

Appendix A – Runway Length Data Tables



Table 1-1. Airplane Weight Categorization for Runway Length Requirements

Airplane Weight Category Maximum Certificated Takeoff Weight (MTOW)		Design Approach	Location of Design Guidelines				
12,500 pounds (5,670 kg) or less	Approach Speeds less than 30 knots	Family grouping of small airplanes	Chapter 2; Paragraph 203				
	Approach Speeds of at least 30 knots but less than 50 knots	Family grouping of small airplanes	Chapter 2; Paragraph 204				
	Approach Speeds of 50 knots or more	<table border="1"> <tr> <td>With Less than 10 Passengers</td> <td>Family grouping of small airplanes</td> <td>Chapter 2; Paragraph 205 Figure 2-1</td> </tr> <tr> <td>With 10 or more Passengers</td> <td>Family grouping of small airplanes</td> <td>Chapter 2; Paragraph 205 Figure 2-2</td> </tr> </table>	With Less than 10 Passengers	Family grouping of small airplanes	Chapter 2; Paragraph 205 Figure 2-1	With 10 or more Passengers	Family grouping of small airplanes
With Less than 10 Passengers	Family grouping of small airplanes	Chapter 2; Paragraph 205 Figure 2-1					
With 10 or more Passengers	Family grouping of small airplanes	Chapter 2; Paragraph 205 Figure 2-2					
Over 12,500 pounds (5,670 kg) but less than 60,000 pounds (27,200 kg)		Family grouping of large airplanes	Chapter 3; Figures 3-1 or 3-2 ¹ and Tables 3-1 or 3-2				
60,000 pounds (27,200 kg) or more or Regional Jets ²		Individual large airplane	Chapter 4; Airplane Manufacturer Websites (Appendix 1)				

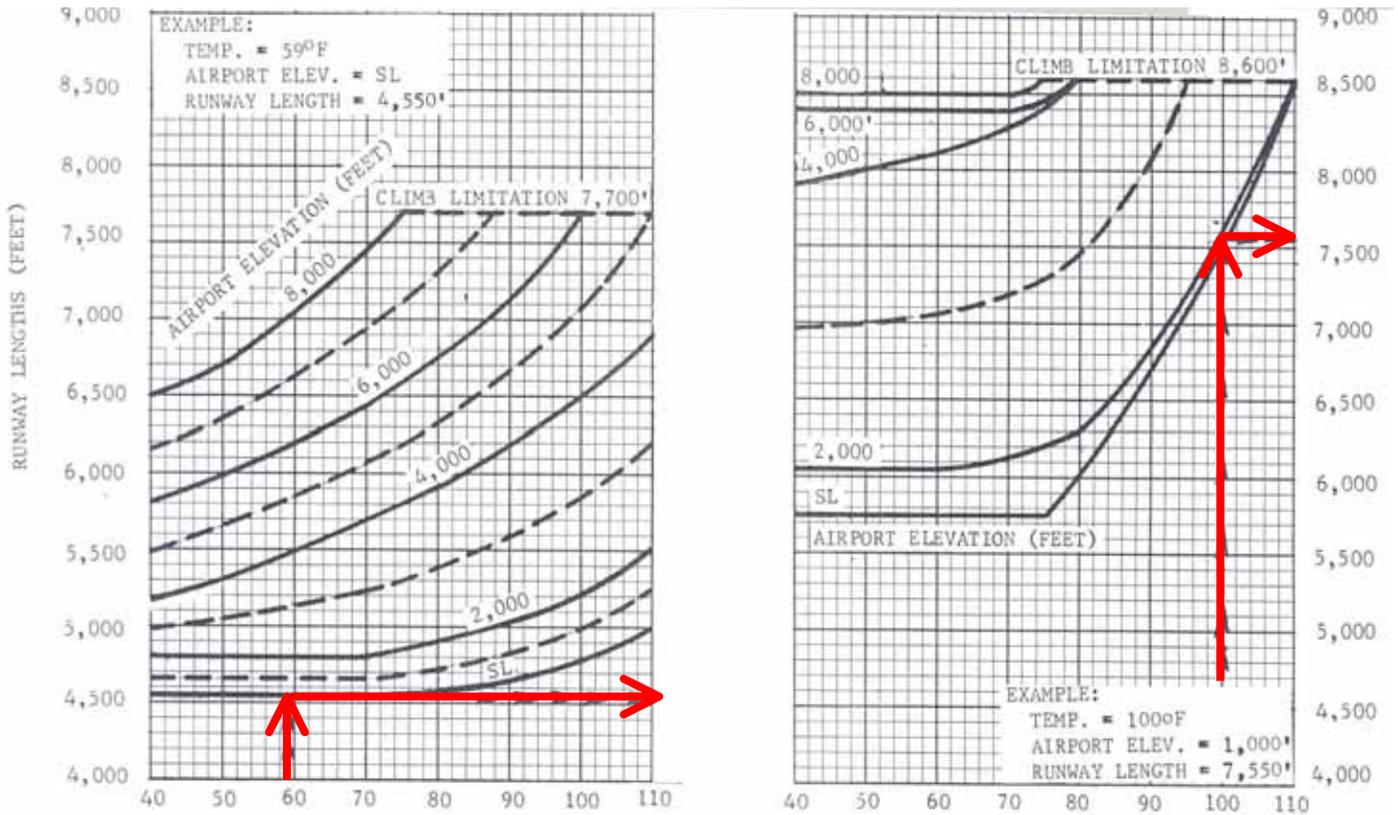
Note¹: When the design airplane's APM shows a longer runway length than what is shown in figure 3-2, use the airplane manufacturer's APM. However, users of an APM are to adhere to the design guidelines found in Chapter 4.

Note²: All regional jets regardless of their MTOW are assigned to the 60,000 pounds (27,200 kg) or more weight category.

103. PRIMARY RUNWAYS. The majority of airports provide a single primary runway. Airport authorities, in certain cases, require two or more primary runways as a means of achieving specific airport operational objectives. The most common operational objectives are to (1) better manage the existing traffic volume that exceed the capacity capabilities of the existing primary runway, (2) accommodate forecasted growth that will exceed the current capacity capabilities of the existing primary runway, and (3) mitigate noise impacts associated with the existing primary runway. Additional primary runways for capacity justification are parallel to and equal in length to the existing primary runway, unless they are intended for smaller airplanes. Refer to AC 150/5060-5, *Airport Capacity and Delay*, for additional discussion on runway usage for capacity gains. Another common practice is to assign individual primary runways to different airplane classes, such as, separating general aviation from non-general aviation customers, as a means to increase the airport's efficiency. The design objective for the main primary runway is to provide a runway length for all airplanes that will regularly use it without causing operational weight restrictions. For Federally funded projects, the criterion for substantial use applies (see paragraph 102a(8).) The design objective for additional primary runways is shown in table 1-2. The table takes into account the separation of airplane classes into distinct airplane groups to achieve greater airport utilization. Procedurally, follow the guidelines found in subparagraph 102(b) for determining recommended runway lengths for primary runways, and, for additional primary runways, apply table 1-2.

104. CROSSWIND RUNWAYS. The design objective to orient primary runways to capture 95 percent of the crosswind component perpendicular to the runway centerline for any airplane forecast to use the airport is not always achievable. In cases where this cannot be done, a crosswind runway is recommended to achieve the design standard provided in AC 150/5300-13, *Airport Design*, for allowable crosswind components according to airplane design groups. Even when the 95-percent crosswind coverage standard is achieved for the design airplane or airplane design group, cases arise where certain airplanes with lower crosswind capabilities are unable to utilize the primary runway. For airplanes with lesser crosswind capabilities, a crosswind runway may be built, provided there is regular usage. For Federally funded projects, the criterion for substantial use applies to the airplane used as the design airplane needing the crosswind runway (see paragraph 102a(8).) The design objective for the length of crosswind runways is shown in table 1-3. Procedurally, follow the guidelines found in subparagraph 102(b) for determining recommended runway lengths for crosswind runways, and, for additional crosswind runways, apply table 1-3.

Figure 3-1. 75 Percent of Fleet at 60 or 90 Percent Useful Load



Mean Daily Maximum Temperature of Hottest Month of the Year in Degrees Fahrenheit

75 percent of feet at 60 percent useful load

75 percent of feet at 90 percent useful load

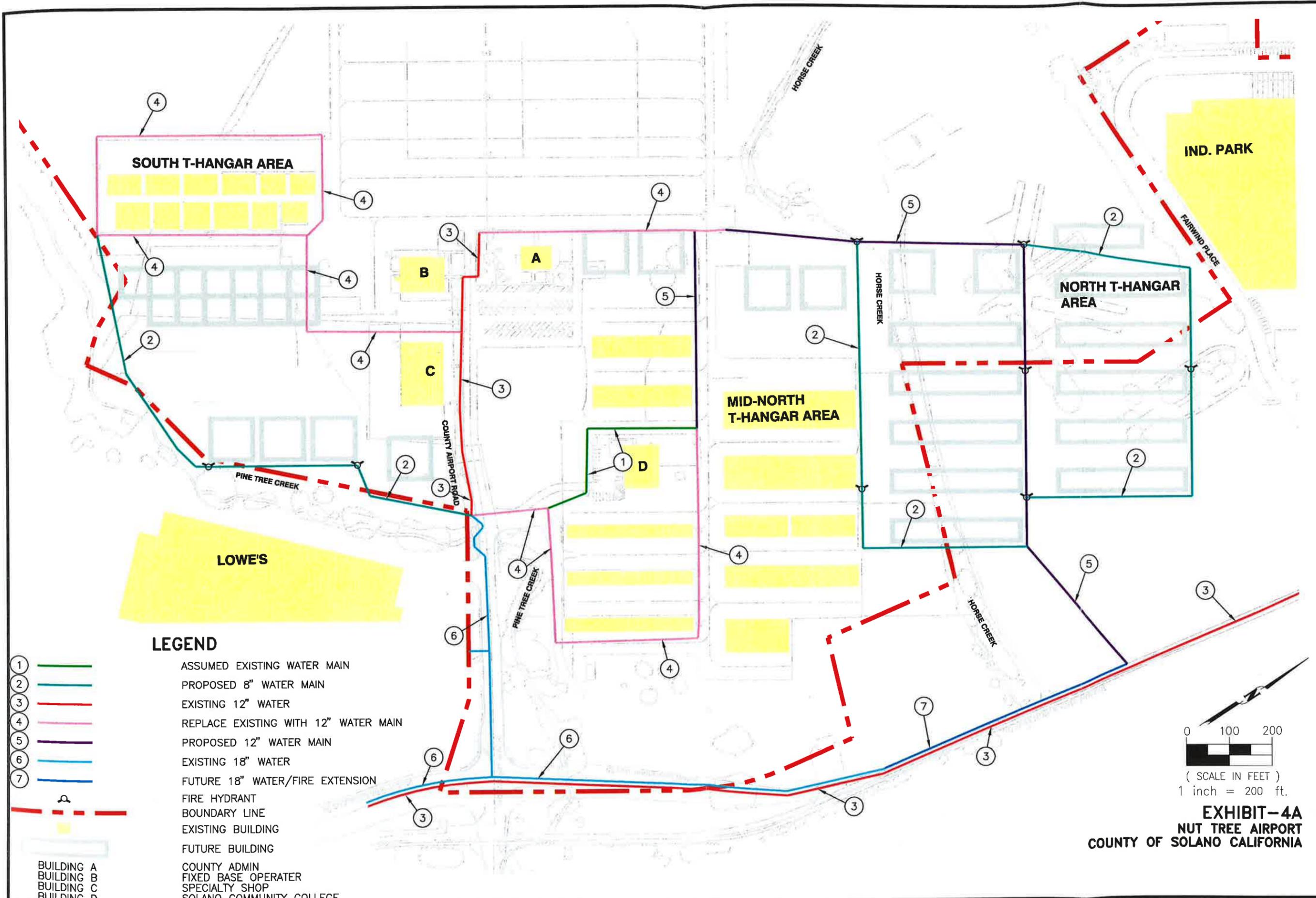
Table 3-1. Airplanes that Make Up 75 Percent of the Fleet

Manufacturer	Model
Aerospatiale	Sn-601 Corvette
Bae	125-700
Beech Jet	400A
Beech Jet	Premier I
Beech Jet	2000 Starship
Bombardier	Challenger 300
Cessna	500 Citation/501Citation Sp
Cessna	Citation I/II/III
Cessna	525A Citation II (CJ-2)
Cessna	550 Citation Bravo
Cessna	550 Citation II
Cessna	551 Citation II/Special
Cessna	552 Citation
Cessna	560 Citation Encore
Cessna	560/560 XL Citation Excel
Cessna	560 Citation V Ultra
Cessna	650 Citation VII
Cessna	680 Citation Sovereign

Manufacturer	Model
Dassault	Falcon 10
Dassault	Falcon 20
Dassault	Falcon 50/50 EX
Dassault	Falcon 900/900B
Israel Aircraft Industries (IAI)	Jet Commander 1121
IAI	Westwind 1123/1124
Learjet	20 Series
Learjet	31/31A/31A ER
Learjet	35/35A/36/36A
Learjet	40/45
Mitsubishi	Mu-300 Diamond
Raytheon	390 Premier
Raytheon Hawker	400/400 XP
Raytheon Hawker	600
Sabreliner	40/60
Sabreliner	75A
Sabreliner	80
Sabreliner	T-39

Appendix B – Water and Sewer Master Plans





SOUTH T-HANGAR AREA

NORTH T-HANGAR AREA

MID-NORTH T-HANGAR AREA

IND. PARK

LOWE'S

LEGEND

- 1 ——— ASSUMED EXISTING WATER MAIN
 - 2 ——— PROPOSED 8" WATER MAIN
 - 3 ——— EXISTING 12" WATER
 - 4 ——— REPLACE EXISTING WITH 12" WATER MAIN
 - 5 ——— PROPOSED 12" WATER MAIN
 - 6 ——— EXISTING 18" WATER
 - 7 ——— FUTURE 18" WATER/FIRE EXTENSION
 - FIRE HYDRANT
 - — — BOUNDARY LINE
 - EXISTING BUILDING
 - FUTURE BUILDING
- BUILDING A
 BUILDING B
 BUILDING C
 BUILDING D
- COUNTY ADMIN
 FIXED BASE OPERATER
 SPECIALTY SHOP
 SOLANO COMMUNITY COLLEGE

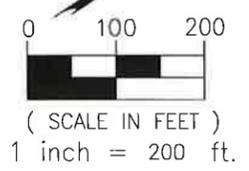
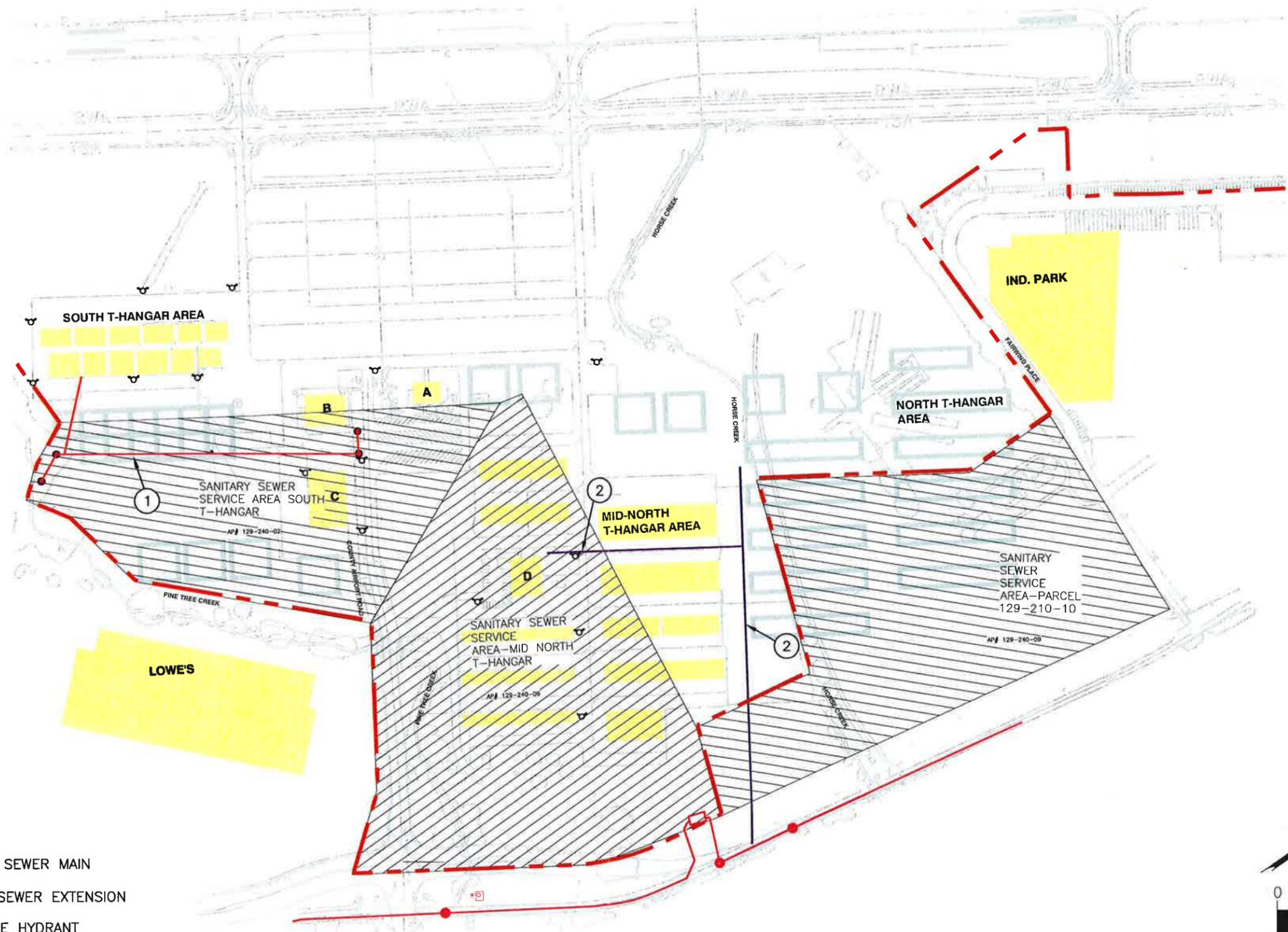


EXHIBIT-4A
NUT TREE AIRPORT
COUNTY OF SOLANO CALIFORNIA

PM: MARIE SILVEIRA DRWN: ELIAS KABAM	DATE: AUG 2008	WORK ORDER: 333446 SCALE:	TAB:	HORIZONTAL: 1" = 200' VERT:
JE JACOBS Carter Burgess 180 PROMENADE CIRCLE, SUITE 300 SACRAMENTO, CA 95834 PHONE (916) 929-3323 FAX (916) 929-1772				
NUT TREE AIRPORT WATER MASTER PLAN				
COUNTY OF SOLANO CALIFORNIA				
SHEET 1	OF 1			



LEGEND

- ① ——— EXISTING 8" SEWER MAIN
 - ② ——— FUTURE 8" SEWER EXTENSION
 - ⊕ EXISTING FIRE HYDRANT
 - - - - - BOUNDARY LINE
 - EXISTING BUILDING
 - FUTURE BUILDING
- | | |
|------------|--------------------------|
| BUILDING A | COUNTY ADMIN |
| BUILDING B | FIXED BASE OPERATER |
| BUILDING C | SPECIALTY SHOP |
| BUILDING D | SOLANO COMMUNITY COLLEGE |

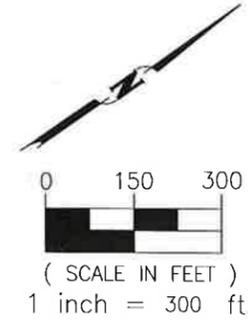


EXHIBIT-4C
NUT TREE AIRPORT
COUNTY OF SOLANO CALIFORNIA

PM.: MARIE SILVEIRA DATE: AUG 2008
 DRWN: ELIAS KARAM
 WORK ORDER: 333446 TAB:
 SCALE:
 HORIZONTAL: 1" = 300'
 VERT: 8-28-08 11:21:08 AM

JE JACOBS
 Carter Burgess
 180 PROMENADE CIRCLE, SUITE 300
 SACRAMENTO, CA 95834
 PHONE (916) 929-3323 FAX (916) 929-1772

NUT TREE AIRPORT
SEWER MASTER PLAN
 COUNTY OF SOLANO CALIFORNIA

SHEET 1 OF 1