit fees shall be in accordance with the City's fee schedule.

b. The copy of these signs shall be limited to information relating to the sale, lease or rental of the premises on which the sign is located. These signs shall be removed upon the close of escrow or when lease or rental of all units has been accomplished.

c. The sign must be located on the site being sold or leased; in the case of a multifamily residential building or a shopping center, the sign may be located on common area property within the larger site as long as it does not occupy any pedestrian or vehicular access.

d. The area of the sign shall not exceed:

1. *Residential.*
   (i) Four (4) or less units per building site: Six square feet.
   (ii) Five (5) or more units per building site: Thirty-two square feet.

2. *Nonresidential.* Thirty-two square feet.

e. Multifamily Residential Developments. Multifamily residential developments with **25-100** or more units available for sale, lease or rental may substitute a banner sign for a free standing real estate sign, subject to the following conditions:

1. Individual real estate banner signs shall be allowed one square foot of signage per linear foot of frontage up to a maximum of 100 square feet.

2. Each residential project shall be allowed to display only one banner sign per frontage. For purposes of this section, building frontage shall be defined as the linear width of a building that faces on any roadway, driveway or parking lot, or that is clearly visible from a public street.

3. Real estate banner signs must be mounted flush to a building and may not be located on the roof or a parapet.

4. Banner signs shall not contain telephone numbers, email addresses or website addresses.

5. Banner signs shall be limited to no more than three colors; white shall be counted as a color.

6. Real estate banner signs shall be allowed with a permit for up to one year, or until **0-100%** of units in the project are sold or leased.

(5) B*anner signs.*

a. Banner signs shall be allowed in commercial districts and on multifamily residential projects that exceed **5- ?** or more units per building.

b. Banner signs shall be allowed to be attached flush to a building or store front.

c. Individual tenant, business or residential facility banner signs shall not exceed the following:

1. For buildings with frontages with 25 linear feet or less, a 25-square-foot maximum sign area is allowed.

2. For buildings with frontages with more than 25 linear feet, one square foot of signage per linear foot of frontage is allowed up to a maximum of 100 square feet.

3. For purposes of this section, building frontage shall be defined as the linear width of the building and/or business which fronts on any roadway, driveway or parking lot, or that is clearly visible from a public street.

c. With the exception of special center events, described in Section "g" below, each building shall be allowed to display only one banner sign per frontage.

d. Each building/business may be granted a permit to display an on-site banner, for a maximum of one hundred and twenty (120) days within a twelve (12) month aggregate period. Time can be used in any multiple of consecutive days, not exceeding 30 days per event/occasion. Banner signs shall be removed for at least 30 days prior to issuance of a new permit. Multiple banners displayed consecutively shall count as a single banner.

e. Banner signs shall not contain telephone numbers, email addresses or website addresses.

f. Banner signs shall be limited to no more than three colors; white shall be counted as a color.

g. In the case of center or plaza events, the maximum banner sign size for individual participants is 25 square feet. A common center or plaza event identification shall not exceed 100 square feet. If the special activity includes multiple tenants of a commercial center or plaza, all signs and banners should be of a similar size, color or lettering style.

h. A banner sign permit is required and may be obtained from the Community Development Department; permit fees shall be in accordance with the City's fee schedule.

i. Nonprofit Community Service Organization Special Event Signs. Subject to a written request and permission of the property owner, a no-fee permit for a temporary banner may be granted by the Director for a one week period or less, to certified nonprofit community service organizations, for an event which will benefit the community, or general public.

City of Laguna Woods
Agenda Report

FOR: November 12, 2009 Land Use and Design Review Committee Meeting

TO: Chair and Members of the Land Use and Design Review Committee

FROM: Christopher Macon, Special Projects Manager

AGENDA ITEM: Water Efficient Landscape Regulations

Recommendation

Discuss proposed water efficient landscape regulations and recommend approval to the City Council.

Background

In 2006, Assembly Bill 1881 (Laird, Water Conservation) was chaptered into State law. It requires cities to adopt either the model water efficient landscape ordinance developed by the State Department of Water Resources (approved by the Office of Administrative Law on September 10, 2009) or an ordinance that is "at least as effective" by January 1, 2010. If no action is taken, the State's model ordinance will automatically become effective and the City will be required to enforce it. By January 31, 2010, the City is required to file proof of compliance with the State.

The Municipal Water District of Orange County, in partnership with the Orange County Division of the League of California Cities, formed a stakeholder group to develop an Orange County model water efficient landscape ordinance that meets Assembly Bill 1881's "at least as effective" requirement. The group also sought to protect local control; promote general consistency throughout the county; and, minimize the cost and complexity of compliance. Participation in the ordinance drafting process was broad, including cities, water districts, irrigation consultants, landscape architects, green industries, and the Building Industry Association.

Discussion

The proposed water efficient landscape ordinance is based heavily on the Orange County model ordinance, with modifications made for formatting consistency with the City's Municipal Code and clarity. It is accompanied by a technical guidelines document that contains specific implementation procedures. Staff believes that the technical guidelines will change in the coming years, as landscape and irrigation technologies continue to evolve. Staff is recommending that the City Council approve the guidelines separate from the ordinance and by resolution, in order to allow for more expedient and responsive changes. The technical guidelines are included as an attachment to this agenda report and will be considered by the City Council at the same time the ordinance is considered for adoption.

In addition to adding a water efficient landscape chapter to Title 4 of the Municipal Code, the proposed ordinance amends Section 13.16.190 of the Municipal Code in order to eliminate conflicts with the water efficient landscape chapter.

Applicability

The proposed ordinance would apply to the following types of landscape projects, provided they are subject to discretionary approval of a landscape plan (e.g., as part of a site development plan) or require the issuance of a ministerial permit for a landscape or water feature (e.g., building, grading, plumbing, or electrical permits):

Individual Homeowners

- New landscape installation projects with a landscape area equal to or greater than 5,000 square feet.

Public Agencies or Non-Residential Developers

- New landscape installations or rehabilitation projects with a landscaped area equal to or greater than 2,500 square feet.

Property Managers or Developers of Single-Family or Multi-Family Residential Projects or Complexes

- New landscape installation or rehabilitation projects with a landscaped area equal to or greater than 2,500 square feet.

The City does not require a permit for simply replanting a landscape; however, if a permit is required for a feature associated with a landscape that is being replanted and the project meets the criteria listed above, it would be required to comply with the ordinance (e.g., the replanting of a multi-family residential landscape equal to or greater than 2,500 square feet would be subject to the ordinance if a change was made to the irrigation system that required a permit).

With the exception of certain provisions related to water conservation and water waste prevention, the ordinance would not apply to existing landscapes.

Exemptions

The following landscape projects are exempt from the proposed ordinance:

- Registered local, state, or federal historical sites
- Ecological restoration projects without permanent irrigation systems
- Mined-land reclamation projects without permanent irrigation systems
- Plant collections in botanical gardens or arboretums open to the public

Additionally, the City Manager would have the ability to waive the requirements of the ordinance for rehabilitation projects that meet all of the following criteria:

- They are limited to the replacement of plants with equal or lower water use.
- No changes are made to the irrigation system requiring ministerial permits.
- The irrigation system is found to be designed, operable, and programmed consistent with the El Toro Water District's water waste regulations.

Landscape Documentation Packages

The proposed ordinance requires applicants to submit a landscape documentation package to the City prior to being issued permits or beginning installation. The elements of the documentation package may vary based on the nature of a given project, but will generally include water efficiency calculations, a soil management report, landscape design plan, irrigation design plan, and grading design plan.

The bases of the landscape documentation packages are two values, the Maximum Applied Water Allowance (MAWA) and the Estimated Applied Water Use (EAWU), both of which would be calculated by the applicant. The MAWA is the annual limit of water that can be applied to a landscape taking into account various environmental factors. The EAWU is the annual amount of water that is required

to keep plants in a healthy state in a particular landscape. Documentation packages must prove that the EAWU does not exceed the MAWA.
The cornerstone of the proposed ordinance – and a significant change from the State's model ordinance – is the ability for applicants to self-certify elements of the documentation package prepared by licensed landscape professionals. This would streamline the permitting process and minimize costs for applicants and the City.

Provisions for Post-Installation and Existing Landscapes

The State's model ordinance includes a number of provisions that staff believes are effectively met by existing efforts, including the El Toro Water District's (ETWD) Water Conservation and Water Supply Shortage Ordinance. Rather than establish duplicative regulations, the proposed ordinance states that irrigation practices for post-installation and existing landscapes must conform to the ETWD's rules and requirements, including penalties and incentives for water conservation and water waste prevention. All water users are currently subject to the ETWD's ordinance. Inclusion of a statement of support fulfills State law requirements without creating new regulations or enforcement responsibilities.

In addition to preventing water waste, State law now requires the implementation of programs targeted to existing landscapes larger than one acre that evaluate water use and provide recommendations, as necessary, to reduce it to levels at or below the Maximum Applied Water Allowance. Programs such as the Municipal Water District of Orange County's Landscape Performance Certification Program (LPCP) effectively meet this requirement. The City will assist the El Toro Water District with enrolling landscapes in the LPCP, including by sharing all applicable water efficiency calculations submitted as part of landscape documentation packages.

Common Interest Developments

In accordance with Assembly Bill 1881, the proposed ordinance prohibits common interest developments from applying architectural guidelines that prohibit or have the effect of prohibiting the use of low-water use plants as a group. Assembly Bill 1061 (Lieu, Common interest developments: water efficient landscapes), which was chaptered into State law on October 11, 2009, also prohibits those guidelines, as well as guidelines that have the effect of prohibiting or restricting compliance with the City's water efficient landscape ordinance.

Delegation

The proposed ordinance allow for arrangements to be made with local agencies regarding it's administration, implementation, and/or enforcement.

CEQA Compliance

The proposed ordinances are exempt from the California Environmental Quality Act pursuant to State CEQA Regulation 15307 (14 Cal. Code Regs., § 15307) in that they will not result in cumulative adverse environmental impacts.

Fiscal Impact

City projects that meet the applicability criteria would be required to comply with the proposed ordinance. At this time, City Centre Park is the only City project that is expected to be subject to the ordinance. The bulk of the new fiscal impact would be associated with contracting with a licensed landscape professional to prepare a landscape documentation package. Sufficient money is included in the project budget for this impact.

Additionally, while few private projects are expected to be subject to the proposed ordinance, there would be a small impact on staff time associated with reviewing and processing landscape documentation packages. However, the City recovers all of its processing costs associated with project review and plan check.

Conclusion

If the City does not adopt a water efficient landscape ordinance by January 1, 2010, the State's model ordinance will automatically become effective and the City will be required to enforce it. The proposed ordinance provides for a less costly, less time-consuming, and less complex way of complying with Assembly Bill 1881.

Attachments: Proposed Ordinance
Draft Guidelines for Implementation

ORDINANCE NO. 09-XX

AN ORDINANCE OF THE CITY OF LAGUNA WOODS, CALIFORNIA, AMENDING THE LAGUNA WOODS MUNICIPAL CODE TO ESTABLISH WATER EFFICIENT LANDSCAPE REGULATIONS

WHEREAS, the State Legislature reached findings related to water use, waste, conservation, and efficiency and included those findings in the chaptered text of Assembly Bill 1881 (Laird, Water Conservation); and

WHEREAS, the City of Laguna Woods intends to amend its Municipal Code so that it is consistent with Assembly Bill 1881; and

WHEREAS, the City of Laguna Woods intends to amend its Municipal Code so that it is "at least as effective" as the State of California's Model Water Efficient Landscape Ordinance, which reflects the requirements of Assembly Bill 1881.

NOW, THEREFORE THE CITY COUNCIL OF THE CITY OF LAGUNA WOODS DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Findings

The City Council hereby incorporates the foregoing recitals and findings.

SECTION 2. Adoption of Building Site Regulations

Section 13.16.190 (Landscaping) of the Laguna Woods Municipal Code is hereby amended in its entirety to read as follows:

Sec. 13.16.190. Landscaping.

Landscaping, consisting of trees, shrubs, vines, ground cover, turf, plants or any combination thereof, shall be installed and maintained subject to the following standards:

(1) Landscaping along all streets and boundaries shall be in compliance with the fences and walls requirements.

(2) Boundary landscaping is required for a minimum depth equal to the required setback distance or ten feet (whichever is less) along all property lines abutting streets except for the required street openings.

(3) Any landscaped area shall be separated from an adjacent parking or vehicular area by a wall or curb at least six inches higher than the adjacent parking or vehicular area.

(4) Landscaping shall be maintained in a neat, clean and healthy condition, and, as applicable, in compliance with Chapter 4.28. This shall include proper pruning; mowing of lawns; weeding; removal of litter; fertilizing and watering as needed and permitted; provision of permanent water facilities as needed and permitted; and replacement of any landscaping as needed and permitted.

(5) In addition to other projects that may be subject to this section, the following projects shall be subject to these regulations regardless of the district or specific plan in which they are located:

(1) Multifamily projects of five or more units;
(2) Residential planned developments (common areas only); and
(3) Commercial/office projects involving landscaping/irrigation of more than one cumulative acre.

SECTION 3. Adoption of Water Efficient Landscape Regulations

Chapter 4.28, entitled Water Efficient Landscapes, is hereby added to Title 4 (Health and Sanitation) of the Laguna Woods Municipal Code as follows:

CHAPTER 4.28. WATER EFFICIENT LANDSCAPES

4.28.010. Findings.

(a) All water services in the City of Laguna Woods are metered.

(b) Landscape plan submittal and review for certain types of projects has been a long-standing practice in the City of Laguna Woods.

(c) Current local design practices in new landscapes typically achieve the State Model Water Efficient Landscape Ordinance water use goals.

(d) The average rainfall in Orange County is approximately 12 inches per year.

(e) Orange County has an established reclaimed water infrastructure system.

(f) The local water purveyor is implementing enforcement of water conservation and water waste prohibitions for all metered landscape areas throughout its service area, which includes the City of Laguna Woods.

(g) Incentive-based and education-based water use efficiency programs have been and continue to be implemented in Orange County and made available to Laguna Woods residents.

(h) Orange County is a leader in researching and promoting the use of smart automatic irrigation controllers.

(i) Pursuant to State legislation, all new irrigation controllers sold in Orange County after 2012 will be smart automatic irrigation controllers.

4.28.020. Purpose.

The purpose of this chapter is to establish regulations to ensure that landscapes are planned, designed, installed, maintained, and managed in a manner that uses water efficiently, encourages water conservation, and prevents water waste.

Furthermore, the purpose of this chapter is to establish an alternative model acceptable under Assembly Bill 1881 (Laird, Water Conservation) as being "at least as effective" as the State of California's Model Water Efficient Landscape Ordinance in the context of conditions relative to the City.

4.28.030. Definitions.

For the purposes of this chapter and the Guidelines, the following terms are defined:

(05) *City* means the City of Laguna Woods.

(10) *City Manager* means the City Manager of the City of Laguna Woods or his or her designee.

(15) *Applicant* means the person submitting a landscape documentation package. Applicants can be the property owner or his or her designee.

(20) *Applied water* means the portion of water supplied by the irrigation system to the landscape.

(25) *Budget-based tiered-rate structure* means tiered or block rates for irrigation accounts charged by the local water purveyor in which the block definition for each customer is derived from lot size or irrigated area and the evapotranspiration requirements of landscaping.

(30) *Ecological restoration project* means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

(35) *Estimated Applied Water Use* or *EAWU* means the average annual total amount of water estimated to be necessary to keep plants in a healthy state, calculated as provided in the Guidelines. It is based on factors such as the reference evapotranspiration rate, the size of the landscape area, plant water use factors, and the irrigation efficiency of the irrigation system.

(40) *Evapotranspiration adjustment factor* or *ET adjustment factor* or *ETAF* is equal to the plant factor divided by the irrigation efficiency factor for a landscape project, as described in the Guidelines. The ETAF is calculated in the context of local reference evapotranspiration, using site-specific plant factors and irrigation efficiency factors that influence the amount of water that needs to be applied to the specific landscaped area. A combined plant mix with a site-wide average plant factor of 0.5 (indicating a moderate water need) and average irrigation efficiency of 0.71 produces an ET adjustment factor of (0.7) = (0.5/0.71), which is the standard of water use efficiency generally required by this chapter and the Guidelines, except that the ETAF for a special landscaped area shall not exceed 1.0.

(45) *Guidelines* refers to the Guidelines for Implementation of the Water Efficient Landscape Ordinance, as approved by the City, which describes procedures, calculations, and requirements for landscape projects subject to this chapter.

(50) *Hardscapes* means any durable material or feature (pervious and non-pervious) installed in or around a landscaped area, such as pavements or walls. Pools and other water features are considered part of the landscaped area and are not considered hardscapes.

(55) *Homeowner installed* means any landscaping either installed by a private individual for a single-family or multi-family residential lot or installed by a licensed contractor hired and paid directly by a homeowner. A homeowner, for purposes of this chapter, is a person who occupies the dwelling he or she owns. This definition excludes speculative homes, which are not owner-occupied dwellings and which are subject under this chapter to the requirements applicable to developer-installed residential landscape projects.

(60) *Hydrozone* means a portion of the landscaped area having plants with similar water needs and typically irrigated by one valve/controller station. A hydrozone may be irrigated or non-irrigated.

(65) *Irrigation efficiency* or *IE* means the measurement of the amount of water beneficially used divided by the amount of water applied to the landscaped area. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum average irrigation efficiency for purposes of this chapter is 0.71. Greater irrigation efficiency can be expected from well-designed and maintained systems.

(70) *Landscape Documentation Package* means the documents required to be provided to the City for review and approval of landscape projects subject to this chapter, as described in the Guidelines.

(75) *Landscape professional* means a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape pursuant to Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the California Business and Professions Code, Section 832.27 of Title16 of the California Code of Regulations, and Section 6721 of the California Food and Agriculture Code.

(80) *Landscape project* means total area of landscape in a project, as provided in the definition of "landscaped area," meeting the requirements under Section 4.28.040 of this chapter.

(85) *Landscape rehabilitation* means any re-landscaping project that meets the applicability criteria of Section 4.28.040(a) of this chapter, where the modified landscape area is greater than 2,500 square feet or where the cumulative modified area is greater than 2,500 square feet if the modifications are planned to occur incrementally within one year.

(90) *Landscaped area* means all the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance and Estimated Applied Water Use calculations. The landscaped area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

(95) *Local agency* means a city or county, including a charter city or charter county, or local water purveyor that is authorized by the City to implement, administer, and/or enforce any of the provisions of this chapter on behalf of the City. The local agency may be responsible for the enforcement or delegation of enforcement of this chapter including, but not limited to, design review, plan check, issuance of permits, and inspection of a landscape project.

(100) *Local water purveyor* means any entity, including a city, county, public agency, or private water company that provides retail water service. Local water purveyor shall also mean any entity that provides wholesale water service, for the purpose of Section 4.28.060(b)(1) and Section 4.28.080.

(105) *Maximum Applied Water Allowance* or *MAWA* means the upper limit of annual applied water for the landscaped area as specified in the Guidelines. It is based upon the area's reference evapotranspiration, the ET adjustment factor, and the size of the landscaped area. The Estimated Applied Water Use shall not exceed the MAWA.

(110) *Mined-land reclamation projects* means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

(115) *New landscape* means, for the purposes of this chapter, a new building with a landscape or other new landscape such as a park, playground, or greenbelt without an associated building.

(120) *Non-pervious* means any surface or natural material that does not allow for the passage of water through the material and into the underlying soil.

(125) *Person* means any individual, firm, joint venture, joint stock company, partnership, public or private association, company, corporation, business trust, organization, public or private agency, government agency or institution, school district, college, university, any other user of water provided by the local water purveyor, or the manager, agent, officer, or employee thereof, or any other entity which is recognized by law as the subject of rights or duties.

(130) *Pervious* means any surface or material that allows the passage of water through the material and into the underlying soil.

(135) *Permit* means an authorizing document issued by a local agency for new construction or rehabilitated landscape.

(140) *Plant factor* or *plant water use factor* is a factor, when multiplied by ETo, that estimates the amount of water needed by plants. For purposes of this chapter, the plant factor range for low water use plants is 0 to 0.3; the plant factor range for moderate water use plants is 0.4 to 0.6; and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors cited in this chapter are derived from the Department of Water Resources 2000 publication "Water Use Classification of Landscape Species."

(145) *Recycled water* or *reclaimed water* means treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation and water features. This water is not intended for human consumption.

(150) *Reference evapotranspiration* or *ETo* means a standard measurement of environmental parameters which affect the water use of plants. ETo is given expressed in inches per day, month, or year as represented in the Guidelines, and is an estimate of the evapotranspiration of a large field of four-to seven-inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowances.

(155) *Smart automatic irrigation controller* means an automatic timing device used to remotely control valves that operate an irrigation system and which schedules irrigation events using either evapotranspiration (weather-based) or soil moisture data.

(160) *Special landscaped area* or *SLA* means an area of the landscape dedicated solely to edible plants such as orchards and vegetable gardens; areas irrigated with recycled water; water features using recycled water; and, areas dedicated to active play where turf provides a playing surface, such as parks, sports fields, and golf courses.

(165) *Turf* means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm-season grasses.

(170) *Valve* means a device used to control the flow of water in an irrigation system.

(175) *Water feature* means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools. The surface area of water features is included in the high water use hydrozone of the landscaped area. Constructed wetlands used for on-site wastewater treatment, habitat protection or storm water best management practices that are not irrigated and used solely for water treatment or storm water retention are not water features and, therefore, are not subject to the water budget calculation.

4.28.040. Applicability.

(a) Beginning January 1, 2010, this chapter shall apply to the following landscape projects:

(1) New landscape installations by public agencies or private non-residential developers, except for cemeteries, with a landscaped area equal to or greater than 2,500 square feet, and which are otherwise subject to a discretionary approval of a landscape plan, or which otherwise require a ministerial permit for a landscape or water feature.

(2) New landscape installations by developers or property managers of single-family and multi-family residential projects or complexes with a landscaped area equal to or greater than 2,500 square feet, and which are otherwise subject to a discretionary approval of a landscape plan, or which otherwise require a ministerial permit for a landscape or water feature.

(3) New landscapes that are homeowner installed on single-family or multi-family residential lots with a total project landscaped area equal to or greater than 5,000 square feet, and which are otherwise subject to a discretionary approval of a landscape plan, or which otherwise require a ministerial permit for a landscape or water feature.

(4) Landscape rehabilitation projects by public agencies or private non-residential developers, except for cemeteries, with a landscaped area equal to or greater than 2,500 square feet and which are otherwise subject to a discretionary approval of a landscape plan, or which otherwise require a ministerial permit for a landscape or water feature;

(5) Landscape rehabilitation projects by developers or property managers of single-family and multi-family residential projects or complexes with a landscaped area equal to or greater than 2,500 square feet and which are otherwise subject to a discretionary approval of a landscape plan, or which otherwise require a ministerial permit for a landscape or water feature;

(b) Section 4.28.070(b) of this chapter shall apply to:

(1) All landscaped areas installed prior to or after January 1, 2010.

4.28.050. Exemptions.

(a) This chapter does not apply to:

(1) Registered local, state, or federal historical sites;

(2) Ecological restoration projects that do not require a permanent irrigation system;

(3) Mined-land reclamation projects that do not require a permanent irrigation system; or

(4) Plant collections, as part of botanical gardens and arboretums open to the public.

(b) The requirements of this chapter may be partially or wholly waived, at the discretion of the City Manager or his or her designee, for landscape rehabilitation projects that are limited to replacement of plantings with equal or

lower water needs and where any modifications to the irrigation system do not require ministerial permits and the irrigation system is found to be designed, operable, and programmed consistent with minimizing water waste in accordance with the local water purveyor's regulations.

4.28.060. Implementation procedures.

(a) A Landscape Documentation Package is required to be submitted to the City for review and approval prior to the issuance of permits and prior to the start of construction. Any Landscape Documentation Package submitted to the City shall comply with the provisions of the Guidelines.

(b) The Landscape Documentation Package shall include a certification by a landscape professional stating that the landscape design plan, soil management report, irrigation design plan, and water calculations have been prepared by or under the supervision of the landscape professional and are certified to be in compliance with the provisions of this chapter.

(1) Water efficient landscape calculations shall be provided to the local water purveyor, as appropriate, under procedures determined by the City.

(2) Certification of Completion of a landscape project shall be obtained through a Certificate of Use and Occupancy or a Permit Final, as provided in the Guidelines.

4.28.070. Landscape water use standards.

(a) For applicable new landscape or landscape rehabilitation projects subject to Section 4.28.040(a) of this chapter, the Estimated Applied Water Use allowed for the landscaped area shall not exceed the MAWA calculated using an ET adjustment factor of 0.7, except for the portion of the MAWA applicable to any special landscaped areas within the landscape project, which shall be calculated using an ETAF of 1.0. Where the design of the landscaped area can be otherwise shown to be equivalently water efficient, the applicant may submit alternative or abbreviated information supporting the demonstration that the annual EAWU is less than the MAWA, at the discretion of and review and approval of the City.

(b) Irrigation of all landscaped areas shall be conducted in a manner conforming to the rules and requirements, and shall be subject to penalties and incentives for water conservation and water waste prevention as determined and

implemented by the local water purveyor or as mutually agreed by local water purveyor and the City.

4.28.080. Delegation.

The City may delegate to, or enter into an agreement with, one or more local agencies to implement, administer, and/or enforce any of the provisions of this chapter on behalf of the City.

4.28.090. Relationship.

Nothing in this Chapter is in any way intended to limit or excuse any person from having to comply with any other provision of this Code.

SECTION 4. Effective Date.

This Ordinance shall take effect and be in full force and operation thirty (30) days after adoption.

SECTION 5. Severability

If any section, subsection, subdivision, paragraph, sentence, clause, or phrase added by this Ordinance, or any part thereof, is for any reason held to be unconstitutional or invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity of effectiveness of the remaining portions of this Ordinance or any part thereof. The City Council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause, or phrase thereof irrespective of the fact that any one or more subsections, subdivisions, paragraphs sentences, clauses, or phrases are declared unconstitutional, invalid, or ineffective.

SECTION 6. City Clerk's Certification.

The City Clerk shall certify to the passage of this Ordinance and shall cause this Ordinance to be published or posted as required by law.

PASSED, APPROVED AND ADOPTED this _____ day of _____ 2009.

ROBERT B. RING, Mayor

ATTEST:

YOLIE TRIPPY, Deputy City Clerk

APPROVED AS TO FORM:

STEPHEN A. MCEWEN, City Attorney

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss.
CITY OF LAGUNA WOODS)

I, YOLIE TRIPPY, Deputy City Clerk of the City of Laguna Woods, do HEREBY CERTIFY that the foregoing **Ordinance No. 09-XX** was duly introduced and placed upon its first reading at a Regular Meeting of the City Council on the 18th of November, 2009, and that thereafter, said Ordinance was duly adopted and passed at a Regular Meeting of the City Council on the _____ day of _____, 2009 by the following vote to wit:

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:

YOLIE TRIPPY, Deputy City Clerk

GUIDELINES
FOR IMPLEMENTATION OF THE WATER EFFICIENT LANDSCAPE ORDINANCE

City of Laguna Woods
24264 El Toro Road
Laguna Woods, CA 92637
www.lagunawoodscity.org

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1. Purpose and Applicability

1.1 Purpose

(a) The primary purpose of these Guidelines is to provide procedural and design guidance for applicants proposing new landscape or landscape rehabilitation projects that are subject to Chapter X.XX of the Laguna Woods Municipal Code (herein after, the Water Efficient Landscape Ordinance). This document is also intended for use and reference by City staff in reviewing and approving designs and verifying compliance with the Water Efficient Landscape Ordinance.

(b) Other regulations affecting landscape design and maintenance practices are potentially applicable and should be consulted for additional requirements. These regulations include but may not be limited to:

(1) State of California Assembly Bill 1881 (Laird, Water Conservation);

(2) National Pollutant Discharge Elimination Permit(s) for the Municipal Separate Storm Sewer System;

(3) Orange County Fire Authority Regulations for Fuel Modification in the Landscape;

(4) Water Conservation, Water Supply Shortage, and Drought Response Regulations of the Local Water Purveyor;

(5) Regulations of the Local Water Purveyor governing use of Recycled Water;

(6) Municipal Code, including Zoning Code;

(7) Building Code;

(8) Specific Plans, Master Plans, General Plan, or similar land use and planning documents; and

(9) Conditions of approval for a specific project

1.2 Applicability

See Section X.XX.040 of the Laguna Woods Municipal Code.

2. Submittal Requirements for New Landscape Installations or Landscape Rehabilitation Projects

(a) Discretionary approval is typically required for landscape projects that are subject to site plan reviews, or where a variance from a local building code is requested, or other procedural processes apply such that standard or special conditions of approval may be required by the City. Discretionary projects with conditions of

approval may be approved administratively by city staff, or acted on formally by the City Council, in accordance with City code and policy. A typical standard condition of approval reads:

> *"Landscaping for the project shall be designed to comply with the City's Water Efficient Landscape Ordinance and with the Guidelines for Implementation of the Water Efficient Landscape Ordinance."*

Landscape or water features that typically require a ministerial permit (i.e., a building, grading, plumbing, electrical, or other similar permit), thereby triggering compliance with the Water Efficient Landscape Ordinance requirements independently of the need for discretionary approval include, but are not limited to, swimming pools, fountains or ponds, retaining walls, grey water systems, and electrical for irrigation systems or water features.

2.1 Elements of the Landscape Documentation Package

(a) A Landscape Documentation Package is required to be submitted by the applicant for review and approval prior to the issuance of ministerial permits and prior to the start of construction. Unless otherwise directed by the City, the Landscape Documentation Package shall include the following elements either on plan sheets or supplemental pages as directed by the City:

(1) Project Information, including, but not limited to, the following:

(a) date;

(b) project name;

(c) project address, parcel, and/or lot number(s);

(d) total landscaped area (square feet) and rehabilitated landscaped area (if applicable);

(e) project type (e.g., new, rehabilitated, public, private, homeowner installed);

(f) water supply type (e.g., potable, recycled, or well) and identification of the local water purveyor if the project applicant is not served by a private well;

(g) checklist or index of all documents in the Landscape Documentation Package;

(h) project contacts, including contact information for the applicant and property owner;

(i) a Certification of Design in accordance with **Exhibit A** of these Guidelines; and

(j) any other information the City Manager or his or her designee deems relevant for determining whether the landscape project complies with the Water Efficient Landscape Ordinance and these Guidelines.

(2) Maximum Applied Water Allowance (MAWA) and Estimated Applied Water Use (EAWU) expressed as annual totals including, but not limited to, the following:

(a) a Water Efficient Landscape Worksheet for the landscape project;

(b) water budget calculations for the landscape project; and

(c) hydrozone information table (optional at the discretion of the City) for the landscape project.

(3) A soil management report or specification provision requiring a soil management report. (See Section 2.3(a)(2) for more information)

(4) A landscape design plan for the landscape project.

(5) An irrigation design plan for the landscape project.

(6) A grading design plan, unless not required or unless grading information is included in the landscape design plan for the landscape project.

2.2 Water Efficient Landscape Calculations and Alternatives

(a) The applicant shall provide the calculated Maximum Applied Water Allowance (MAWA) and Estimated Applied Water Use (EAWU) for the landscaped area as part of the Landscape Documentation Package submittal to the City. The MAWA and EAWU shall be calculated based on completing the Water Efficient Landscape Worksheets (in accordance with sample worksheets in **Appendix B**).

(b) The EAWU allowable for the landscaped area shall not exceed the MAWA. The MAWA shall be calculated using an evapotranspiration adjustment factor (ETAF) of 0.7 except for the portion of the MAWA applicable to any special landscaped areas within the landscape project, which shall be calculated using an ETAF of 1.0. Where the design of the landscaped area can otherwise be shown to be equivalently water-efficient, the applicant may submit alternative or abbreviated information supporting the demonstration that the annual EAWU is less than the MAWA, at the discretion of and for the review and approval of the City.

(c) Water budget calculations shall adhere to the following requirements:

(1) The MAWA shall be calculated using the Water Efficient Landscape Worksheets and equation presented in **Appendix B** on page B-1. The example calculation on page B-1 is a hypothetical example to demonstrate proper use of the equation.

(2) The EAWU shall be calculated using the Water Efficient Landscape Worksheets and equation presented in Appendix B on page B-2. The example calculation on page B-2 is a hypothetical example.

(3) For the calculation of the MAWA and EAWU, an applicant shall use the ETo values from the closest location listed in the Reference Evapotranspiration Table in **Appendix C**. For geographic areas not covered in **Appendix C**, data from other cities located nearby in the same reference evapotranspiration zone may be used, as found in the CIMIS Reference Evapotranspiration Zones Map, Department of Water Resources, 1999.

(4) For calculation of the EAWU, the plant water use factor shall be determined as appropriate to the project location from the Water Use Efficiency of Landscape Species (WUCOLS) Species Evaluation List. The plant factor is 0.1 for very low water use plants, 0.2 to 0.3 for low water use plants, 0.4 to 0.6 for moderate water use plants, and 0.7 to 1.0 for high water use plants.

(5) For calculating the EAWU, the plant water use factor shall be determined for each valve hydrozone based on the highest-water-use plant species within the zone. The plant factor for each hydrozone may be required to be further refined as a "landscape coefficient," according to protocols defined in detail in the WUCOLS document, to reflect planting density and microclimate effects on water need at the option of the applicant or the City.

(6) For calculation of the EAWU, the area of a water feature shall be defined as a high water use hydrozone with a plant factor of 1.0.

(7) For calculation of the EAWU, a temporarily irrigated hydrozone area, such as an area of highly drought-tolerant native plants that are not intended to be irrigated after they are fully established, shall be defined as a very low water use hydrozone with a plant factor of 0.1.

(8) For calculation of the MAWA, the ETAF for special landscaped areas shall be set at 1.0. For calculation of the EAWU, the ETAF for special landscaped areas shall be calculated as the special landscaped area (SLA) plant factor divided by the SLA irrigation efficiency factor.

(9) Irrigation efficiency shall be calculated using the worksheet and equation presented in **Appendix B** on page B-2.

(d) The Maximum Applied Water Allowance shall adhere to the following requirements:

(1) The Maximum Applied Water Allowance shall be calculated using the equation presented in **Appendix B**. The example calculation in **Appendix B** is hypothetical to demonstrate proper use of the equation and does not represent an existing and/or planned landscape project. The reference evapotranspiration (ETo) values used in this calculation are from the Reference Evapotranspiration Table in **Appendix C** and are for planning purposes only. For actual irrigation scheduling, automatic irrigation controllers are required and shall use current ETo data, such as from the California Irrigation Management Information System (CIMIS), other equivalent data, or soil moisture sensor data.

2.3 Soil Management Report

(a) In order to reduce runoff and encourage healthy plant growth, a soil management report shall be completed by the applicant, or his/her designee, as follows:

(1) Submit soil samples to a certified agronomic soils laboratory for analysis and recommendations.

(a) Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.

(b) The soil analysis may include, but is not limited to:

1. soil texture;
2. infiltration rate determined by laboratory test or soil texture infiltration rate table;
3. pH;
4. total soluble salts;
5. sodium;
6. percent organic matter; and
7. recommendations.

(2) The applicant, or his/her designee, shall comply with one of the following:

(a) If significant mass grading is planned, the soil analysis report shall be submitted to the City as part of the Certification of Completion.

(b) if significant mass grading is not planned, the soil analysis report shall be submitted to the City as part of the Landscape Documentation Package; or

(c) The soil analysis report shall be made available, in a timely manner, to the professionals preparing the landscape design plans and irrigation design plans in order to make any necessary adjustments to the design plans.

(d) The applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the local agency with the Certification of Completion.

2.4 Landscape Design Plan

(a) For the efficient use of water, a landscape shall be carefully designed and planned for the intended function of the project. The following design criteria shall be submitted as part of the Landscape Documentation Package.

(1) Plant Material

(a) Any plant may be selected for the landscaped area provided the EAWU in the landscaped area does not exceed the MAWA. To encourage the efficient use of water, the following is highly recommended:

1. protection and preservation of non-invasive water-conserving plant species and water-conserving turf;
2. selection of water-conserving plant species and water-conserving turf;
3. selection of plants based on disease and pest resistance;
4. selection of trees based on applicable City and local tree ordinances or tree shading guidelines; and
5. selection of plants from local and regional landscape program plant lists.

(b) Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use, as specified in Section 2.5(a)(2)(D) of these Guidelines.

(c) Plants shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. To encourage the efficient use of water, the following is highly recommended for inclusion in the landscape design plan:

(1) use the Sunset Western Climate Zone System which takes into account temperature, humidity, elevation, terrain, latitude, and varying degrees of continental and marine influence on local climate;

(2) recognize the horticultural attributes of plants (i.e., mature plant size, invasive surface roots) to minimize damage to property or infrastructure (e.g., buildings, sidewalks, and power lines); and

(3) consider the solar orientation for plant placement to maximize summer shade and winter solar gain.

(d) Turf is discouraged on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape and where 25% means 1 foot of vertical elevation change for every 4 feet of horizontal length (rise divided by run x 100 = slope percent).

(e) A landscape design plan for projects in fire-prone areas and fuel modification zones shall comply with requirements of the Orange County Fire Authority, where applicable. When conflicts between water conservation and fire safety design elements exist, the fire safety requirements shall have priority.

(f) The use of invasive plant species and/or noxious plant species is strongly discouraged.

(g) The architectural guidelines of a common interest development, which include community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of water efficient plant species as a group.

(1) Water Features

(a) Recirculating water systems shall be used for water features.

(b) Where available and consistent with public health guidelines, recycled water shall be used as a source for decorative water features.

(c) The surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.

(d) Pool and spa covers are highly recommended.

(2) Mulch and Amendments

(a) A minimum two inch (2″) layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated.

(b) Stabilizing mulching products shall be used on slopes.

(c) The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.

(d) Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 2.3 of these Guidelines).

(h) The landscape design plan, at a minimum, shall:

(1) delineate and label each hydrozone by number, letter, or other method;

(2) identify each hydrozone as low, moderate, high water, or mixed water use. Temporarily irrigated areas of the landscaped area shall be included in the low water use hydrozone for the water budget calculation;

(3) identify recreational areas;

(4) identify areas permanently and solely dedicated to edible plants;

(5) identify areas irrigated with recycled water;

(6) identify type of mulch and application depth;

(7) identify soil amendments, type, and quantity;

(8) identify type and surface area of water features;

(9) identify hardscapes (pervious and non-pervious);

(10) identify location and installation details of any applicable storm water best management practices that encourage on-site retention and infiltration of storm water. Storm water best management practices are encouraged in the landscape design plan and examples include, but are not limited to:

(a) infiltration beds, swales, and basins that allow water to collect and soak into the ground;

(b) constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants; and

(c) pervious or porous surfaces (e.g., permeable pavers or blocks, pervious or porous concrete, etc.) that minimize runoff.

(11) identify any applicable rain harvesting or catchment technologies (e.g., rain gardens, cisterns, etc.);

2.5 Irrigation Design Plan

(a) For the efficient use of water, an irrigation system shall meet all the requirements listed in this section and the manufacturer's recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance. An irrigation design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

(1) System

(a) Dedicated landscape water meters are highly recommended on landscaped areas smaller than 5,000 square feet to facilitate water management.

(b) Smart automatic irrigation controllers utilizing evapotranspiration or soil moisture sensor data shall be required for irrigation scheduling in all irrigation systems.

(c) The irrigation system shall be designed to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance.

1. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators, booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system.

2. Static water pressure, dynamic or operating pressure, and flow reading of the water supply shall be measured at the point of connection. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at installation.

(d) Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climatic conditions. Irrigation should be avoided during windy or freezing weather or during rain.

(e) Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be required as close as possible to the point of connection of the water supply to minimize water loss in case of an emergency (such as a main line break) or routine repair.

(f) Backflow prevention devices shall be required to protect the water supply from contamination by the irrigation system. A project applicant shall refer to the applicable City code for additional backflow prevention requirements.

(g) High flow sensors that detect and report high flow conditions created by system damage or malfunction are recommended.

(h) The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.

(i) Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems.

(j) The design of the irrigation system shall conform to the hydrozones of the landscape design plan.

(k) Average irrigation efficiency for the project shall be determined in accordance with the EAWU calculation sheet in **Appendix B**. Unless otherwise indicated by the irrigation equipment manufacturer's specifications or demonstrated by the applicant, the irrigation efficiency of the irrigation heads used within each hydrozone shall be assumed to be:

Pop-up stream rotator heads = 75%
Stream rotor heads = 75%
Microspray = 75%
Bubbler = 80%
Drip emitter = 85%
Subsurface irrigation = 90%

(l) It is highly recommended that the applicant inquire with the local water purveyor about peak water operating demands (on the water supply system) or water restrictions that may impact the effectiveness of the irrigation system.

(m) In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.

(n) Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer's recommendations.

(o) Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.

(p) Swing joints or other riser-protection components are required on all risers subject to damage that are adjacent to high traffic areas.

(q) Check valves or anti-drain valves are required for all irrigation systems.

(r) Narrow or irregularly shaped areas, including turf, less than eight (8) feet in width in any direction shall be irrigated with subsurface irrigation or a low volume irrigation system.

(s) Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface. Allowable irrigation within the setback from non-permeable surfaces may include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:

1. the landscaped area is adjacent to permeable surfacing and no runoff occurs; or

2. the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping; or

3. the irrigation designer for the landscape project specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates strict adherence to the irrigation system design criteria in Section 2.5 (a)(1)(H) hereof. Prevention of overspray and runoff must be confirmed during an irrigation audit.

4. Slopes greater than 25% shall not be irrigated with an irrigation system with a precipitation rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer of the landscape project specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff and erosion must be confirmed during the irrigation audit.

(2) Hydrozone

(a) Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use.

(b) Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.

(c) Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf.

(d) Individual hydrozones that mix plants of moderate and low water use or moderate and high water use may be allowed if:

1. the plant factor calculation is based on the proportions of the respective plant water uses and their respective plant factors; or

2. the plant factor of the higher water using plant is used for the calculations.

(e) Individual hydrozones that mix high and low water use plants shall not be permitted.

(f) On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. On the irrigation design plan, designate the areas irrigated by each valve and assign a number to each valve.

(g) The irrigation design plan, at a minimum, shall contain:

1. the location and size of separate water meters for landscape;

2. the location, type, and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices;

3. static water pressure at the point of connection to the public water supply;

4. flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;

5. irrigation schedule parameters necessary to program smart timers specified in the landscape design;

2.6 Grading Design Plan

(a) For the efficient use of water, grading of a landscape project site shall be designed to minimize soil erosion, runoff, and water waste. Finished grading configuration of the landscaped area, including pads, slopes, drainage, post-construction erosion control, and storm water control Best Management Practices, as applicable, shall

be shown on the Landscape Plan unless this information is fully included in separate Grading Plans for the project.

(b) The applicant shall submit a landscape grading design plan that indicates finished configurations and elevations of the landscaped area including, but not limited to:

(1) height of graded slopes;

(2) drainage patterns;

(3) pad elevations;

(4) finish grade; and

(5) storm water retention improvements, if applicable.

(c) To prevent erosion and runoff, it is highly recommended that the applicant:

(1) grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes;

(2) avoid disruption of natural drainage patterns and undisturbed soil; and

(3) avoid soil compaction in landscaped areas.

(d) Certification of compliance with the City of Laguna Woods' Water Efficient Landscape Ordinance (Laguna Woods Municipal Code Chapter X.XX) and the City of Laguna Woods' Guidelines for Implementation of the Water Efficient Landscape Ordinance in form sufficient to the City Manager or his or her designee.

2.7 Certification of Completion

(a) Landscape project construction shall not proceed until the Landscape Documentation Package has been approved by the City and any ministerial permits required are issued.

(b) The applicant shall notify the City at the beginning of the installation work and at intervals, as necessary, for the duration of the landscape project work to schedule all required inspections.

(c) Certification of Completion of the landscape project shall be obtained through a Certificate of Use and Occupancy or a Permit Final. The requirements for the Final Inspection and Permit Closure include submittal of:

(1) A Landscape Installation Certificate of Completion in the form included as **Appendix D** of these Guidelines, which shall include: (i) certification by a landscape professional that the landscape project has been installed per the approved Landscape Documentation Package; and (ii) the following

statement: "The landscaping has been installed in substantial conformance to the design plans, and complies with the provisions of the Water Efficient Landscape Ordinance for the efficient use of water in the landscape."

(2) Documentation of the irrigation scheduling parameters used to set the controller(s);

(3) An irrigation audit report from a certified irrigation auditor, documentation of enrollment in regional or local water purveyor's water conservation programs, and/or documentation that the MAWA and EAWU information for the landscape project has been submitted to the local water purveyor, may be required at the option of the City.

2.8 Post-Installation Irrigation Scheduling

(a) For the efficient use of water, all irrigation schedules shall be developed, managed, and evaluated to utilize the minimum amount of water required to maintain plant health. Irrigation schedules shall meet the following criteria:

(1) Irrigation scheduling shall be regulated by automatic irrigation controllers.

(2) Overhead irrigation shall be scheduled in accordance with the local water purveyor's Water Conservation Ordinance.

2.9 Post-Installation Landscape and Irrigation Maintenance

(a) Landscapes shall be maintained to ensure water use efficiency in accordance with existing City codes governing landscape and property maintenance.

3. Provisions for Existing Landscapes

(a) Irrigation of all landscaped areas shall be conducted in a manner conforming to the rules and requirements and shall be subject to penalties and incentives for water conservation and water waste prevention, as determined and implemented by the local water purveyor and as may be mutually agreed by the City.

(b) The City and/or the regional or local water purveyor may administer programs such as irrigation water use analyses, irrigation surveys and/or irrigation audits, tiered water rate structures, water budgeting by parcel, or other approaches to achieve landscape water use efficiency community-wide to a level equivalent to or less than would be achieved by applying a MAWA calculated with an ETAF of 0.8 to all landscaped areas in the City over one acre in size.

(c) The architectural guidelines of a common interest development, including apartments, condominiums, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.

Appendix A

CERTIFICATION OF LANDSCAPE DESIGN

I hereby certify that:

(1) I am a landscape professional meaning a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape pursuant to Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the California Business and Professions Code, Section 832.27 of Title16 of the California Code of Regulations, and Section 6721 of the California Food and Agriculture Code.

(2) The landscape design and water use calculations for the property located at _____

_____

(provide street address or parcel number(s)) were prepared by me or under my supervision.

(3) The landscape design and water use calculations for the identified property comply with the requirements of the City of Laguna Woods' Water Efficient Landscape Ordinance (Laguna Woods Municipal Code Chapter X.XX) and the City of Laguna Woods' Guidelines for Implementation of the Water Efficient Landscape Ordinance.

(4) The information I have provided in this Certificate of Landscape Design is true and correct and is hereby submitted in compliance with the City of Laguna Woods' Guidelines for Implementation of the Water Efficient Landscape Ordinance.

_____ _____

Print Name Date

_____ _____

Signature License Number

_____

Address

_____ _____

Telephone E-mail Address

Landscape Professional's Stamp
(If applicable)

EXAMPLE WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out for each Point of Connection. Please complete all sections of the worksheet.

Point of Connection # 1

Maximum Applied Water Allowance (MAWA)

Total MAWA = (ETo x 0.7 x LA in Sq. Ft. x 0.62) + (ETo x 1.0 x SLA in Sq. Ft. x 0.62) = Gallons per year for LA+SLA

where:
MAWA = Maximum Applied Water Allowance (gallons per year)
ETo = Reference Evapotranspiration **Appendix C** (inches per year)
0.7 = Evapotranspiration Adjustment Factor (ETAF)
1.0 = ETAF for Special Landscaped Area
LA = Landscaped Area (square feet)
0.62 = Conversion factor (to gallons per square foot)
SLA = Special Landscaped Area (square feet)

Example Calculation: a hypothetical landscape project in Santa Ana, CA with an irrigated landscaped area of 40,000 square feet with 10,000 square feet of Special Landscaped Area. To calculate MAWA, the annual reference evapotranspiration value for Santa Ana is 48.2 inches as listed in the Reference Evapotranspiration Table in **Appendix C**.

	ETo		ETAF		LA or SLA (ft^2)		Conversion		MAWA (Gallons Per Year)
MAWA for LA =	48.2	x	0.7	x	40,000	x	0.62	=	836,752
MAWA for SLA =	48.2	x	1.0	x	10,000	x	0.62	=	298,840
Total MAWA =					50,000				1,135,592 Gallons per year for LA+SLA

Estimated Applied Water Use

EAWU = ETo x K_L x LA x 0.62 ÷ IE = Gallons per year

where:

EAWU = Estimated Applied Water Use (gallons per year)
ETo = Reference Evapotranspiration **Appendix C** (inches per year)
K_L = Landscape Coefficient
LA = Landscaped Area (square feet)
0.62 = Conversion factor (to gallons per square foot)
IE = Irrigation Efficiency = IME x DU (See definition in Appendix E for example IE percentages)
IME = Irrigation Management Efficiency (90%)
DU = Distribution Uniformity of irrigation head

$K_L = K_s \times K_d \times K_{mc}$

K_s = species factor (range = 0.1-0.9) (see WUCOLS list for values)
K_d = density factor (range = 0.5-1.3) (see WUCOLS for density value ranges)
K_{mc} = microclimate factor (range = 0.5-1.4) (see WUCOLS)

WUCOLS – **www.owue.water.ca.gov/docs/wucols00.pdf**

Example Calculation:

	ETo		K_L		LA		Conversion		IE		EAWU (Gallons per year)
Special Landscaped Area	48.2	x	1.00	x	10,000	x	0.62	÷	0.75	=	398,453
Cool Season Turf	48.2	x	1.00	x	0	x	0.62	÷	0.71	=	0
Warm Season Turf	48.2	x	0.65	x	0	x	0.62	÷	0.71	=	0
High Water Using Shrub	48.2	x	0.70	x	0	x	0.62	÷	0.71	=	0
Medium Water Using Shrub	48.2	x	0.50	x	15,000	x	0.62	÷	0.65	=	344,815
Low Water Using Shrub	48.2	x	0.30	x	25,000	x	0.62	÷	0.75	=	298,840
Very Low Water Using Shrub	48.2	x	0.20	x	0	x	0.62	÷	0.71	=	0
Other	48.2	x	0.50	x	0	x	0.62	÷	0.71	=	0
Other	48.2	x	0.50	x	0	x	0.62	÷	0.71	=	0
Total EAWU =					50,000						1,042,109 Gallons per year

Compare EAWU with MAWA.
The EAWU (1,042,109 gallons per year) is less than MAWA (1,135,592 gallons per year). For this example, the water budget complies with the MAWA.

List sprinkler heads, microspray, and drip emitters here along with average precipitation rate and Distribution Uniformity of Irrigation Head.

Sprinkler Head Types	**Average Precipitation Rate**	**Distribution Uniformity of Irrigation Head**
Drip		
Microspray		
Bubbler		
Low precipitation rotating nozzles		
Stream rotors		

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out for each Point of Connection. Please complete all sections of the worksheet.

Point of Connection #___

Maximum Applied Water Allowance (MAWA)

Total MAWA = (ETo x 0.7 x LA in Sq. Ft. x 0.62) + (ETo x 1.0 x SLA in Sq. Ft. x 0.62) = Gallons per year for LA+SLA

where:

MAWA = Maximum Applied Water Allowance (gallons per year)
ETo = Reference Evapotranspiration **Appendix C** (inches per year)
0.7 = Evapotranspiration Adjustment Factor (ETAF)
1.0 = ETAF for Special Landscaped Area
LA = Landscaped Area (square feet)
0.62 = Conversion factor (to gallons per square foot)
SLA = Special Landscaped Area (square feet)

MAWA Calculation:

	ETo		ETAF		LA or SLA (ft^2)		Conversion		MAWA (Gallons Per Year)
MAWA for LA =		x	0.7	x		x	0.62	=	
MAWA for SLA =		x	1.0	x		x	0.62	=	
Total MAWA =									

Estimated Applied Water Use

EAWU = ETo x K_L x LA x 0.62 ÷ IE = Gallons per year

where:

EAWU = Estimated Applied Water Use (gallons per year)
ETo = Reference Evapotranspiration **Appendix C** (inches per year)
K_L = Landscape Coefficient
LA = Landscaped Area (square feet)
0.62 = Conversion factor (to gallons per square foot)
IE = Irrigation Efficiency = IME x DU
IME = Irrigation Management Efficiency (90%)
DU = Distribution Uniformity of irrigation head

$K_L = K_s \times K_d \times K_{mc}$

K_s = species factor (range = 0.1-0.9) (see WUCOLS list for values)
K_d = density factor (range = 0.5-1.3) (see WUCOLS for density value ranges)
K_{mc} = microclimate factor (range = 0.5-1.4) (see WUCOLS)

WUCOLS – **www.owue.water.ca.gov/docs/wucols00.pdf**

EAWU Calculation:

	ETo		K_L		LA		Conversion		IE		EAWU (Gallons Per Year)
Special Landscaped Area		x		x		x	0.62	÷		=	
Cool Season Turf		x		x		x	0.62	÷		=	
Warm Season Turf		x		x		x	0.62	÷		=	
High Water Using Shrub		x		x		x	0.62	÷		=	
Medium Water Using Shrub		x		x		x	0.62	÷		=	
Low Water Using Shrub		x		x		x	0.62	÷		=	
Very Low Water Using Shrubs		x		x		x	0.62	÷		=	
		x		x		x	0.62	÷		=	
		x		x		x	0.62	÷		=	
		x		x		x	0.62	÷		=	
		x		x		x	0.62	÷		=	
		x		x		x	0.62	÷		=	
		x		x		x	0.62	÷		=	
Other		x		x		x	0.62	÷		=	
Total EAWU =											

List sprinkler heads, microspray, and drip emitters here along with average precipitation rate and Distribution Uniformity of Irrigation Head.

Sprinkler Head Types	**Average Precipitation Rate**	**Distribution Uniformity of Irrigation Head**
Drip		
Microspray		
Bubbler		
Low precipitation rotating nozzles		
Stream rotors		

Appendix C

Reference Evapotranspiration (ETo) Table

Appendix C - Reference Evapotranspiration (ETo) Table*													
County and City	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual ETo**
Orange													
Irvine	2.2	2.5	3.7	4.7	5.2	5.9	6.3	6.2	4.6	3.7	2.6	2.3	49.6
Laguna Beach	2.2	2.7	3.4	3.8	4.6	4.6	4.9	4.9	4.4	3.4	2.4	2.0	43.2
Santa Ana	2.2	2.7	3.7	4.5	4.6	5.4	6.2	6.1	4.7	3.7	2.5	2.0	48.2
* The values in this table were derived from:1) California Irrigation Management Information System (CIMIS) 2) Reference EvapoTranspiration Zones Map, UC Dept. of Land, Air & Water Resources and California Dept of Water Resources 1999, 3) Reference Evapotranspiration for California, University of California, Department of Agriculture and Natural Resources (1987) Bulletin 1922 4) Determining Daily Reference Evapotranspiration, Cooperative Extension UC Division of Agriculture and Natural Resources (1987), Publication Leaflet 21426													

LANDSCAPE INSTALLATION CERTIFICATE OF COMPLETION

I hereby certify that:

(1) I am a landscape professional meaning a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape pursuant to Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the California Business and Professions Code, Section 832.27 of Title16 of the California Code of Regulations, and Section 6721 of the California Food and Agriculture Code.

(2) The landscape project for the property located at _____ _____(provide street address or parcel number(s)) was installed by me or under my supervision.

(3) The landscape project for the identified property has been installed in substantial conformance with the approved Landscape Documentation Package and complies with the requirements of the City of Laguna Woods' Water Efficient Landscape Ordinance (Laguna Woods Municipal Code Chapter X.XX) and the City of Laguna Woods' Guidelines for Implementation of the Water Efficient Landscape Ordinance for the efficient use of water in the landscape.

(4) The information I have provided in this Certificate of Landscape Design is true and correct and is hereby submitted in compliance with the City of Laguna Woods' Guidelines for Implementation of the Water Efficient Landscape Ordinance.

_____ _____

Print Name Date

_____ _____

Signature License Number

_____

Address

_____ _____

Telephone E-mail Address

Landscape Professional's Stamp
(If Appropriate)

Appendix E

Supplemental Definitions

Terms used in these Guidelines are defined in Section X.XX.XXX of the Laguna Woods Municipal Code. Additional terms used in these Guidelines have the meaning set forth below:

"*Backflow prevention device*" means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

"*Conversion factor*" means the number that converts acre-inches per acre per year to gallons per square foot per year.

"*Check valve*" or "*anti-drain valve*" means a valve located under a sprinkler head, or other location in the irrigation system, to hold water in the system to prevent drainage from sprinkler heads when the sprinkler is off.

"*Certified Landscape Irrigation Auditor*" means person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency's WaterSense irrigation auditor certification program and Irrigation Association's Certified Landscape Irrigation Auditor program.

"*Certification of Design*" means the certification included as Exhibit E of these Guidelines that must be included in the Landscape Documentation Package pursuant to Section 2.1 of these Guidelines.

"*Common interest developments*" means community apartment projects, condominium projects, planned developments, and stock cooperatives per Civil Code Section 1351

"*Distribution Uniformity*" or "*DU*" is a measure of how uniformly an irrigation head applies water to a specific target area and theoretically ranges form zero to 100 percent.

"*Drip irrigation*" means any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

"*Emitter*" means a drip irrigation emission device that delivers water slowly from the system to the soil.

"*Evapotranspiration rate*" means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.

"*Flow rate*" means the rate at which water flows through pipes, valves and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.

"*Infiltration rate*" means the rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).

"*Invasive plants species*" or "*noxious*" means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive plant species may be regulated by county agricultural agencies as noxious species.

"*Irrigation audit*" means an in-depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. An irrigation audit includes, but is not limited to: inspection, system tune-up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow, and preparation of an irrigation schedule.

"*Irrigation Management Efficiency*" or "*IME*" means the measurement used to calculate the irrigation efficiency of the irrigation system for a landscaped project. A 90% IME can be achieved by using evaportranspiration controllers, soil moisture sensors, and other methods that will adjust irrigation run times to meet plant water needs.

"*Landscape coefficient*" (K_L) is the product of a plant factor multiplied by a density factor and a microclimate factor. The landscape coefficient is derived to estimate water loss from irrigated landscaped areas and special landscaped areas.

"*Landscape Installation Certificate of Completion*" means the certificate included as Exhibit F of these Guidelines that must be submitted to the City pursuant to Section 2.7(a)(1) of hereof.

"*Lateral line*" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

"*Low volume irrigation*" means the application of irrigation water at low pressure through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

"*Main line*" means the pressurized pipeline that delivers water from the water source to the valve or outlet.

"M*icroclimate*" means the climate of a small, specific area that may contrast with the climate of the overall landscaped area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.

"*Mulch*" means any organic material such as leaves, bark, straw or compost, or inorganic mineral materials such as rocks, gravel, or decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.

"*Operating pressure*" means the pressure at which the parts of an irrigation system of sprinklers are designed to operate at by the manufacturer

"*Overspray*" means the irrigation water which is delivered beyond the target area.

"*Precipitation rate*" means the rate of application of water measured in inches per hour.

"*Runoff*" means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscaped area. For example, runoff may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a slope.

"*Sprinkler head*" means a device which delivers water through a nozzle.

"*Static water pressure*" means the pipeline or municipal water supply pressure when water is not flowing.

"*Station*" means an area served by one valve or by a set of valves that operate simultaneously.

"*Swing joint*" means an irrigation component that provides a flexible, leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.

"*Water Efficient Landscape Ordinance*" means City of Laguna Woods Ordinance Number 09-XX, codified in Laguna Woods Municipal Code Chapter X.XX.

"*Water Efficient Landscape Worksheets*" means the worksheets required to be completed pursuant to Section 2.2 of these Guidelines and which are included in Appendix B hereof.

"*Watering window*" means the time of day irrigation is allowed.

"*WUCOLS*" means the Water Use Classification of Landscape published by the University of California Cooperative Extension, the Department of Water Resources, and the Bureau of Reclamation, 2000. www.owue.water.ca.gov/docs/wucols00

City of Laguna Woods
Agenda Report

FOR: November 12, 2009 Land Use and Design Review Committee

TO: Chairman and Members of the Land Use and Design Review Committee

FROM: Deborah Drasler, City Planner

AGENDA ITEM: Conditional Use Permit application CUP-580 -Sprint/Nextel wireless expansion at 24141 Moulton Parkway, filed by Sprint/Nextel.

Recommendation

Review the proposed cellular site modifications and recommend approval of Conditional Use Permit Application CUP 580 to City Council subject to the recommended conditions of approval.

Background

The applicant, Sprint/Nextel is requesting a Conditional Use Permit to expand their existing wireless facility on an existing mono-pine located within the water tank facility compound of the El Toro Water District. The proposal will relocate two antennas within the same sector and add three new antennas and three new microwave dishes. Additionally, one equipment cabinet and GPS antenna will be placed within an existing equipment area. The proposed facility is intended to improve cellular service for Sprint/Nextel Wireless customers within the City of Laguna Woods.

Co-location of antennas or the expansion of a wireless facility is considered "minor" facilities because of their minimal potential for physical and visual impact to the surrounding properties. Even though the proposal is minor, the expansion of use requires that the project obtain a conditional use permit approval and go through the public hearing process.

This application, if approved, would be the fifth entitlement related to a wireless telecommunications facility at the subject site.

On July 19, 2000, the City Council approved CUP 00-03 allowing Sprint Wireless to construct a 60' high mono-pine wireless tower with 12 panel antennas at 55' on center within the water tank facility compound of the El Toro Water District.

On July 17, 2002, the City Council approved Conditional Use Permit CUP-33 which allowed the co-location of 6 antennas at 35' on center by AT&T Wireless.

On July 15, 2006, the City Council approved CUP 286 allowing Cingular Wireless (who had since acquired AT&T Wireless) to co-locate three additional antennas at 35' on center.

Lastly, on September 20, 2006, the City Council approved CUP 325 which allowed the co-location of 6 antennas at 45' on center by Royal Street.

Adjacent Land Uses to the proposed site

Location	Land Use designation	Land Use
North	Open Space	City Centre Park Location- Gate 12
South	Community Commercial	Laguna Hills Animal Hospital
East	Community Commercial	Extra Space Self-Storage Facility and Arco Station
West	Community Commercial	Town Centre Development

Discussion

Issue 1: Mono-pine and Installation of the Antennas

The existing mono-pine utilizes a stealth design in camouflaging the structure to simulate a pine tree to blend in with the existing trees that currently screen the water tanks. The original mono-pine design also utilizes existing site topography, an approximate 21 foot high earthen berm, to screen the antenna structure and related equipment cabinets. As a result, only the upper two-thirds (approximately 40 foot) of the mono-pine can be seen from the public right of way.

As currently existing, Sprint/Nextel maintains three sectors of two panel antennas (six panel antennas total) at 55' on center. Although originally entitled for 12 panel

antennas, only 6 panel antennas have been erected. As proposed, the applicant is requesting to relocated 2 panel antennas within the existing sectors and install three additional antennas and three microwave dishes (at the 55'level) on the upper portion of the mono-pine structure. As a result, the overall project will include nine panel antennas and three microwave dishes. Each antenna panel is 4 feet tall, 8 inches wide and 3 inches deep, and each micro wave dish is two feet wide in diameter. Both the panel antennas and microwave dish are capable of sending and receiving signals.

In addition, the wireless facility has capabilities for GPS (Global Positioning System) and is part of the 911 emergency systems. The specific orientation and height of each antenna sector has been determined by technical analysis to achieve the network requirements of the applicant. All proposed microwave dishes will be painted green in color and all existing and proposed panel antennas will be camouflaged with "pine needle antenna socks" to blend in with the simulated tree and reduce visual obtrusiveness, thus minimizing the aesthetic impact to the residents of Laguna Woods (condition no. 14). Additionally, staff is requesting the applicant to provide additional braches throughout the mono-pine to resemble a natural pine tree and to blend in better with the other mature trees in the immediate surround area of the site. (condition no.15).

Interference with Public Safety Equipment

In recent years there has been concern that the increased use of cell phone technology may result in interference with public safety radio frequencies. As a result of this concern, a set of project conditions have been developed to resolve conflicts between public safety equipment and cell phone technology. These conditions contain provisions for testing proposed sites for interference with public safety radios and enforcement of non-interference standards. These conditions have been incorporated into the prior project approval and remain a condition of the cellular site expansion (see wireless conditions).

Issue 2: Location of Equipment Boxes

In addition to the cellular antennas, the applicant proposes to add a 2' X 5' equipment cabinet on an existing Sprint/Nextel pad. All new and existing equipment boxes will be located in the existing lease area. The equipment cabinets will continue to be fully screened from view from the public right of way.

Issue 3: Required findings for City Council
In addition to the required finding for conditional use permits, City Council must make the following findings when approving permits for wireless facilities based on the application and conditions of approval:

1. The proposed facility will not create any significant blockage of public views.

2. The proposed facility will be an enhancement to the City due to its ability to provide additional communication capabilities.

3. The proposed facility will be aesthetically integrated into its surrounding land use.

4. The proposed facility will comply with FCC regulations regarding interference with the reception or transmission of other wireless service signals within the City and surrounding community.

5. The proposed facility will operate in compliance with all other applicable federal regulations for such facilities, including safety regulations.

6. The Public need for the use of the antenna facility has been documented.

Environmental Review:

The proposed project is categorically exempt from the requirements for the preparation of environmental documents under section 15301 "Existing Facilities" of the California Environmental Quality Act.

Conclusion:

Staff recommends that the Land Use and Design Review Committee review the proposed wireless facility expansion and recommend approval to City Council. Land Use and Design Review Committee comments will be presented with the project proposal when it is considered by the City Council at their December 2, 2009 meeting.

Attached:
1. Draft Conditions of Approval
2. Appendix B – Conditions of Approval for CUP00-03
3. Coverage analysis
4. Photo Simulations
5. Project Plans

DRAFT CONDITIONS OF APPROVAL
CUP 580

GENERAL PROJECT CONDITIONS

1. This permit (Conditional Use Permit CUP 580) is issued for the expansion of the existing wireless facility co-location approved by CUP00-03 on July 19, 2000. All applicable City standards and conditions of that approval shall be in place unless specifically superceded by the project conditions referenced within. The proposed expansion shall be in conformance with the site plans stamped approved on December 2, 2009.

2. The applicant, or successor in interest, shall abide by and faithfully comply with any and all conditions of this permit. Failure to comply with the conditions of this permit constitute grounds for revocation of said permit by the City of Laguna Woods City Council.

3. The applicant, or successor in interest, shall agree, as a condition of issuance of this permit, to at its sole expense, defend, indemnify, and hold harmless the City, its officers, employees, agents and consultants from any claim, action, or proceeding against the City, its officers, agents, and employees to attach, set aside, void or annul an approval of the City Council, Planning Agency, or other decision-making body, or staff action concerning this project. The applicant shall pay the City's defense costs and shall reimburse the City for court costs and attorney fees that the City may be required by a court to pay as a result of such defense. The applicant may at its sole discretion participate in the defense or any such action under this condition.

4. The permit is granted for the property as described in the application and shall not be transferable from one parcel to another.

5. This permit shall become null and void within 24 months from the date of its issuance, unless the proposed development or use has been diligently pursued. The issuance of a grading, foundation, or building permit for structural construction shall be a minimum requirement for evidence of diligent pursuit.

6. The development or use by the Developer of any activity or structure authorized by this permit shall constitute acceptance of all of the conditions and obligations imposed by the City on this permit. The Developer by said acceptance waives any challenge as to the validity of these conditions.

7. Any covenants, conditions, and restrictions (CC&R's) applicable to the subject property shall be consistent with the terms of this permit and the Laguna Woods City Code. Where a conflict exists between the CC&R's and City regulations, the City regulations shall prevail.

8. The applicant and applicant's successors in interest shall be fully responsible for knowing and complying with all conditions of approval, including making known the conditions to City staff for future governmental permits or actions on the project site.

9. The applicant and applicant's successors in interest shall be responsible for payment of all applicable fees along with reimbursement for all City expense in ensuring compliance with these conditions. Fees shall be due within 60 days of approval or prior to final approval of related building permits, whichever occurs first.

PLANNING STANDARD CONDITIONS

10. This approval constitutes approval of the project only to the extent that it complies with the City Zoning Code and any other applicable City standards. Approval does not eliminate the need for building permits or include any action or finding as to compliance or approval of any other applicable Federal, State or Local ordinance, regulation or requirements.

11. Except as otherwise provided herein, this permit is approved as a precise plan for the location and design of the uses, structures, features, and materials shown on the approved plans. After an application has been approved, a change plan may be submitted to the City's Community Development Director for any relocation, alteration, or addition to any use, structure, feature, or material, not specifically approved in the original application. If the Community Development Director determines that the proposed change complies with the

provisions, spirit and intent of this approval action, and that the action would have been the same for the changed plan as for the approved plot plan, he may approve the changed plan without requiring a new public hearing.

12. A building permit shall be secured for any new construction or modifications to structures, including interior modifications, authorized by this permit. The applicant shall submit three (3) sets of plans stamped and signed by the architect or engineer to the Building Department for review, approval and issuance of a building permit.

13. The cover sheet of the building construction documents shall contain the City's conditions of approval and it shall be attached to each set of plans submitted for City approval or shall be printed on the title sheet verbatim.

PLANNING SPECIAL CONDITIONS

14. Prior to issuance of a building permit, the applicant shall incorporate the following information on the final approved architectural plans:
    a. All proposed microwave dishes shall be painted green in color.
    b. All existing and proposed panel antennas shall be camouflaged with "pine needle antenna socks"

15. Prior to issuance of a building permit, the applicant shall incorporate on the final approved architectural plans; additional branches and replace any missing branches throughout the mono-pine to resemble a natural pine tree and to blend in better with the other mature trees in the immediate surrounding area of the site.

16. Prior to issuance of a building permit, the applicant shall provide the following information on the final approved site plan subject to the review and approval of the Building Official.
    a. Page A2, detail 1; Identify proposed power cable and conduit sizing. Submit calculation for existing load on 'key note item 6 and 4'. Calculate proposed additional load with existing load to determine the total proposed load. Note compliance of equipment capability to handle total proposed load.
    b. Identify means of grounding for proposed equipment and cabinet.

c. Identify proposed equipment voltage range to determine working space requirement in front of the proposed cabinet.

WIRELESS PERMIT CONDITIONS

17. The City may require modification or removal of wireless antenna facilities for various reasons such as, but not limited to, changes in technology, safety hazards or new environmental concerns, etc. All costs of installation, modification to and removal of wireless antenna facilities and related equipment shall be borne by the applicant, whether required by the City or otherwise.

18. The applicant and applicant's successors in interest shall cease operation of this facility, upon expiration of a 24-hour cure period, should it cause interference with the City or City agent's Public Safety radio equipment. Failure to cease operation will result in automatic suspension of the permit and grounds for revocation by City Council.

19. The proposed facility shall not bear any signs or advertising devices except those required for certification, public safety, warning or other required seals or signage.

20. The facility shall not be illuminated unless specifically required by the Federal Aviation Administration or other governmental agency.

21. The applicant and applicant's successors in interest shall be required to completely dismantle and remove the proposed antennas and equipment cabinets, if abandoned for a period of six months or more.

22. A Radio-Frequency testing report shall be provided after the initial installation. At the time a Temporary Certificate of Occupancy will be issued and then once the site is operable, an additional report shall be submitted within 45 days to demonstrate that the facility is in compliance with government safety standards.

23. The applicant and applicant's successors in interest shall submit to a post-installation test to confirm that the facility does not interfere with the City of Laguna Woods Public Safety radio equipment (including contract services). This test will be conducted by the Communications Division of the Orange County Sheriff's Department or a Division-

approved contractor at the expense of the applicant. Proof of compliance shall be provided the Community Development Director.

24. The applicant and applicant's successors in interest shall provide a "single point of contact" in its Engineering and Maintenance Departments to ensure continuity on all interference issues. The name, telephone number, fax number, and e-mail address of that person shall be provided to the Communications Division of the Orange County Sheriff's Department.

STORMWATER CONDITIONS

25. The applicant, or successor in interest, shall take all necessary steps to prevent construction and all other non-storm water waste from entering the storm drain system. This may include structural BMPs (best management practices) such as gravel bags around storm drains, sweeping instead of washing down construction areas and the proper handling and disposal of construction materials.

26. The City retains the right to inspect the premises for compliance with the City's storm water programs and NPDES permit requirements.

FIRE CONDITIONS

28. Prior to the issuance of a grading or building permit, the applicant shall submit to the Fire Chief a list of all hazardous, flammable and combustible liquids, solids or gases to be stored, used or handled on site. These materials shall be classified according to the Uniform Fire Code and a document submitted to the Fire Chief with a summary sheet listing the totals for storage and use for each hazard class. Please contact the Orange County Fire Authority at (714) 744-0499 or visit the Orange County Fire Authority website to obtain a copy of the "Guideline for Completing Chemical Classification Packets."

29. Prior to the issuance of a building permit, the applicant shall complete and submit to the Fire Chief a copy of a "Hazardous Materials Disclosure Chemical Inventory and Business Emergency Plan" packet. Please contact the Orange County Fire Authority Hazardous

Materials Services Section at (714) 744-0463 to obtain a copy of the packet.

30. Prior to the issuance of a building permit, the applicant shall submit architectural plans for the review and approval of the Fire Chief if required per the "Orange County Fire Authority Plan Submittal Criteria Form." Please contact the Orange County Fire Authority at (714) 744-0499 for a copy of the Site/Architectural Notes to be placed on the plans prior to submittal.

APPENDIX B

Conditions of Approval for Conditional Use Permit CUP00-03 – Sprint PCS

As approved by the City Council July 19, 2000

CONDITIONS OF APPROVAL

1 ZONING

BASIC/ZONING REGULATIONS

A. This approval constitutes approval of the proposed project only to the extent that the project complies with the City of Laguna Woods Zoning Code and any other applicable zoning regulations. Approval does not include any action or finding as to compliance of approval of the project regarding any other applicable ordinance, regulation, or requirement.

BASIC/TIME LIMIT

B. This approval is valid for a period of 24 months from the date of final determination. If the use approved by this action is not established within such period of time, this approval shall be terminated and shall, thereafter, be null and void.

BASIC/PRECISE PLAN

C. Except as otherwise provided herein, this permit is approved as a precise plan. After any application has been approved, if changes are proposed regarding the location or alteration of any use or structure, a changed plan may be submitted to the City's Community Development Director, for approval. If the Community Development Director determines that the proposed change complies with the provisions and the spirit and intent of the approval action, and that the action would have been the same for the changed plan as for the approved plot plan, he may approve the changed plan.

BASIC/COMPLIANCE

D. Failure to abide by and faithfully comply with any and all conditions attached to this approving action shall constitute grounds for the revocation of said action by the City Council.

2. BASIC/OBLIGATIONS

The applicant agrees, as a condition of issuing this permit, to indemnify, protect, defend, and hold harmless the City, and any agency thereof, and/or of its officers, employees, and agents thereof, including actions approved by the voters of the City, concerning the project, or any maps, permits, and environmental approvals associated therewith. In the event of indemnification and defense pursuant to this condition, the applicant shall reasonably accept defense counsel requested by the City and pay all legal and expert fees and expenses of the City in defending any legal action brought against the City, or any agency thereof, and/or its officers, employees and agents. City shall promptly notify the applicant of any claim, action or proceeding concerning the project, and City shall further cooperate fully.

3. INDEMNIFICATION RESPONSIBILITY

Applicant shall defend, at his/her sole expense; any action brought against the City because of issuance of this permit or, in the alternative, shall relinquish such permit. Applicant will reimburse the City for any court costs and attorneys fees that the City may be required by a court to pay as a result of such action. The City may, at its sole discretion, participate in the defense of any such action, but such participation shall not relieve applicant of his/her obligations under this condition.

4. BASIC/OBLIGATIONS

Pursuant to Government Code Section 66020, the applicant is informed that the 90-day period in which the applicant may protest the fees, dedications, reservation or other extraction imposed on this project through the conditions of approval has begun.

5. HAZARDOUS MATERIALS

A. Prior to the approval of a use/site permit(s), issuance of any grading permits, or building permits, whichever occurs first, the applicant shall submit to the Fire Chief a list of the quantities of all hazardous, flammable, and combustible materials, liquids, or gases to be stored, used, or handled on site. These liquids and materials shall be classified according to the Uniform Fire Code using the Orange County Fire Authority Chemical Classification Handout. The submittal shall provide a summary sheet listing each hazard class, the total quantity of chemicals stored per class, and the total quantity of chemicals used in each class. All forms of materials are to be converted to units of measure in pounds, gallons, and cubic feet.

B. Prior to the issuance of a building permit, the applicant shall contact the Orange County Fire Authority Hazardous Materials Disclosure Office at (714) 744-0463 to obtain a Hazardous Materials Business Information and Chemical Inventory Packet. This shall be completed and submitted to the Fire Chief prior to the issuance of any building permit.

6. FACILITY FINAL DESIGN

A. Prior to the issuance of a building permit for the wireless telecommunication facility, the applicant shall demonstrate within the construction plans, in a manner meeting the approval of the Community Development Director, that the final construction plans are consistent with the preliminary site development permit plans, including exterior finishes and colors of the screen enclosures, locations of the equipment and antennas, and dimensions of the equipment and antenna enclosures.

B. Prior to issuance of final certificates of use and occupancy for the wireless telecommunication facility, the applicant shall ensure that the above measures have been completed in a manner meeting the approval of the City Building Official.

7. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS

All applicable Federal, State and Local laws shall be adhered to by the operator of the facility. Regulatory agencies involved with compliance requirements include the Federal Communications Commission (FCC), Federal Aviation

12. COMBUSTIBLE CONSTRUCTION LETTER

Prior to the issuance of a building permit for combustible construction, the builder shall submit a letter to the Fire Chief, on company letterhead, stating that water for firefighting purposes and the all-weather fire protection access roads shall be in place and operational before any combustible material is placed on site.

13. ARCHITECTURAL BUILDING PLANS

Prior to the issuance of a building permit, the applicant shall submit plans for the review and approval of the Fire Chief as indicated on the OCFA Plan Submittal Criteria form. Call the OCFA at (714) 744-0403 for a copy of the Fire Safety Site/Architectural Notes to be placed on the plans prior to submittal.

14. GEOLOGY REPORT

Prior to the issuance of a grading permit, the applicant shall submit a geo-technical report to the Manager, Subdivision and Grading for approval. The report shall include the information and be in a form as required by the Grading Manual.

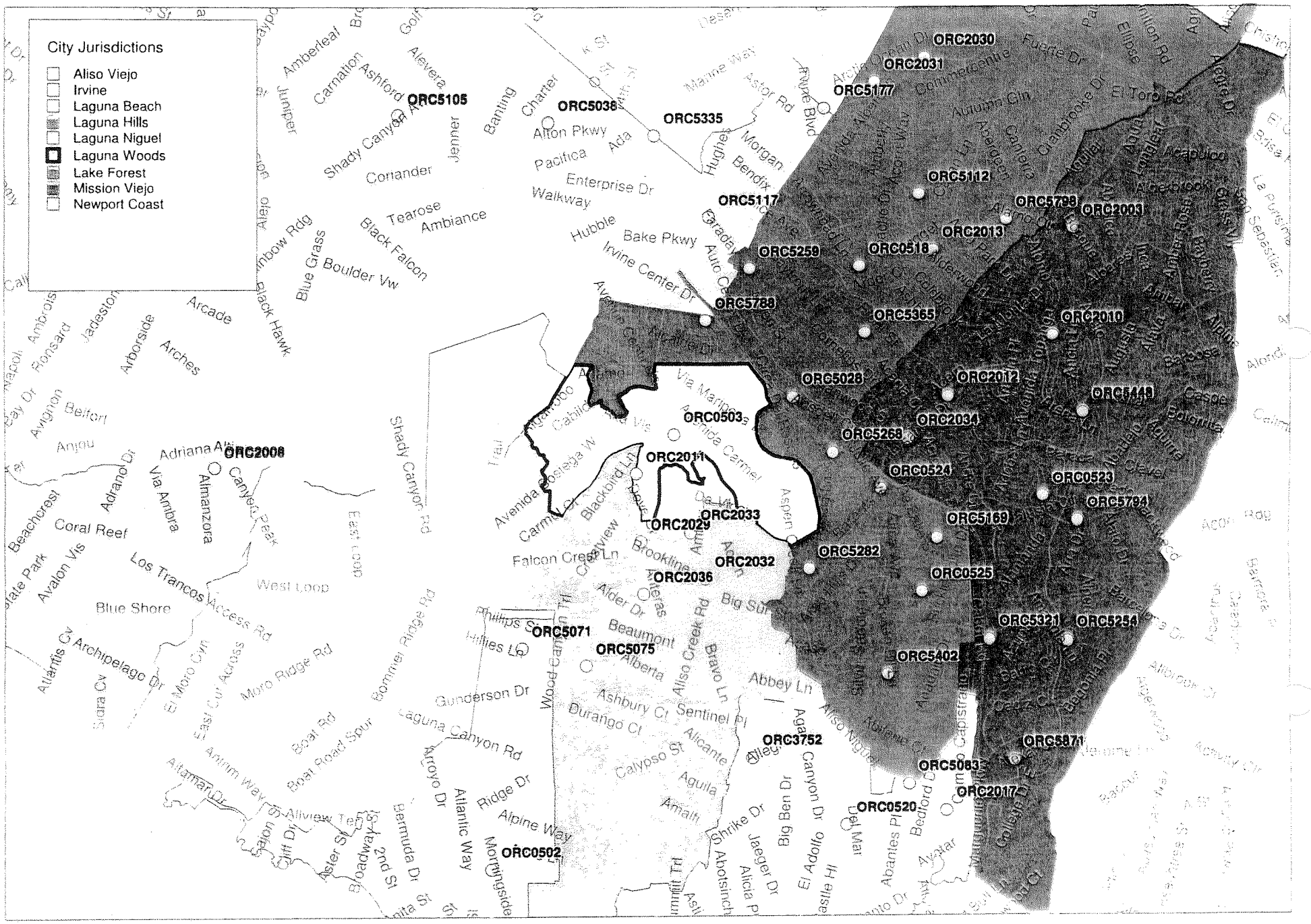
15. CONSTRUCTION NOISE

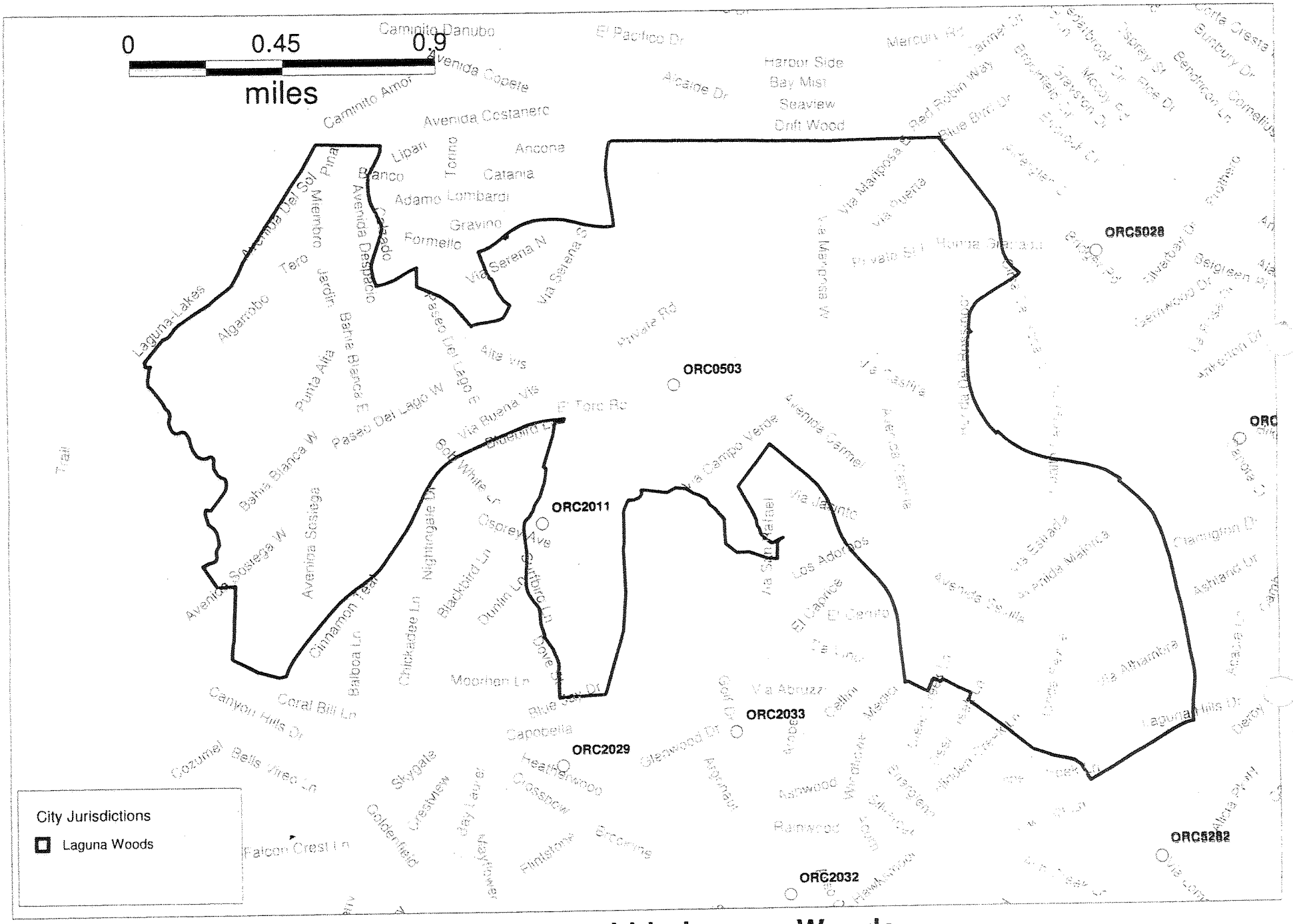
A. Prior to the issuance of any grading permits, the project proponent shall produce evidence acceptable to the City Engineer, that:
   (1) All construction vehicles or equipment, fixed or mobile, operated within 1,000 feet of a dwelling shall be equipped with properly operating and maintained mufflers.
   (2) All operations shall comply with the City's noise ordinance (Noise Control).
   (3) Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings.

B. Notations in the above format, appropriately numbered and included with other notations on the front sheet of grading plans, will be considered as adequate evidence of compliance with this condition.

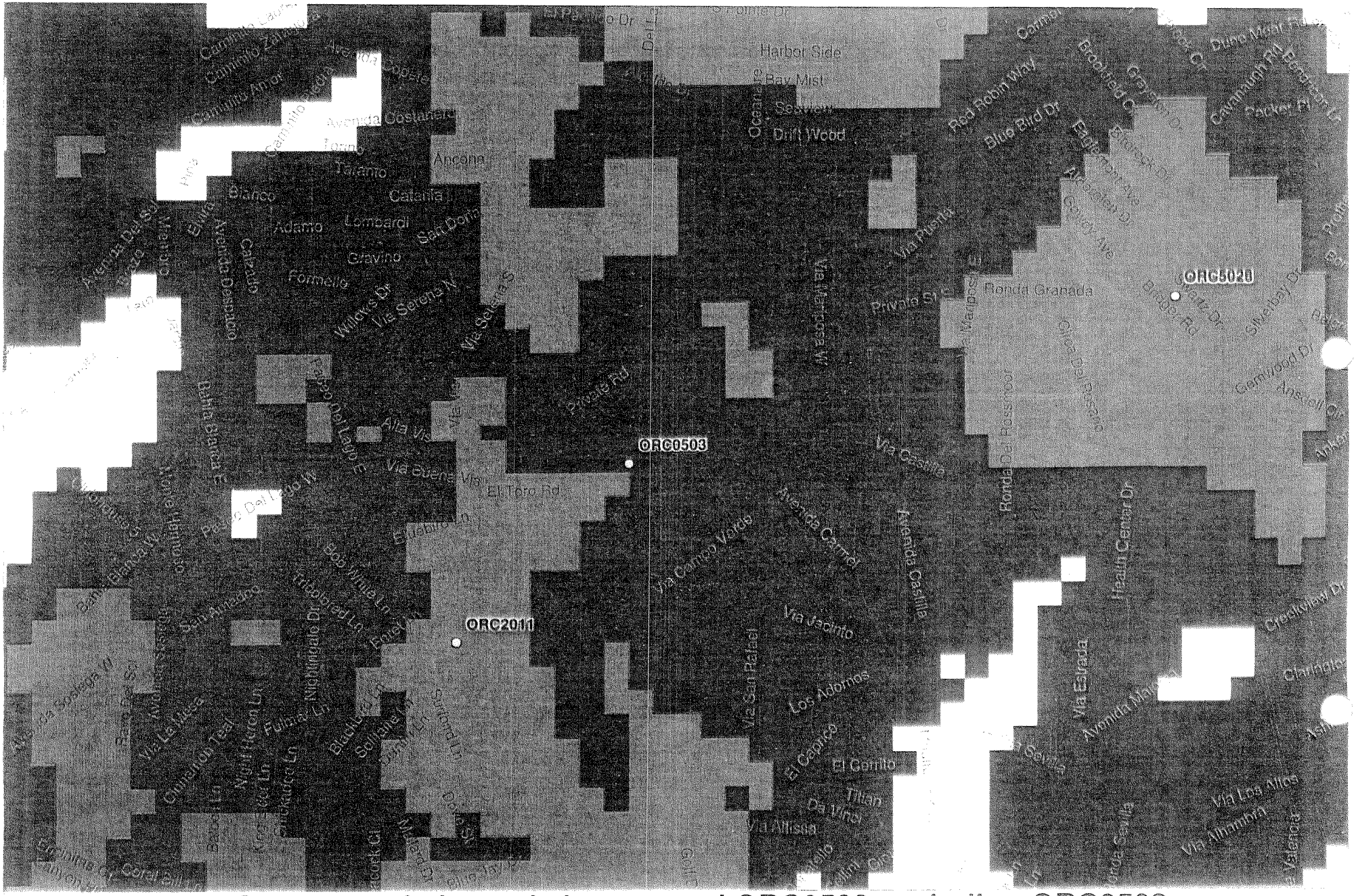
16. CAMOUFLAGING

Prior to the issuance of a use and occupancy permit, the applicant shall submit photographic evidence to the Community Development Director that the "pine tree" camouflaging is in place and effectively helps camouflage the antennas.



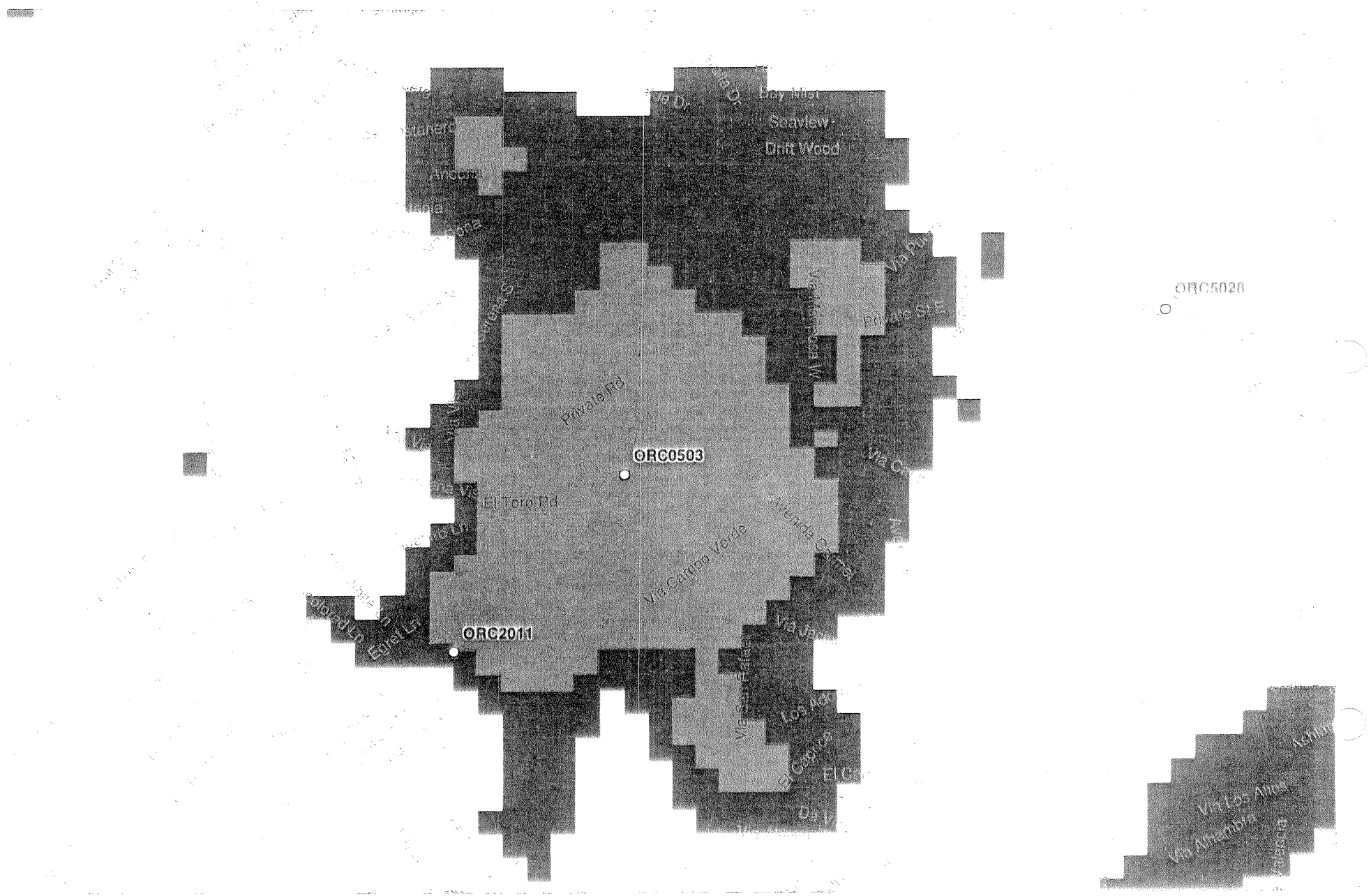


Site Locations within Laguna Woods



Coverage of planned sites around ORC0503 excluding ORC0503

Areas with good to excellent coverage	Areas with marginal to good coverage	Areas with no coverage or outside coverage boundaries	Future Site Locations



Coverage provided by ORC0503

Areas with good to excellent coverage	Areas with marginal to good coverage	Areas with no coverage or outside coverage boundaries	Future Site Locations

Coverage of planned sites including ORC0503

Areas with good to excellent coverage

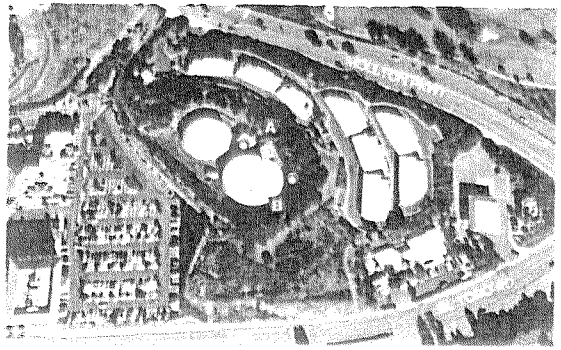
Areas with marginal to good coverage

Areas with no coverage or outside coverage boundaries

Future Site Locations

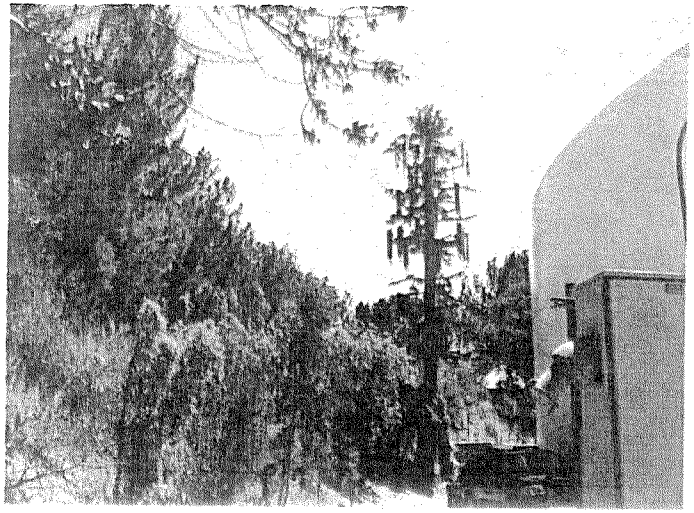
Photosims

AERIAL MAP



LEGENDS:
- PROJECT
- VIEW 'A'
- VIEW 'B'
- VIEW 'C'

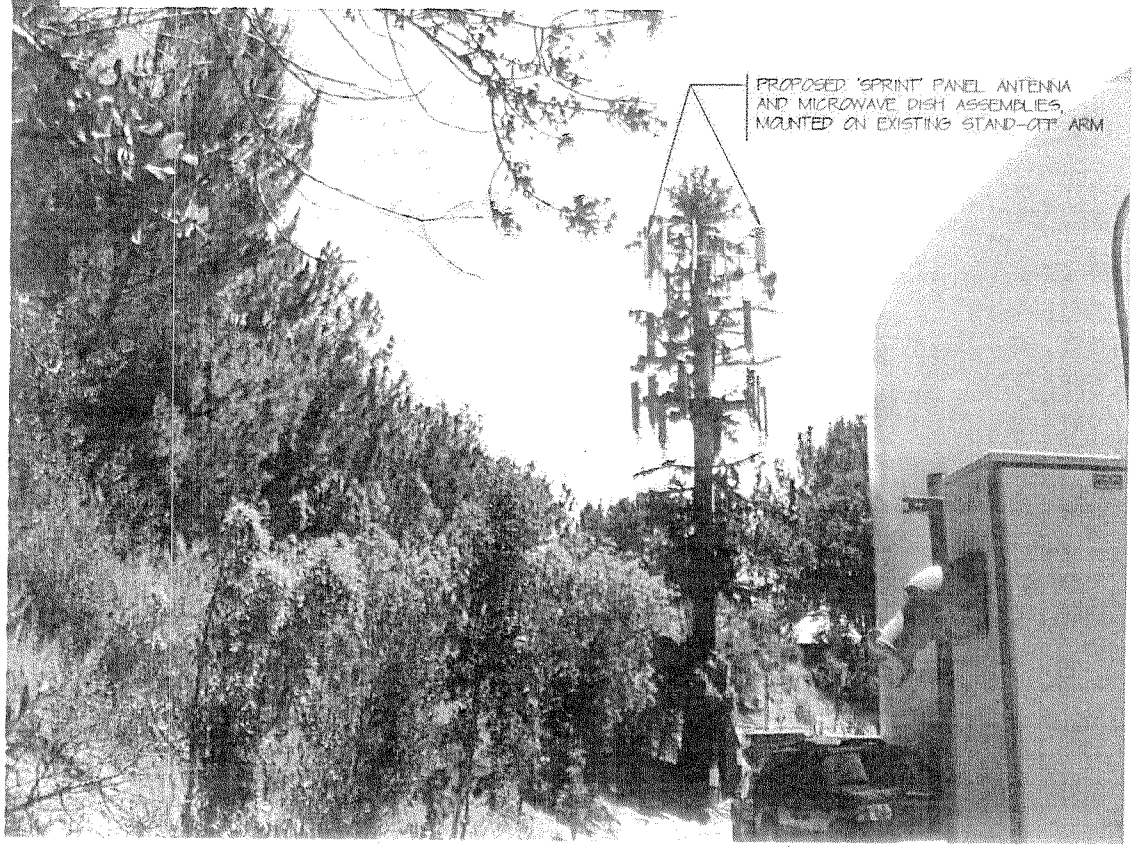
EXISTING SITE



APPLICANT REPRESENTATIVE:

GLENN DIETZ
POWDER RIVER, INC
T 818-209-7169

VIEW A PROPOSED TELECOM SITE



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IRVINE, CA 92612
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(949) 475-1001 F

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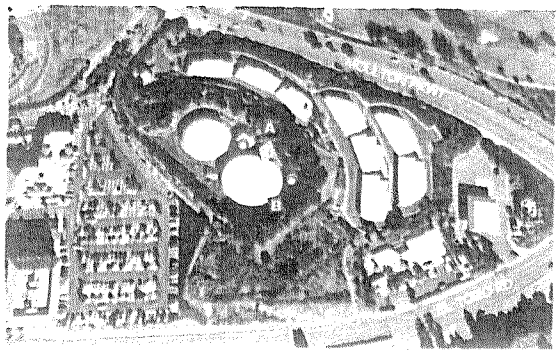
Together with NEXTEL

LEISURE WORLD
CA-ORC0503A
24141 MOULTON PKWY
LAGUNA WOODS, CA 92637

AERIAL MAP



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- VIEW 'A'
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- VIEW 'C'

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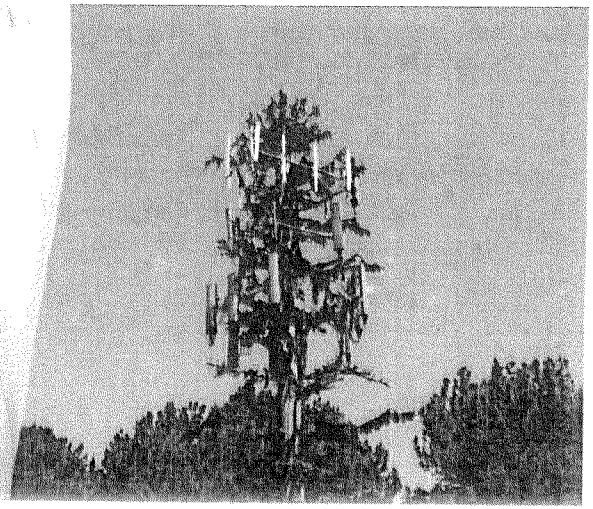
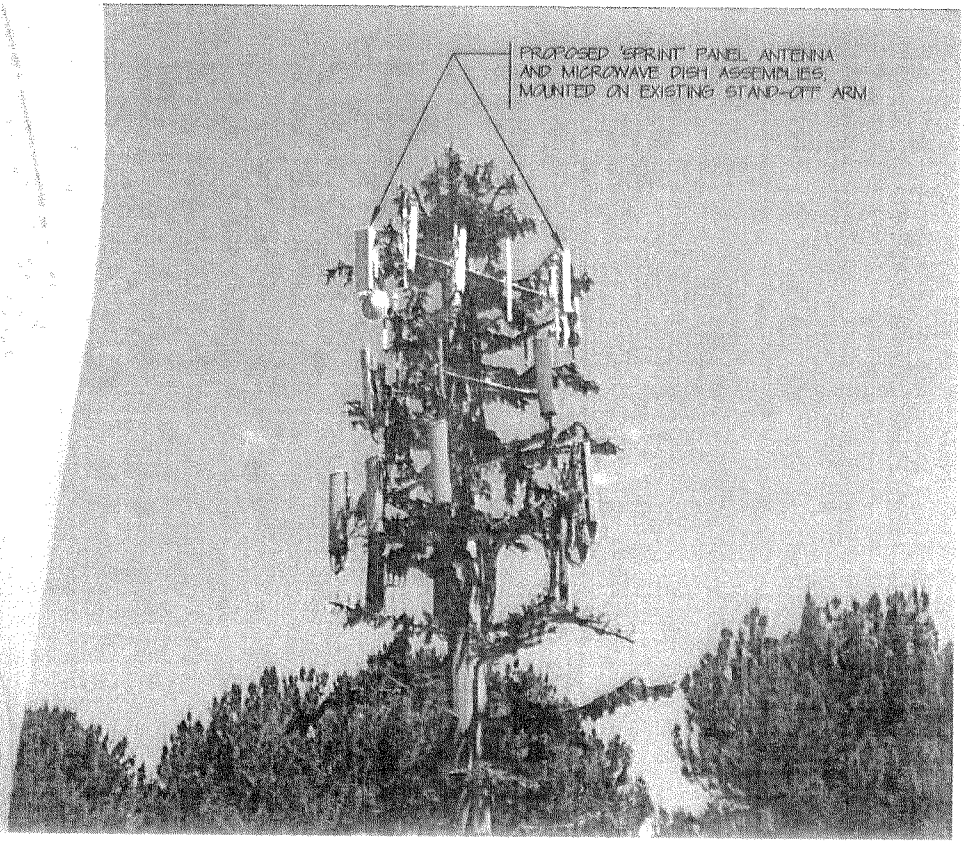
POWDER RIVER, INC
T 818-209-7169

EXISTING SITE



VIEW B PROPOSED TELECOM SITE



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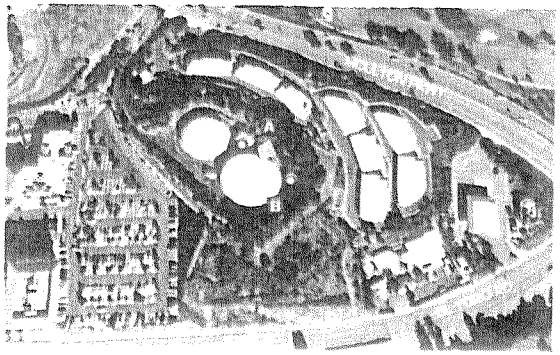
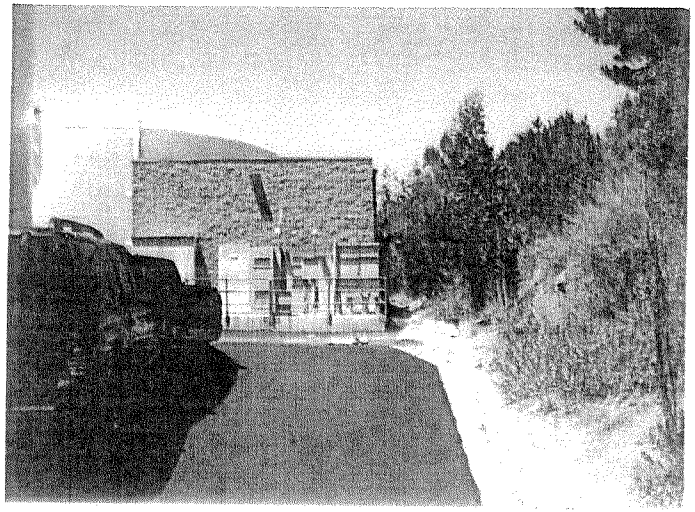
AERIAL MAP



LEGENDS:

- PROJECT
- VIEW 'A'
- VIEW 'B'
- VIEW 'C'

EXISTING SITE



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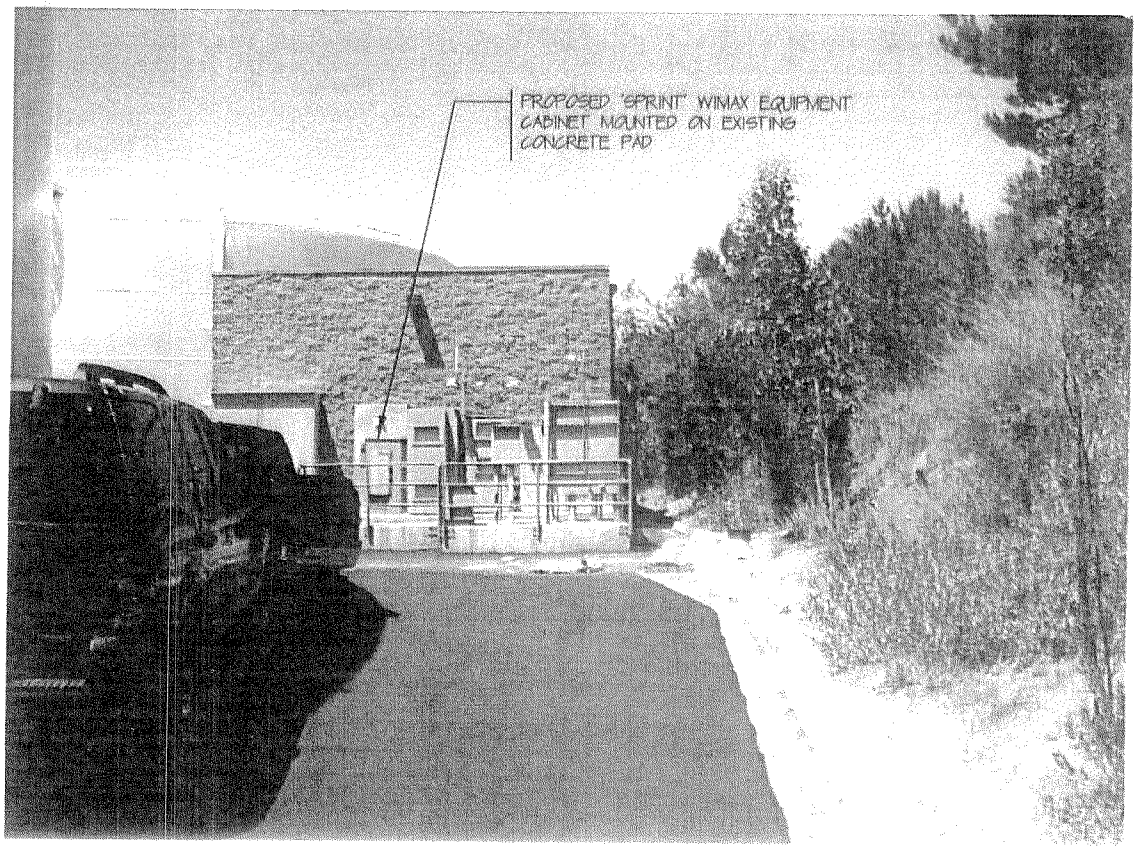
POWDER RIVER, INC
T 818-209-7169

PROPOSED TELECOM SITE



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CA-ORC0503a
24141 MOULTON PKWY.
LAGUNA WOODS, CA 92637

PROJECT INFORMATION

PROJECT DESCRIPTION:

SPRINT PROPOSES TO MODIFY THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY AS FOLLOWS:
- ADD (3) PANEL ANTENNAS WITH DAP ON (E) AVAILABLE MOUNTS
- ADD (3) MICROWAVE DISH ASSEMBLIES ON (E) AVAILABLE MOUNTS
- ADD (1) WIMAX CABINET/RACK WITHIN EXISTING SHELTER
- ADD (1) GPS ANTENNA

CODE INFORMATION:

ZONING CLASSIFICATION:	COMMUNITY COMMERCIAL
BUILDING CODE:	2007 CBC
CONSTRUCTION TYPE:	V-B
JURISDICTION:	CITY OF LAGUNA HILLS
CURRENT USE:	S-2 (TELECOM FACILITY)
PROPOSED USE:	S-2 (TELECOM FACILITY)

UTILITY COMPANY:

POWER:	SCE
PHONE:	(800) 655-4555

SITE LOCATION:

LATITUDE:	33.610485° N
LONGITUDE:	117.728223° W
TOP OF (E) STRUCTURE:	60'-00" AGL
BASE OF STRUCTURE:	460'-00" AMSL

PROPERTY INFORMATION:

PARCEL NUMBER(S):	616-012-02
LEASE AREA:	N/A
OWNER:	EL TORO WATER DISTRICT
ADDRESS:	24251 LOS ALISOS BLVD. EL TORO, CA 92630
CONTACT:	DENNIS CAFFERTY
PHONE:	(949) 837-7050 EXT 223

APPLICANT:

SPRINT NEXTEL
6391 SPRINT PARKWAY
OVERLAND PARK, KS 66251
MS: KSOPHT0101 Z2650

CONTACT:	PROPERTY SERVICES
PHONE:	(800) 357-7641

ARCHITECT:

DCI PACIFIC
2450 DUPONT DRIVE
IRVINE, CA 92612

CONTACT:	D.K. DO, RA
PHONE:	(949) 475-1000
FAX:	(949) 475-1001
E-MAIL:	DK@DCIPACIFIC.COM

SITE ACQUISITION:

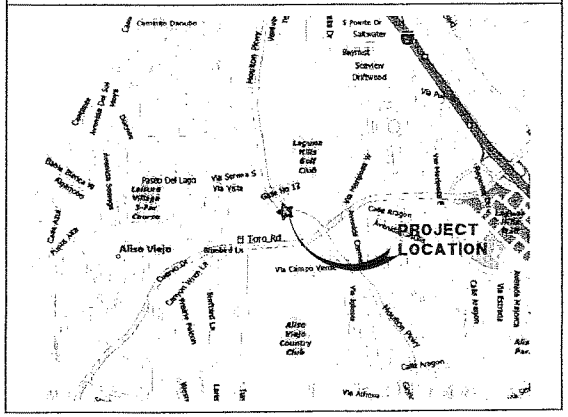
POWDER RIVER INC.
16519 MOORPARK ST
ENCINO, CA 91436

PHONE:	(818) 981-8387
FAX:	(818) 981-8386

PROJECT TEAM:

RF ENGINEER:	PRIYA ROY
PHONE:	(949) 254-0515
CONSTRUCTION:	DON TALEN
PHONE:	(858) 335-1538
SITE ACQUISITION:	GLENN DIETZ
PHONE:	(818) 209-7169
PLANNING:	JEREMY BREWER
PHONE:	(760) 500-6079
ARCHITECT:	D.K. DO, RA
PHONE:	(949) 475-1000
SURVEYOR:	N/A
PHONE:	–
CIVIL/STRUCTURAL ENGR.	N/A
PHONE:	–

VICINITY MAP



DRIVING DIRECTIONS

DEPART FROM LAX
1-START OUT GOING EAST ON WORLD WAY/CENTER WAY.
2-MERGE ONTO S. SEPULVEDA BLVD./CA-1 S TOWARD I-105.
3-TAKE THE IMPERIAL HWY WEST/I-105 E RAMP TOWARD IMPERIAL TERMINAL.
4-MERGE ONTO I-105 E TOWARD NORWALK.
5-MERGE ONTO I-405 S TOWARD LONG BEACH.
6-TAKE THE IRVINE CENTER DR EXIT, EXIT 1C
7-KEEP RIGHT AT THE FORK TO GO ON IRVINE CENTER DR.
8-STAY TRAIGHT TO GO ONTO MOULTON PKWY.
10-END AT 24141 MOULTON PKWY LAFUNA WOODS, CA 92637

APPROVAL	DATE	SIGNATURE
P.M.:		
LANDLORD:		
CONST:		
S/A:		
R.F.:		
ZONING:		
A&E:		
R.F.:		

REVIEWERS SHALL CLEARLY PLACE INITIALS ADJACENT TO EACH REDLINE NOTE AS DRAWINGS ARE BEING REVIEWED

DRAWING INDEX

SHEET	DESCRIPTION
T1	TITLE SHEET
A1	SITE PLAN
A2	EQUIPMENT & ANTENNA LAYOUT PLANS
A3	ELEVATIONS

LEGAL DESCRIPTION

LEGAL DESCRIPTION (TO BE ADDED)

CODE COMPLIANCE

1. CALIFORNIA BUILDING CODE CBC-2007
2. CALIFORNIA ADMINISTRATIVE CODE (INCL. TITLES 24 & 25) 2007
3. ANSI/EIA-222-F LIFE SAFETY CODE
4. NFPA-101-2006
5. CALIFORNIA ELECTRICAL CODE CEC-2007
6. CALIFORNIA MECHANICAL CODE CMC-2007
7. CALIFORNIA PLUMBING CODE CPC-2007
8. LOCAL BUILDING CODE(S)
9. CITY AND/OR COUNTY ORDINANCES

** NOTE: ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THESE CODES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

ABBREVIATIONS

A/C	AIR CONDITIONING	GA	GAUGE	OC	ON CENTER
AGL	ABOVE FINISH GRADE	GALV	GALVANIZED	OD	OUTSIDE DIAMETER
APPROX	APPROXIMATELY	GC	GENERAL CONTRACTOR		
		GRND	GROUND	PLYWD	PLYWOOD
BLDG	BUILDING	GYP BD	GYPSUM WALL BOARD	PROJ	PROJECT
BLK	BLOCKING			PROP	PROPERTY
		HORZ	HORIZONTAL	PT	PRESSURE TREATED
CLG	CEILING	HR	HOUR	REQ	REQUIRED
CLR	CLEAR	HT	HEIGHT	RM	ROOM
CONC	CONCRETE	HVAC	HEATING, VENTILATION, AIR CONDITIONING	SHT	SHEET
CONST	CONSTRUCTION			SIM	SIMILAR
CONT	CONTINUOUS	ID	INSIDE DIAMETER	SPEC	SPECIFICATION
		IN	INCH	SF	SQUARE FOOT
DBL	DOUBLE	INFO	INFORMATION	SS	STAINLESS STEEL
DIA	DIAMETER	INSUL	INSULATION	STL	STEEL
DIAG	DIAGONAL	INT	INTERIOR	STRUCT	STRUCTURAL
DN	DOWN	CBC	CALIFORNIA BUILDING CODE	STD	STUD
DET	DETAIL			SUSP	SUSPENDED
DWG	DRAWING	LBS	POUNDS		
		MAX	MAXIMUM	THRU	THROUGH
EA	EACH	MECH	MECHANICAL	TYP	TYPICAL
ELEV	ELEVATION	MTL	METAL		
ELEC	ELECTRICAL	MFR	MANUFACTURE	UNO	UNLESS NOTED OTHERWISE
EQ	EQUAL	MGR	MANAGER		
EQUIP	EQUIPMENT	MIN	MINIMUM	VERT	VERTICAL
EXT	EXTERIOR	MISC	MISCELLANEOUS	VIF	VERIFY IN FIELD
		RO	ROUGH OPENING		
FIN	FINISH			W/	WITH
FLUOR	FLOURESCENT	NA	NOT APPLICABLE	W/O	WITHOUT
FLR	FLOOR	NIC	NOT IN CONTRACT	WP	WATER PROOF
FT	FOOT	NTS	NOT TO SCALE		

Sprint
Together with NEXTEL
310 COMMERCE, IRVINE, CA 92602
PHONE: (714) 368-3500 FAX: (714) 368-3501

DCI PACIFIC
ARCHITECTURE • ENGINEERING • CONSULTING
2450 DUPONT DRIVE, IRVINE, CA 92612
TEL: 949-475-1000 FAX: 949-475-1001

LEISURE WORLD
(OG38XC261_55)
CA-ORC0503a
24141 MOULTON PARKWAY
LAGUNA WOODS, CA 92637

LICENSURE

ISSUE STATUS

NO.	DATE	DESCRIPTION	INITIAL
1	05-01-08	PRELIM ZD	HH
2	05-05-08	100% ZD	FV
3	07-21-08	REVISED ZD PER NEW EQUIPMENT DESIGN	HH
4	07-27-08	SAC COMMENTS	FV
5	08-24-08	ANTENNA AND MW CHAN	FV
6	10-01-08	PLANNING COMMENTS	

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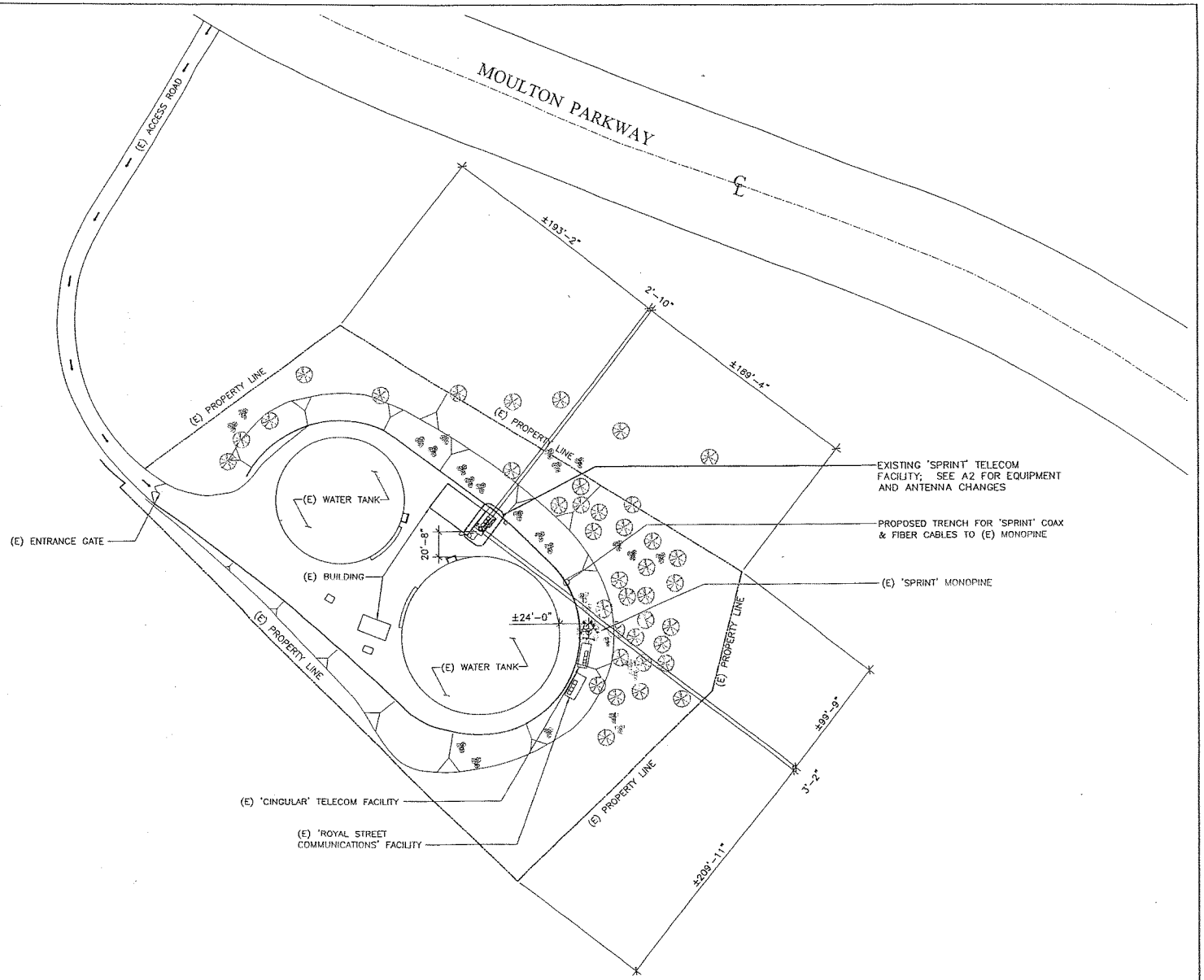
SHEET TITLE
TITLE SHEET

SHEET NUMBER
T1



SITE PLAN

NORTH | SCALE: 1"=40' | 0 20' 40' | 1

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(OG38XC261_55)
CA-ORC0503a
24141 MOULTON PARKWAY
LAGUNA WOODS, 92637

LICENSURE

ISSUE STATUS

NO.	DATE	DESCRIPTION	INITIAL
1	05-01-09	PRELIM ZD	HH
2	05-05-09	100% ZD	FV
3	07-01-09	BOARD RM FOR NEW EQUIPMENT LOCATION	HH
4	07-27-09	SAC COMMENTS	FV
5	08-31-09	ANTENNA AND MW CHANGES	FV
6	10-01-09	PLANNING COMMENTS	

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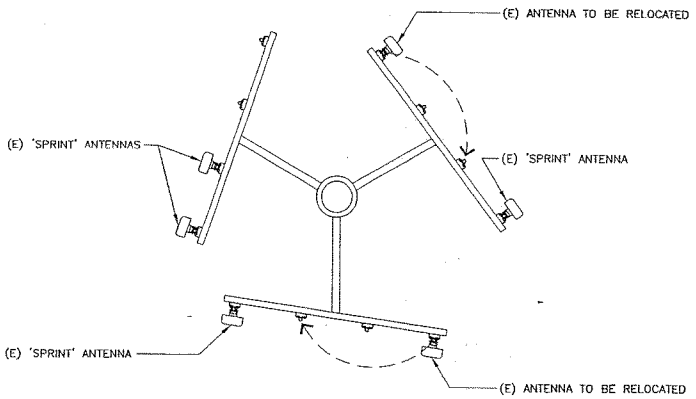
SHEET TITLE
SITE PLAN

SHEET NUMBER
A1

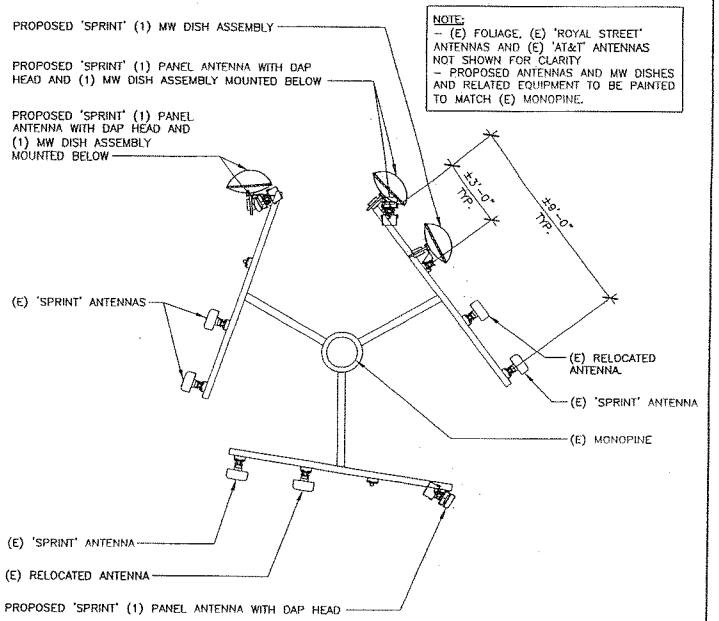
NOTE:
– (E) FOLIAGE, (E) 'ROYAL STREET' ANTENNAS AND (E) 'AT&T' ANTENNAS NOT SHOWN FOR CLARITY



EXISTING ANTENNA LAYOUT PLAN

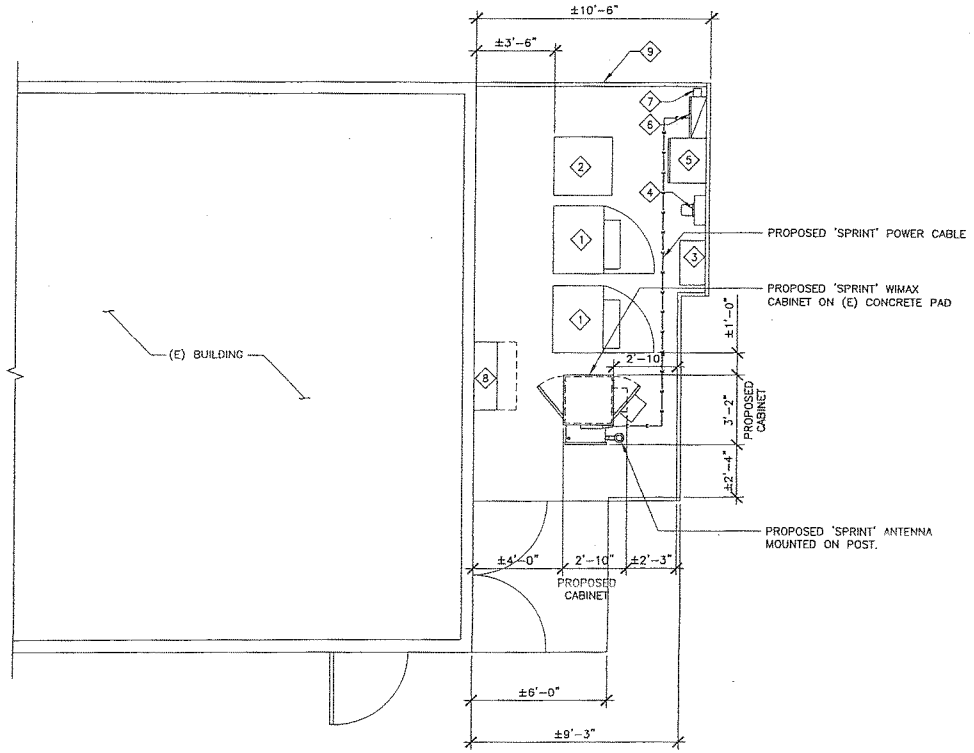
SCALE: 3/8"=1' — 2

NOTE:
– (E) FOLIAGE, (E) 'ROYAL STREET' ANTENNAS AND (E) 'AT&T' ANTENNAS NOT SHOWN FOR CLARITY
– PROPOSED ANTENNAS AND MW DISHES AND RELATED EQUIPMENT TO BE PAINTED TO MATCH (E) MONOPINE.



PROPOSED ANTENNA LAYOUT PLAN

SCALE: 3/8"=1' — 3



KEY NOTES:

1. (E) EQUIPMENT
2. (E) BATTERY
3. (E) TRANSFORMER
4. (E) 100A METER/MAIN
5. (E) TELCO BOX
6. (E) 200A POWER PANEL, PROPOSED 'SPRINT' POWER P.O.C.
7. (E) EGR
8. (E) COAX CABLE SHROUD
9. (E) RAILING

EQUIPMENT LAYOUT PLAN

SCALE: 3/8"=1' — 1

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LICENSURE

ISSUE STATUS

NO.	DATE	DESCRIPTION	INITIAL
1	05-03-06	PRELIM ZD	HH
2	05-05-06	100% ZD	FV
3	07-01-06	REVISED SITE PER NEW SURVEYOR LAYOUT	HH
4	07-27-06	SAC COMMENTS	FV
5	08-24-06	ANTENNA AND MW DISH	
6	10-01-06	PLANNING COMMENTS	

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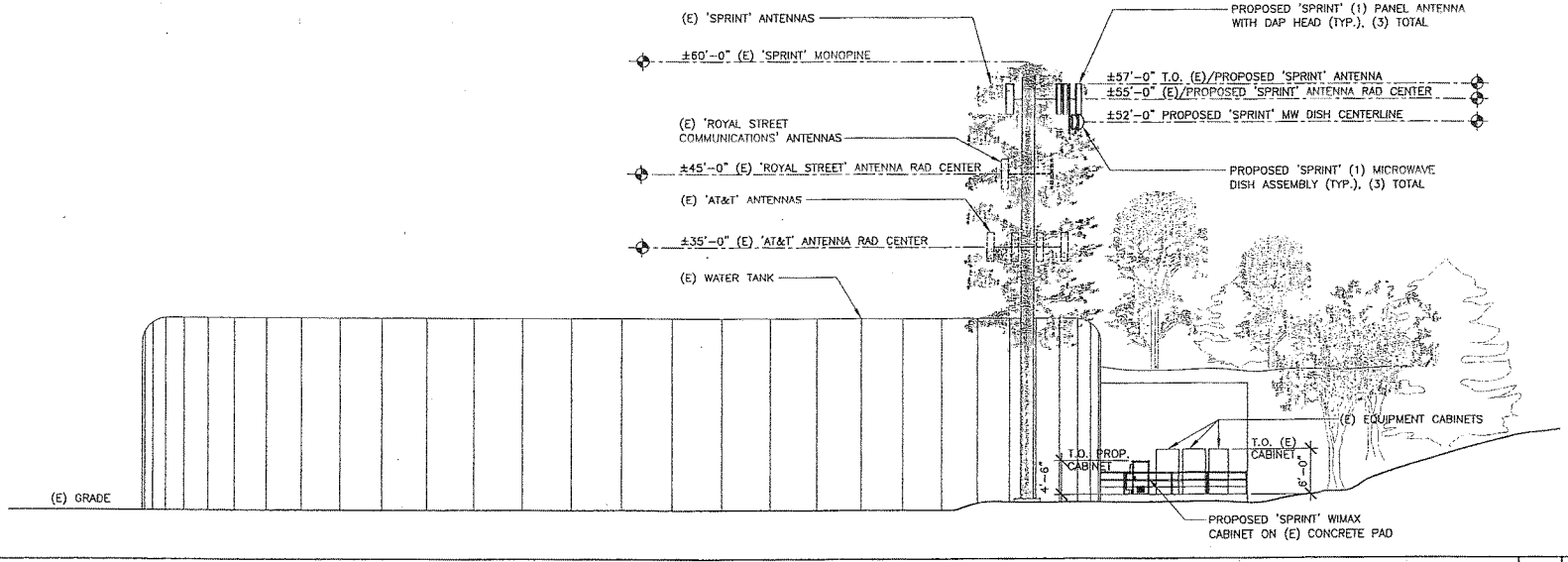
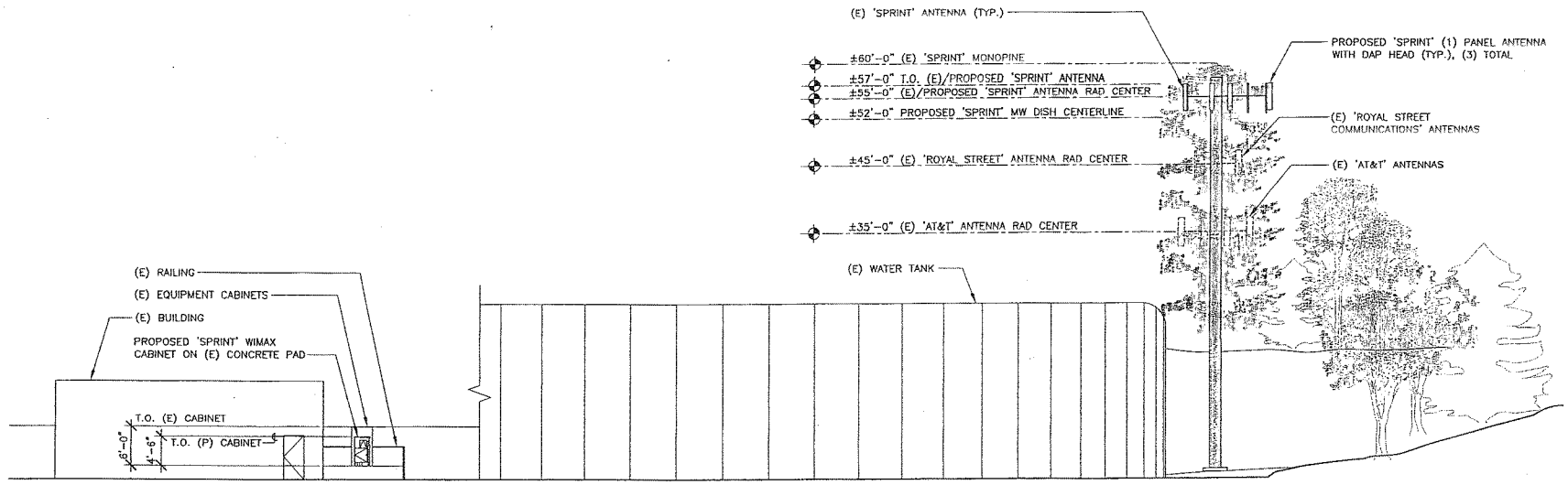
SHEET TITLE
EQUIPMENT AND ANTENNA LAYOUT PLAN

SHEET NUMBER
A2



NORTHWEST ELEVATION

SCALE: 1/8"=1'-0" | 2



NORTHEAST ELEVATION

SCALE: 1/8"=1'-0" | 1

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LAGUNA WOODS 92637

LICENSURE

ISSUE STATUS

NO.	DATE	DESCRIPTION	INITIAL
1	05-01-09	PRELIM ZD	HH
2	05-05-09	100% ZD	FV
3	07-01-09	REVISED 30% RF NEW DEPOT LEASE	HH
4	07-27-09	SAC COMMENTS	FV
5	08-24-09	ANTENNA AND MW CHA	
6	10-01-09	PLANNING COMMENT	

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SHEET TITLE
ELEVATIONS

SHEET NUMBER
A3