

Appendix E1-6
LAX SPECIFIC PLAN AMENDMENT STUDY REPORT

Land Uses Within the Runway Protection Zone

March 2012

Prepared for:

Los Angeles World Airports
One World Way
Los Angeles, California 90045

Prepared by:

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MEMORANDUM

Date: March 7, 2012

Subject: Land Uses Within the Runway Protection Zone

Purpose

The Runway Protection Zone (RPZ) is a two-dimensional trapezoidal area centered along the extended runway centerline whose function is to enhance the protection of people and property on the ground. As such, the Federal Aviation Administration (FAA) has made recommendations for allowable land uses within the RPZ¹:

While it is desirable to clear all objects from the RPZ, some uses are permitted, provided they do not attract wildlife, are outside of the Runway OFA, and do not interfere with navigational aids. Automobile parking facilities, although discouraged, may be permitted, provided the parking facilities and any associated appurtenances, in addition to meeting all of the preceding conditions, are located outside the central portion of the RPZ. Fuel storage facilities may not be located in the RPZ.

Land uses prohibited from the RPZ are residences and places of public assembly. (Churches, schools, hospitals, office buildings, shopping centers, and other uses with similar concentrations of persons typify places of public assembly.) Fuel storage facilities may not be located in the RPZ.

Where it is determined to be impracticable for the airport owner to acquire and plan the land uses within the entire RPZ, the RPZ land use standards have recommendation status for that portion of the RPZ not controlled by the airport owner.

Due to the proximity of non-airport owned land east of the north airfield, concepts were evaluated to determine the land use type and number of parcels that would fall within the RPZ.

Methodology

For each concept, the location and dimensions of the RPZ were determined using the FAA guidelines outlined in Advisory Circular (AC) 150/5300-13 *Airport Design*. Land use and parcel information provided by Los Angeles World Airports (LAWA) was then used to determine the number and type of parcels that would fall within the RPZ.

¹ Federal Aviation Administration, Advisory Circular 150/5300-13 *Airport Design*, December 30, 2011.



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Findings

Exhibit 1 and **Table 1** detail the number and type of parcels within the Runway 24R and 24L RPZs for Existing Condition (2009).

Table 1

Parcels within Runway 24R and 24L RPZs – Existing Condition

Parcel Type	Number of Parcels within RPZ	
	Runway 24R	Runway 24L
Single Family Residential	8	-
Multi-Family Residential	1	-
Commercial	19	4
Vacant	3	-
TOTAL	31	4

Sources: Federal Aviation Administration, AC 150/5300-13 Airport Design, December 30, 2011; HNTB, Los Angeles International Airport Layout Plan, August 2010; Los Angeles World Airports. Parcel Data, 2011; Ricondo & Associates, Inc., March 2012.
Prepared By: Ricondo & Associates, Inc., March 2012.

For concepts relocating Runway 6L-24R to the north, only the Runway 24R RPZ was evaluated. The number and types of parcels within the RPZ are detailed in **Table 2** and **Exhibits 2 through 5**.

Table 2

Parcels within Runway 24R RPZ – North Relocation Concepts

Parcel Type	Number of Parcels within Runway 24R RPZ			
	100 ft. North	200 ft. North	300 ft. North	400 ft. North
Single Family Residential	11	16	18	22
Multi-Family Residential	1	1	1	1
Commercial	25	30	36	42
Vacant	4	5	5	5
School/Church	-	1	1	1
TOTAL	41	53	61	71

Sources: Federal Aviation Administration, AC 150/5300-13 Airport Design, December 30, 2011; HNTB, Los Angeles International Airport Layout Plan, August 2010; Los Angeles World Airports. Parcel Data, 2011; Ricondo & Associates, Inc., March 2012.
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In order to mitigate the number of residential and public use parcels within the Runway 24R RPZ, additional concepts displacing the Runway 24R arrival threshold to the west were evaluated. During



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this process, it was determined that displacing the threshold 604 feet would remove all residential parcels, however, it was not practicable to remove all public use parcels. **Table 3** and **Exhibits 6 through 9** detail the number and type of parcels for concepts with displaced thresholds.

Table 3

Parcels within Runway 24R RPZ – North Relocation Concepts with Displaced Threshold

Parcel Type	Number of Parcels within Runway 24R RPZ			
	100 ft. North	200 ft. North	300 ft. North	400 ft. North
Single Family Residential	-	-	-	-
Multi-Family Residential	-	-	-	-
Commercial	24	27	32	37
Vacant	-	-	-	-
School/Church	-	-	-	-
TOTAL	24	27	32	37

Sources: Federal Aviation Administration, AC 150/5300-13 Airport Design, December 30, 2011; HNTB, Los Angeles International Airport Layout Plan, August 2010; Los Angeles World Airports. Parcel Data, 2011; Ricondo & Associates, Inc., March 2012.
Prepared By: Ricondo & Associates, Inc, March 2012.

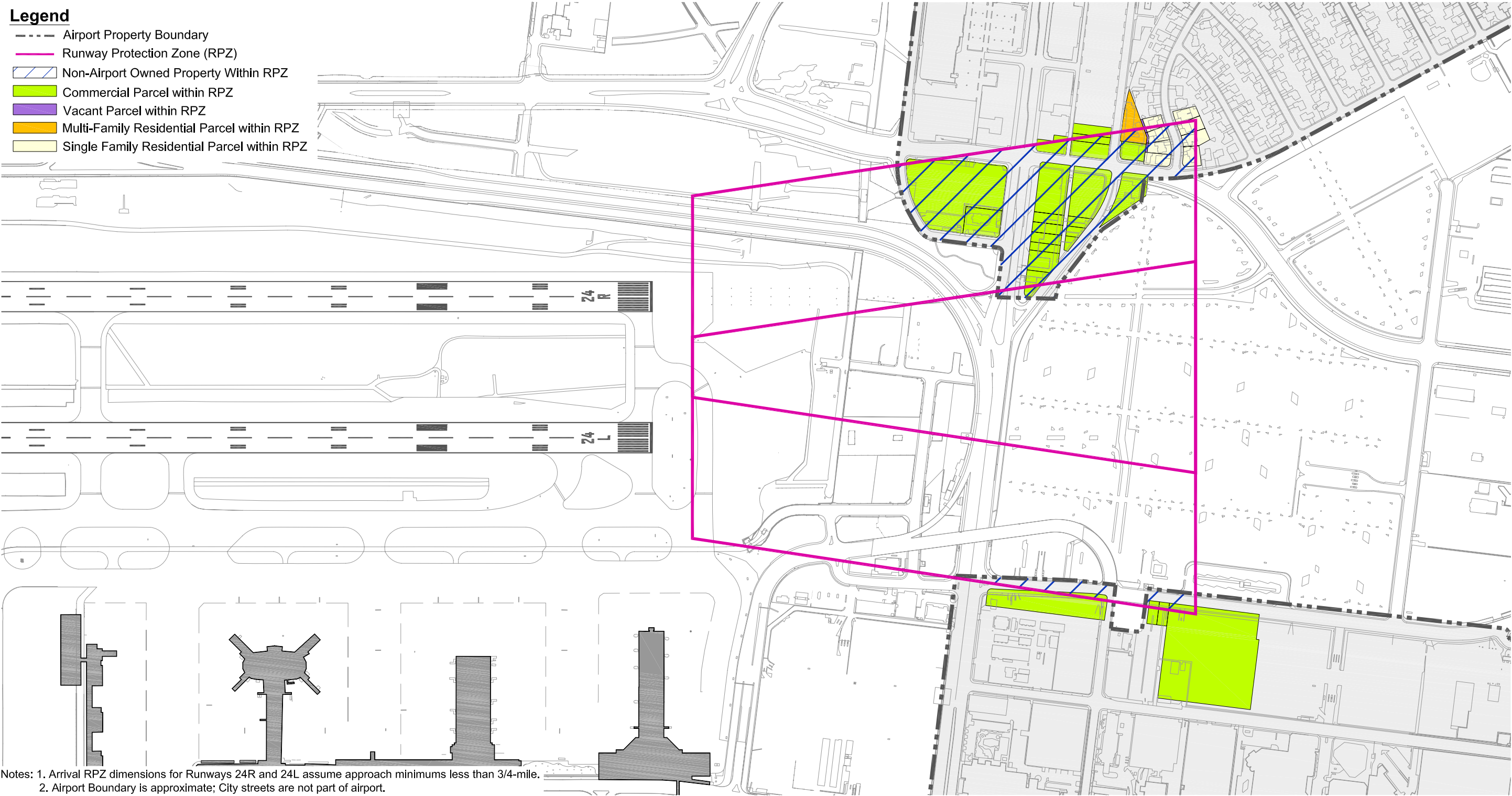
Enclosures: Exhibits 1 through 9

cc: Read File

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Legend

- Airport Property Boundary
- Runway Protection Zone (RPZ)
- Non-Airport Owned Property Within RPZ
- Commercial Parcel within RPZ
- Vacant Parcel within RPZ
- Multi-Family Residential Parcel within RPZ
- Single Family Residential Parcel within RPZ



Source: Federal Aviation Administration, AC 150/5300-13 *Airport Design*, December 30, 2011; HNTB, Los Angeles International Airport Layout Plan, August 2010; Los Angeles World Airports. Parcel Data, 2011; Ricondo & Associates, Inc., March 2012.
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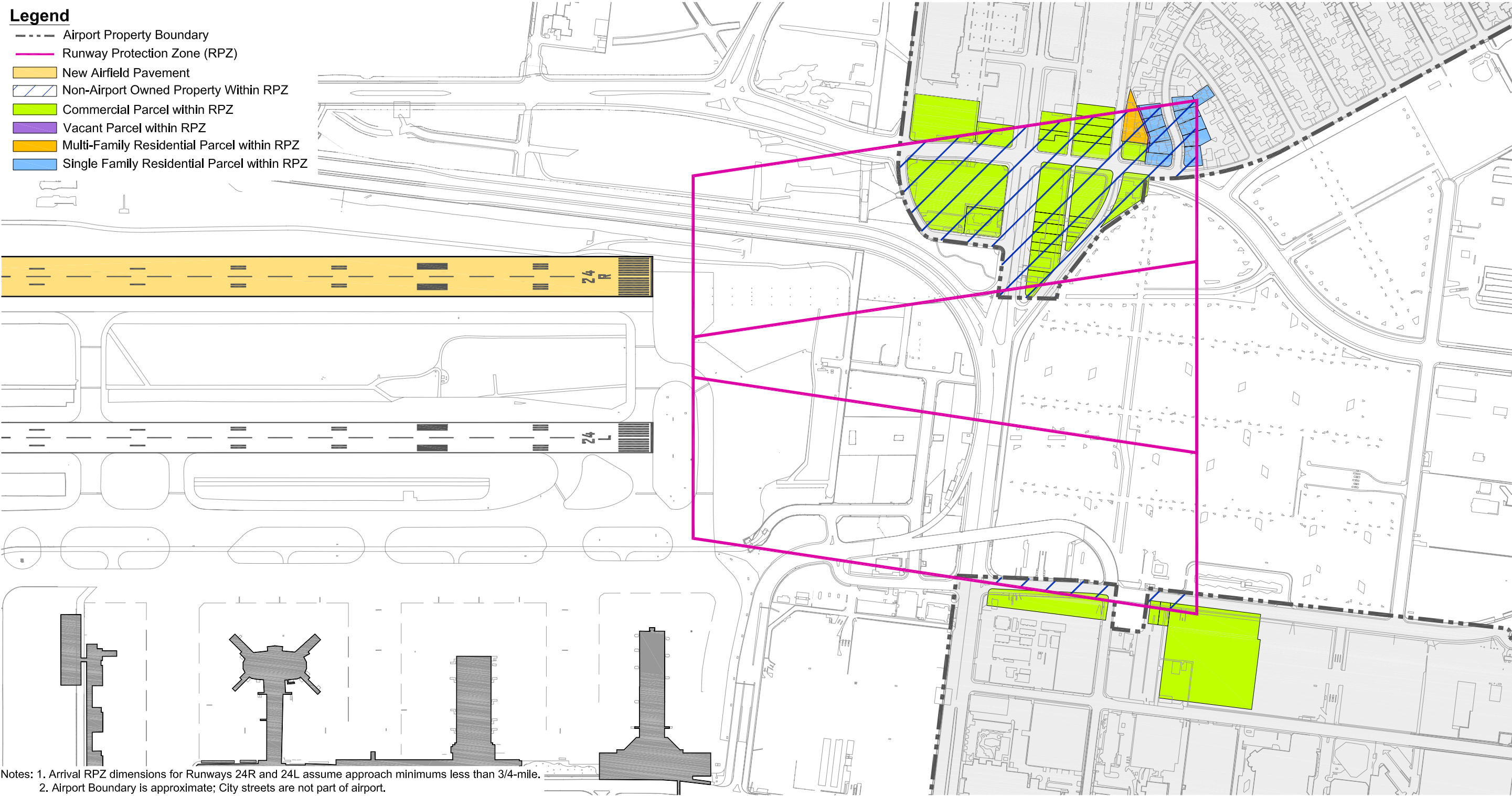
Exhibit 1



Existing Condition

Legend

- Airport Property Boundary
- Runway Protection Zone (RPZ)
- New Airfield Pavement
- Non-Airport Owned Property Within RPZ
- Commercial Parcel within RPZ
- Vacant Parcel within RPZ
- Multi-Family Residential Parcel within RPZ
- Single Family Residential Parcel within RPZ



Notes: 1. Arrival RPZ dimensions for Runways 24R and 24L assume approach minimums less than 3/4-mile.
2. Airport Boundary is approximate; City streets are not part of airport.

Source: Federal Aviation Administration, AC 150/5300-13 *Airport Design*, December 30, 2011; HNTB, Los Angeles International Airport Layout Plan, August 2010; Los Angeles World Airports. Parcel Data, 2011; Ricondo & Associates, Inc., March 2012.
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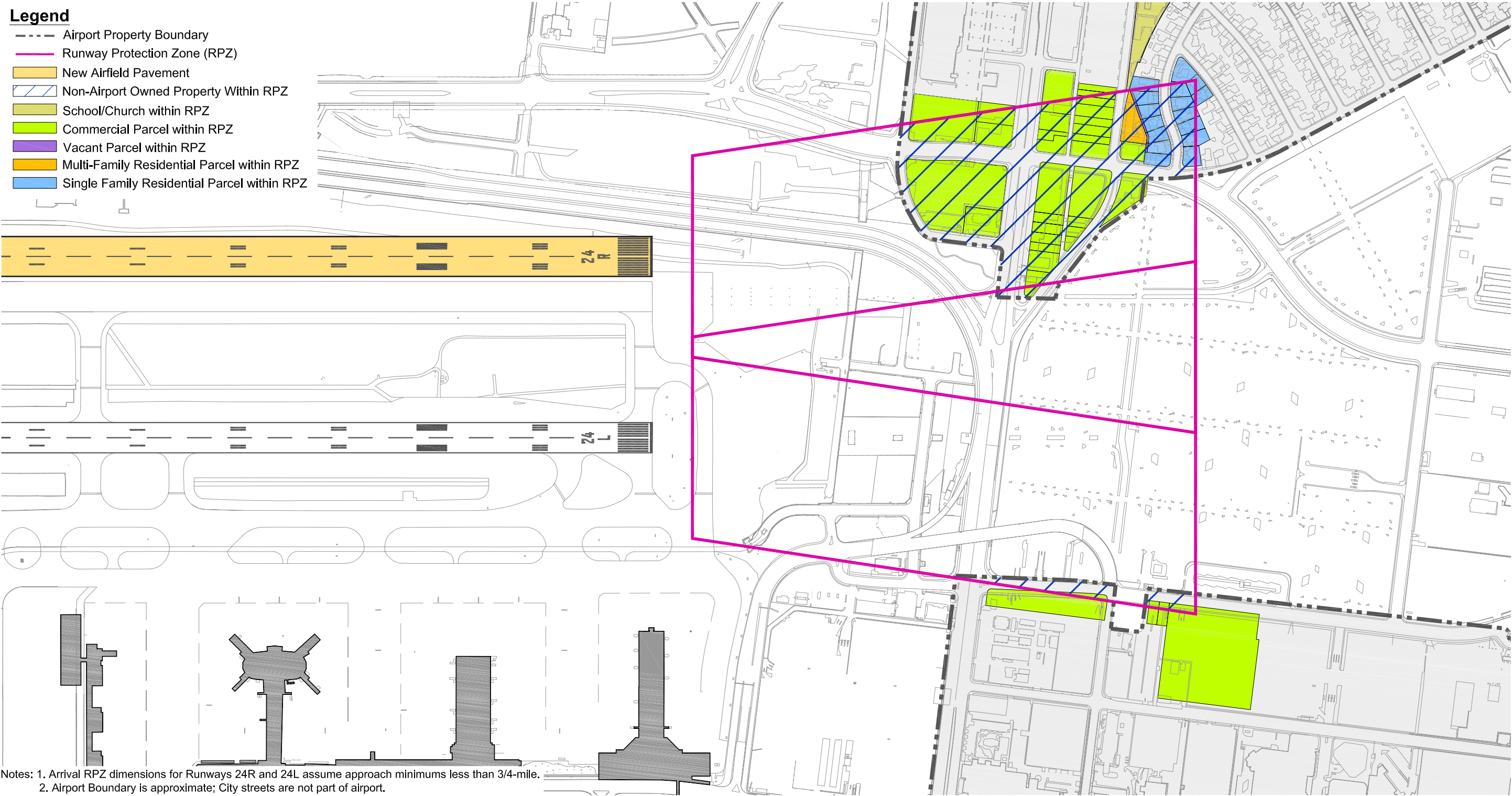
Exhibit 2



Runway 6L-24R Relocated 100 ft. North

Legend

- Airport Property Boundary
- Runway Protection Zone (RPZ)
- New Airfield Pavement
- Non-Airport Owned Property Within RPZ
- School/Church within RPZ
- Commercial Parcel within RPZ
- Vacant Parcel within RPZ
- Multi-Family Residential Parcel within RPZ
- Single Family Residential Parcel within RPZ



Source: Federal Aviation Administration, AC 150/5300-13 *Airport Design*, December 30, 2011; HNTB, Los Angeles International Airport Layout Plan, August 2010; Los Angeles World Airports. Parcel Data, 2011; Ricondo & Associates, Inc., March 2012.
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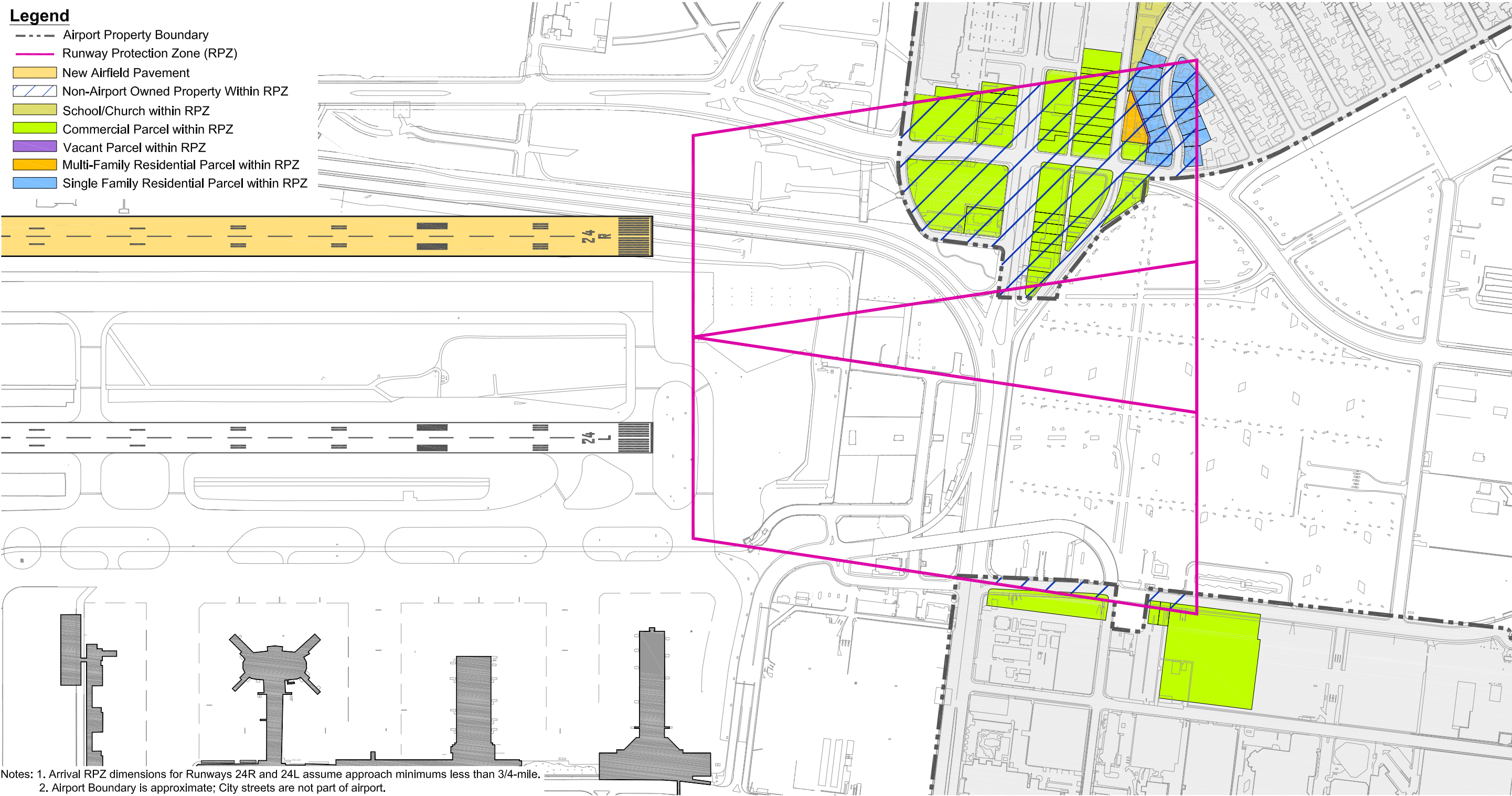
Exhibit 3



Runway 6L-24R Relocated 200 ft. North

Legend

- Airport Property Boundary
- Runway Protection Zone (RPZ)
- New Airfield Pavement
- Non-Airport Owned Property Within RPZ
- School/Church within RPZ
- Commercial Parcel within RPZ
- Vacant Parcel within RPZ
- Multi-Family Residential Parcel within RPZ
- Single Family Residential Parcel within RPZ



Source: Federal Aviation Administration, AC 150/5300-13 *Airport Design*, December 30, 2011; HNTB, Los Angeles International Airport Layout Plan, August 2010; Los Angeles World Airports. Parcel Data, 2011; Ricondo & Associates, Inc., March 2012.
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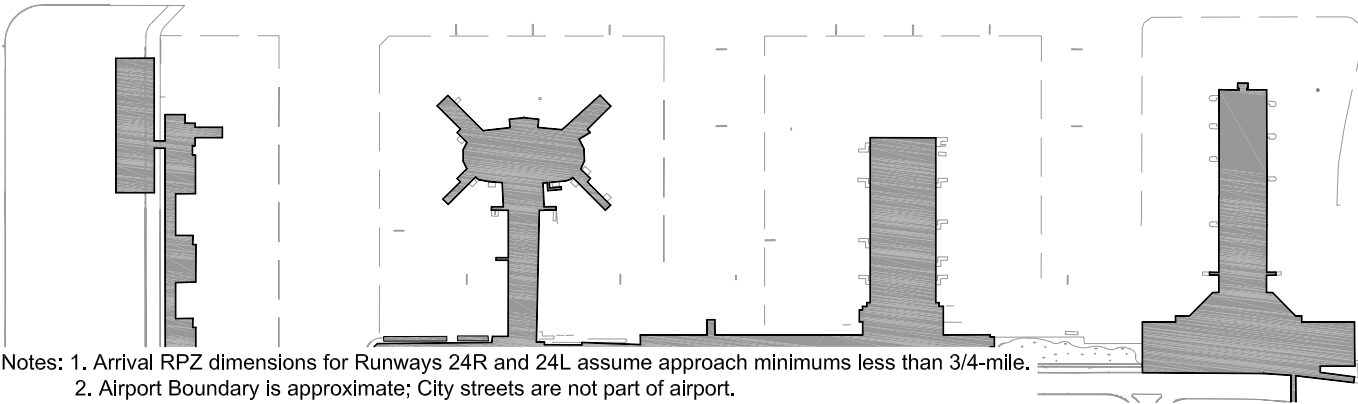
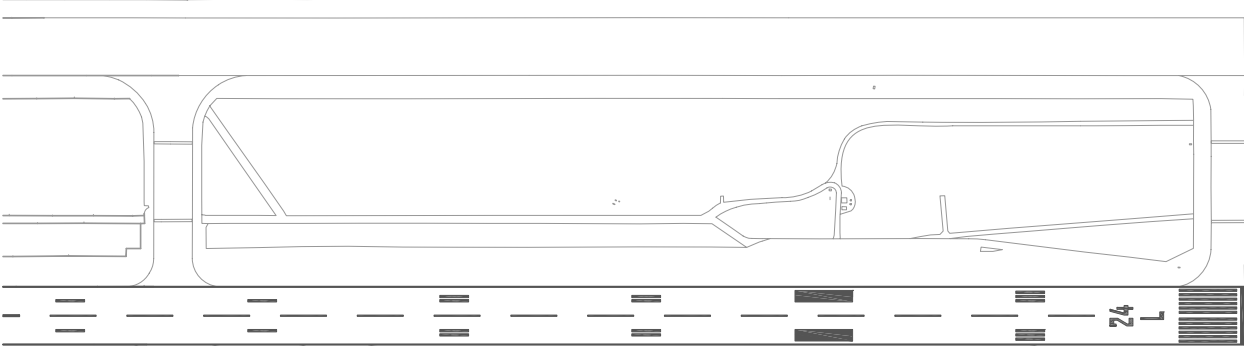
Exhibit 4



Runway 6L-24R Relocated 300 ft. North

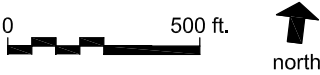
Legend

- Airport Property Boundary
- Runway Protection Zone (RPZ)
- New Airfield Pavement
- Non-Airport Owned Property Within RPZ
- School/Church within RPZ
- Commercial Parcel within RPZ
- Vacant Parcel within RPZ
- Multi-Family Residential Parcel within RPZ
- Single Family Residential Parcel within RPZ



Source: Federal Aviation Administration, AC 150/5300-13 *Airport Design*, December 30, 2011; HNTB, Los Angeles International Airport Layout Plan, August 2010; Los Angeles World Airports. Parcel Data, 2011; Ricondo & Associates, Inc., March 2012.
Prepared by: Ricondo & Associates, Inc., March 2012.

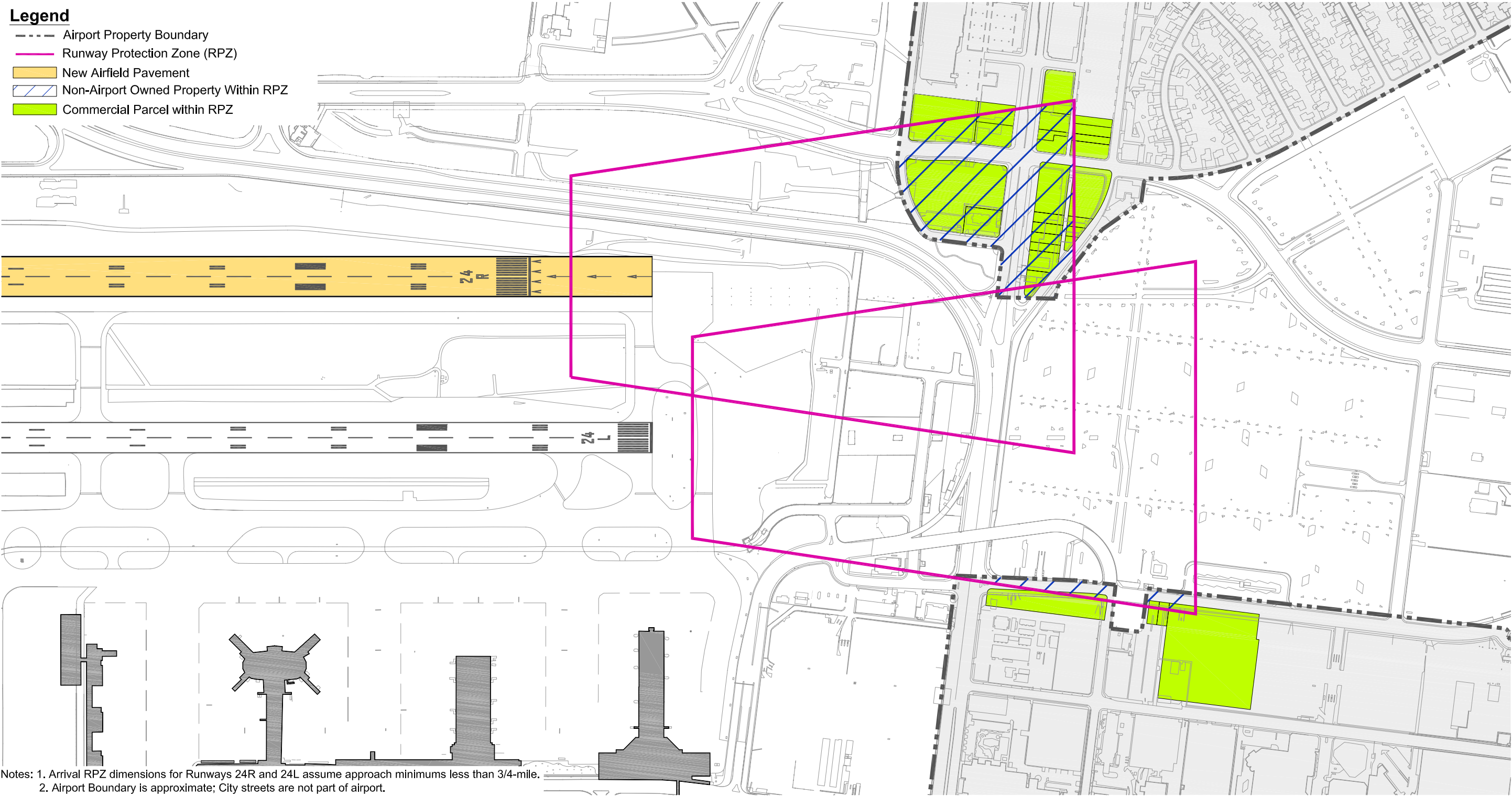
Exhibit 5



Runway 6L-24R Relocated 400 ft. North

Legend

- Airport Property Boundary
- Runway Protection Zone (RPZ)
- New Airfield Pavement
- Non-Airport Owned Property Within RPZ
- Commercial Parcel within RPZ



Notes: 1. Arrival RPZ dimensions for Runways 24R and 24L assume approach minimums less than 3/4-mile.
2. Airport Boundary is approximate; City streets are not part of airport.

Source: Federal Aviation Administration, AC 150/5300-13 *Airport Design*, December 30, 2011; HNTB, Los Angeles International Airport Layout Plan, August 2010; Los Angeles World Airports. Parcel Data, 2011; Ricondo & Associates, Inc., March 2012.
Prepared by: Ricondo & Associates, Inc., March 2012.

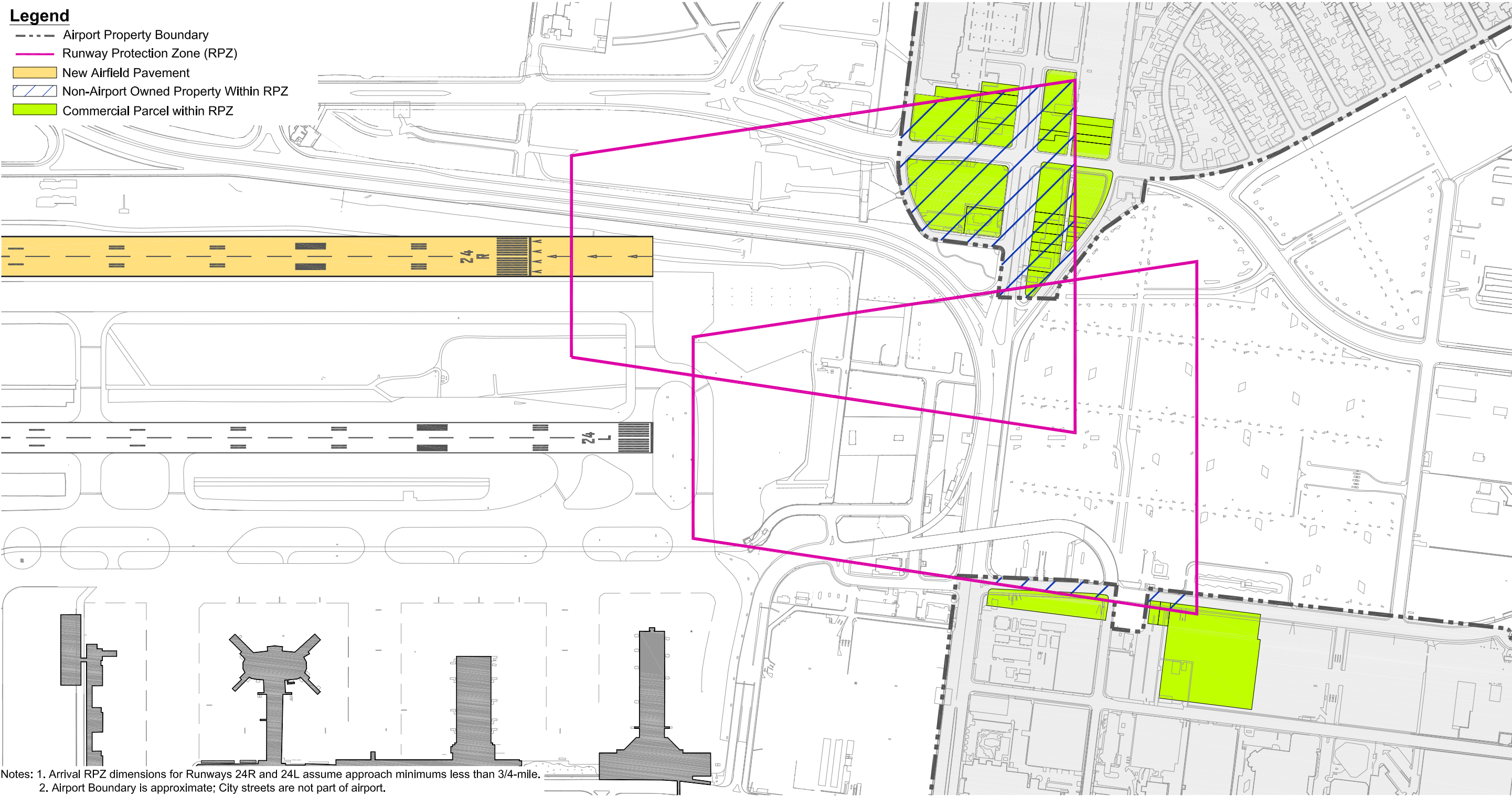
Exhibit 6



Runway 6L-24R Relocated 100 ft. North
24R Threshold Displaced 604 ft.

Legend

- Airport Property Boundary
- Runway Protection Zone (RPZ)
- New Airfield Pavement
- Non-Airport Owned Property Within RPZ
- Commercial Parcel within RPZ



Notes: 1. Arrival RPZ dimensions for Runways 24R and 24L assume approach minimums less than 3/4-mile.
2. Airport Boundary is approximate; City streets are not part of airport.

Source: Federal Aviation Administration, AC 150/5300-13 *Airport Design*, December 30, 2011; HNTB, Los Angeles International Airport Layout Plan, August 2010; Los Angeles World Airports. Parcel Data, 2011; Ricondo & Associates, Inc., March 2012.
Prepared by: Ricondo & Associates, Inc., March 2012.

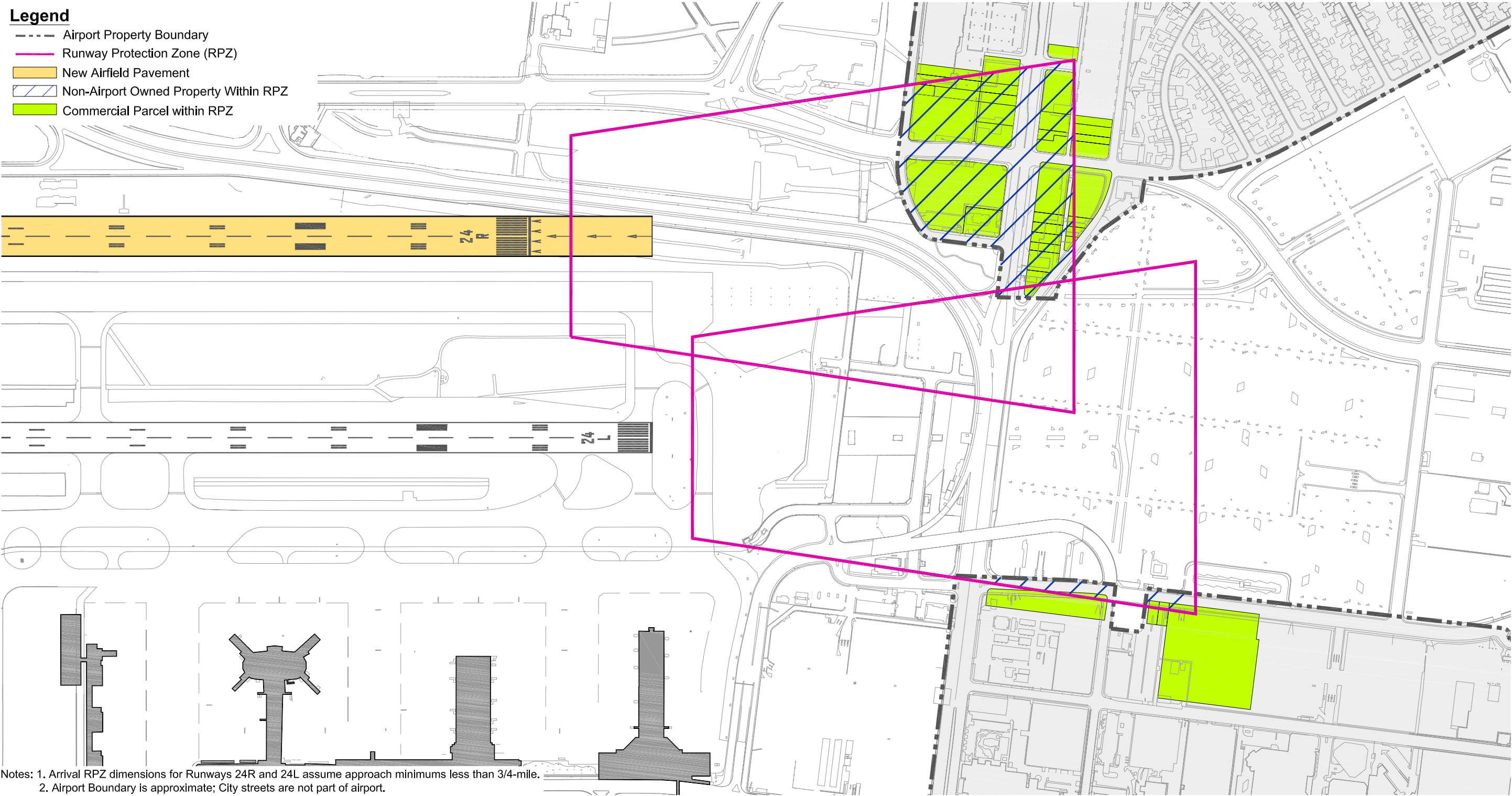
Exhibit 7



Runway 6L-24R Relocated 200 ft. North
24R Threshold Displaced 604 ft.

Legend

- Airport Property Boundary
- Runway Protection Zone (RPZ)
- New Airfield Pavement
- Non-Airport Owned Property Within RPZ
- Commercial Parcel within RPZ



Notes: 1. Arrival RPZ dimensions for Runways 24R and 24L assume approach minimums less than 3/4-mile.
2. Airport Boundary is approximate; City streets are not part of airport.

Source: Federal Aviation Administration, AC 150/5300-13 *Airport Design*, December 30, 2011; HNTB, Los Angeles International Airport Layout Plan, August 2010; Los Angeles World Airports. Parcel Data, 2011; Ricondo & Associates, Inc., March 2012.
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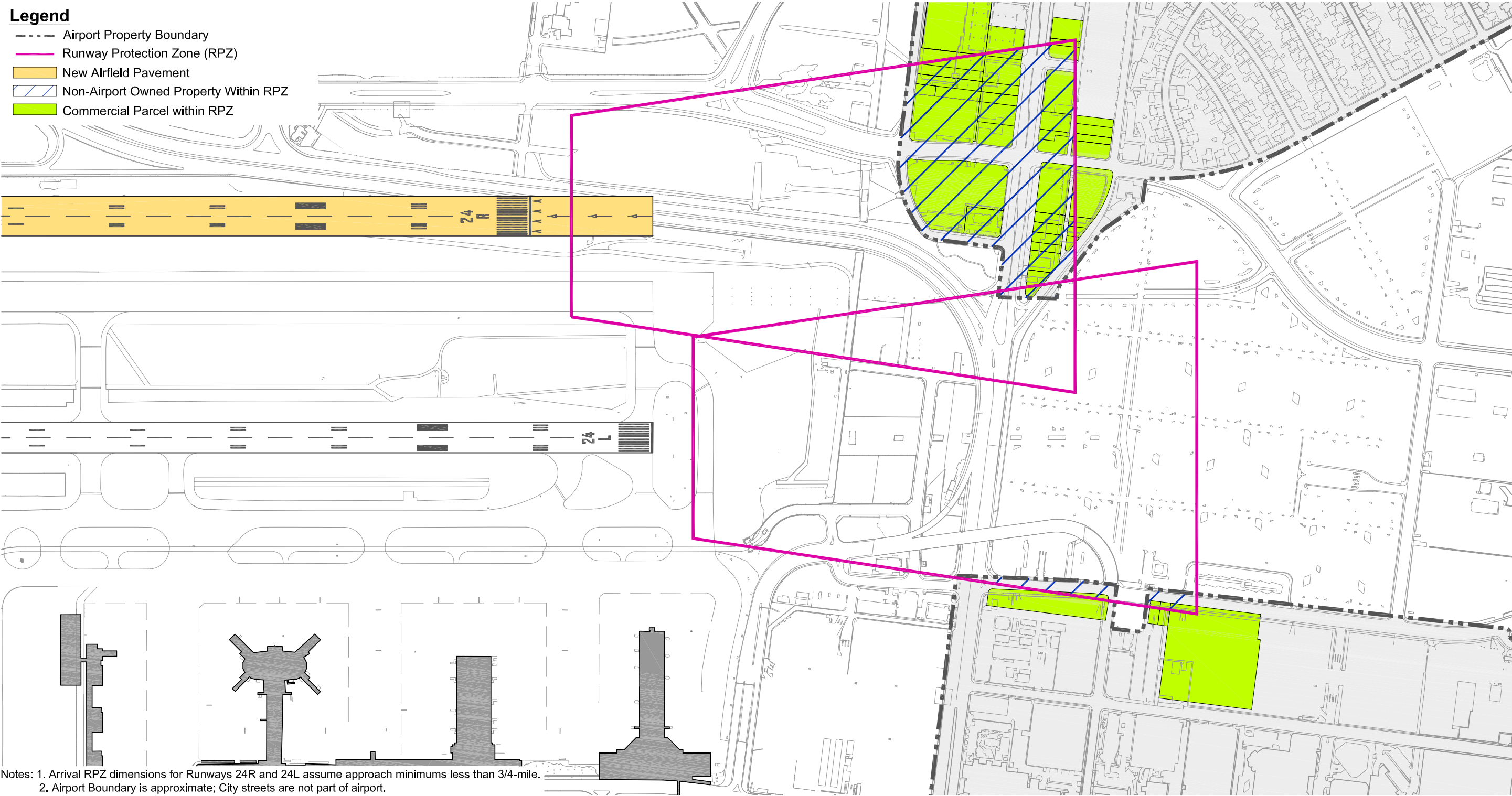
Exhibit 8



Runway 6L-24R Relocated 300 ft. North
24R Threshold Displaced 604 ft.

Legend

- Airport Property Boundary
- Runway Protection Zone (RPZ)
- New Airfield Pavement
- Non-Airport Owned Property Within RPZ
- Commercial Parcel within RPZ



Notes: 1. Arrival RPZ dimensions for Runways 24R and 24L assume approach minimums less than 3/4-mile.
2. Airport Boundary is approximate; City streets are not part of airport.

Source: Federal Aviation Administration, AC 150/5300-13 *Airport Design*, December 30, 2011; HNTB, Los Angeles International Airport Layout Plan, August 2010; Los Angeles World Airports. Parcel Data, 2011; Ricondo & Associates, Inc., March 2012.
Prepared by: Ricondo & Associates, Inc., March 2012.

Exhibit 9



Runway 6L-24R Relocated 400 ft. North
24R Threshold Displaced 604 ft.

