Northeast Hangar Development Standards (Example Aircraft Hangar Layout Details)



(•) Wiley Post Airport



Entry Door

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October 2014







Mead Cherry Street Building 1616 East 15th Street Tulsa, Oklahoma 74120-6027 Phone Number. 918 585 8844 FAX Number. 918 585 8857 www.meadhunt.com

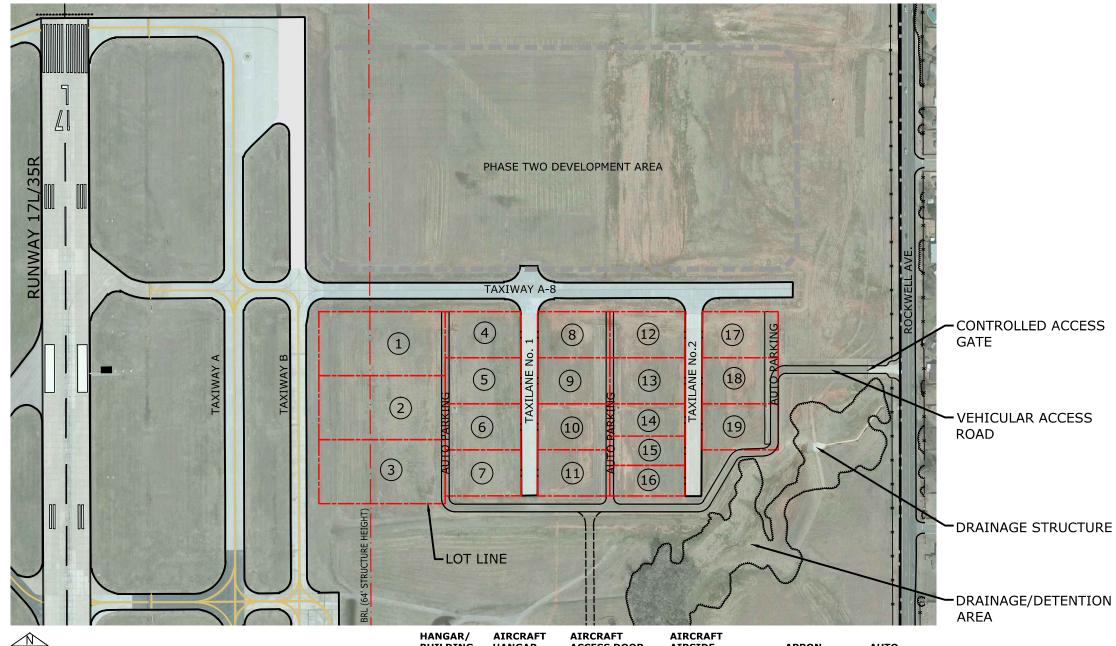
Entry Doo

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GRAPHIC SCALE IN	N	FEET
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300

150'

IMAGERY SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, AND THE GIS USER COMMUNITY (FEB 28, 2011)

600'

900



	HANGAR/	AIRCRAFT	AIRCRAFT	AIRCRAFT		
	BUILDING	HANGAR	ACCESS DOOR	AIRSIDE	APRON	AUTO
SQ.FT.	MIN SQ. FT. ¹	GROUP ¹		ACCESS	PARKING	PARKING
70.000	25.000	т	> 20 ET		VEC	YES
		1				
	,	1				YES
79,000	20,000	I	> 28 FT.	TAXIWAY B/APRON	YES	YES
33,400	10,000	II or III	< or = 28 FT.	TAXILANE No.1	OPTIONAL	YES
33,400	8,000	II or III	< or = 28 FT.	TAXILANE No.1	OPTIONAL	YES
33,400	8,000	II or III	< or = 28 FT.	TAXILANE No.1	OPTIONAL	YES
33,400	8,000	II or III	< or = 28 FT.	TAXILANE No.1	OPTIONAL	YES
33,400	10,000	II or III	< or = 28 FT.	TAXILANE No.1	OPTIONAL	YES
33,400	8,000	II or III	< or = 28 FT.	TAXILANE No.1	OPTIONAL	YES
33,400	12,000	II or III	< or = 28 FT.	TAXILANE No.1	OPTIONAL	YES
33,400	12,000	II or III	< or = 28 FT.	TAXILANE No.1	OPTIONAL	YES
33,400	10,000	II or III	< or = 28 FT.	TAXILANE No.2	OPTIONAL	YES
33,400	8,000	II or III	< or = 28 FT.	TAXILANE No.2	OPTIONAL	YES
23,700	6,000	II or III	< or = 28 FT.	TAXILANE No.2	OPTIONAL	YES
21,300	6,000	II or III	< or = 28 FT.	TAXILANE No.2	OPTIONAL	YES
22,200	6,000	II or III	< or = 28 FT.	TAXILANE No.2	OPTIONAL	YES
33,400	8,000	II or III	< or = 28 FT.	TAXILANE No.2	OPTIONAL	YES
33,400	8,000	II or III	< or = 28 FT.	TAXILANE No.2	OPTIONAL	YES
33,400	8,000	II or III	< or = 28 FT.	TAXILANE No.2	OPTIONAL	YES
	79,000 79,000 33,400 33,400 33,400 33,400 33,400 33,400 33,400 33,400 33,400 33,400 23,700 21,300 22,200 33,400 33,400	BUILDING MIN SQ. FT. 79,000 25,000 79,000 20,000 79,000 20,000 33,400 10,000 33,400 8,000 33,400 8,000 33,400 8,000 33,400 8,000 33,400 8,000 33,400 10,000 33,400 12,000 33,400 12,000 33,400 10,000 33,400 8,000 23,700 6,000 22,200 6,000 33,400 8,000 33,400 8,000	BUILDING MIN SQ. FT. HANGAR MIN SQ. FT. 79,000 25,000 I 79,000 20,000 I 33,400 10,000 II or III 33,400 10,000 II or III 33,400 8,000 II or III 33,400 10,000 II or III 33,400 10,000 II or III 33,400 10,000 II or III 33,400 12,000 II or III 33,400 10,000 II or III 33,400 10,000 II or III 33,400 8,000 II or III 23,700 6,000 II or III 22,200 6,000 II or III 33,400 8,000 II or III 33,400 8,000 II or III 33,400 8,000 II or III	BUILDING MIN SQ. FT.HANGAR GROUP1ACCESS DOOR HEIGHT 179,000 $25,000$ I> 28 FT.79,000 $20,000$ I> 28 FT.33,400 $10,000$ II or III< or = 28 FT.	BUILDING MIN SQ. FT.HANGAR GROUP1ACCESS DOOR HEIGHT1AIRSIDE ACCESS79,00025,000I> 28 FT.TAXIWAY B/APRON79,00020,000I> 28 FT.TAXIWAY B/APRON79,00020,000I> 28 FT.TAXIWAY B/APRON33,40010,000II or III< or = 28 FT.	BUILDING MIN SQ. FT.HANGAR GROUP1ACCESS DOOR HEIGHT 1AIRSIDE ACCESSAPRON PARKING79,000 $25,000$ I> 28 FT.TAXIWAY B/APRONYES79,000 $20,000$ I> 28 FT.TAXIWAY B/APRONYES79,000 $20,000$ I> 28 FT.TAXIWAY B/APRONYES33,400 $10,000$ II or III< or = 28 FT.

1 Minimum & maximum hangar sizes to be designed/approved/constructed in accordance with current International Building Code (IBC) and National Fire Protection Association (NFPA) 409 requirements.

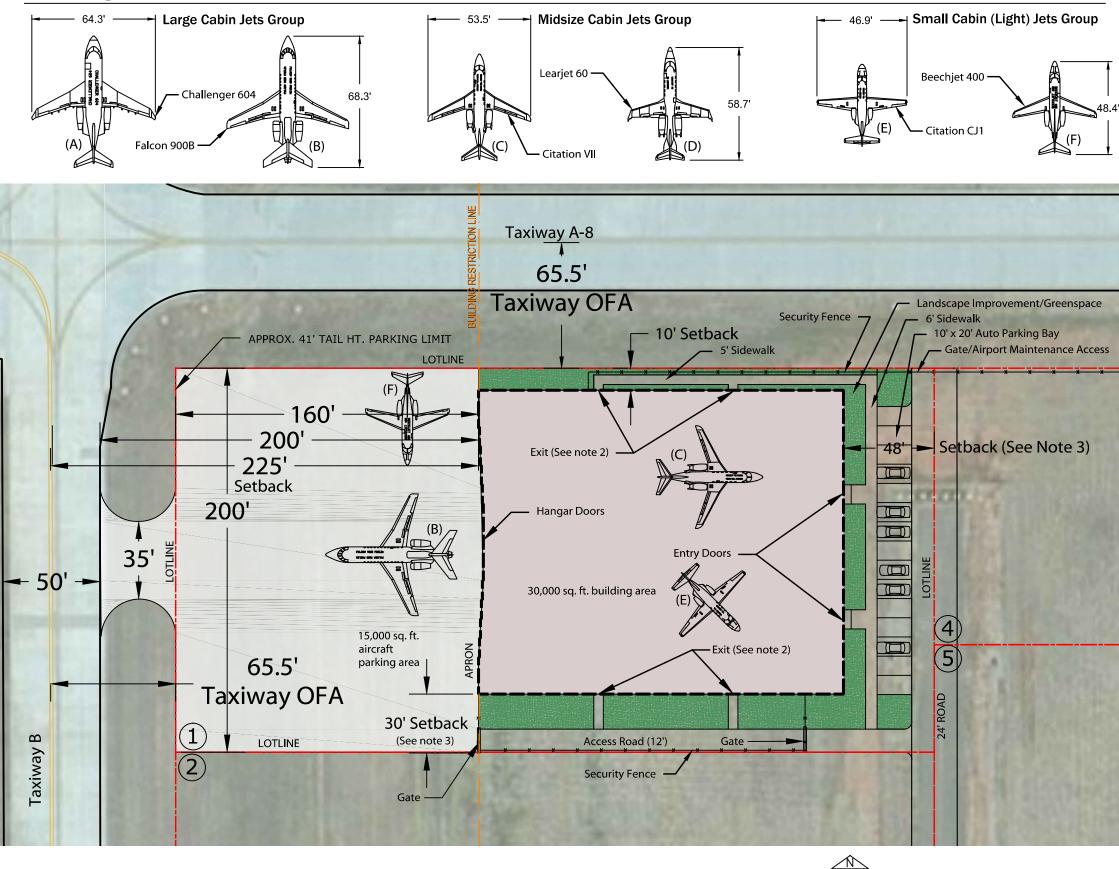


Vicinity Map

Attachment 1 Northeast Hangar Development/ Phase One Site Plan



Aircraft Legend







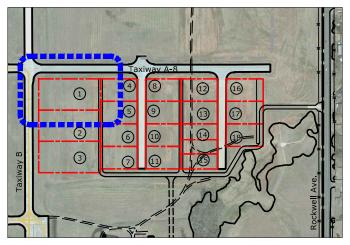
GRAPHIC SCALE IN FEET IMAGERY SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, AND THE GIS USER COMMUNITY (FEB 28, 2011)

100

150

25

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Location Map

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Example Aircraft Hangar Group I Layout Detail/Lot 1

- Lot Size @ 79,000 ft.²
- Hangar Size @ 30,000 ft.² (minimum 25,000 ft.²)
- Aircraft Access Door Height > 28 ft.
- Taxiway Access with Aircraft Parking Apron (31,500 ft.²) •
- Auto Parking with Controlled Airside Access Road •
- Landscape/Green Space Area

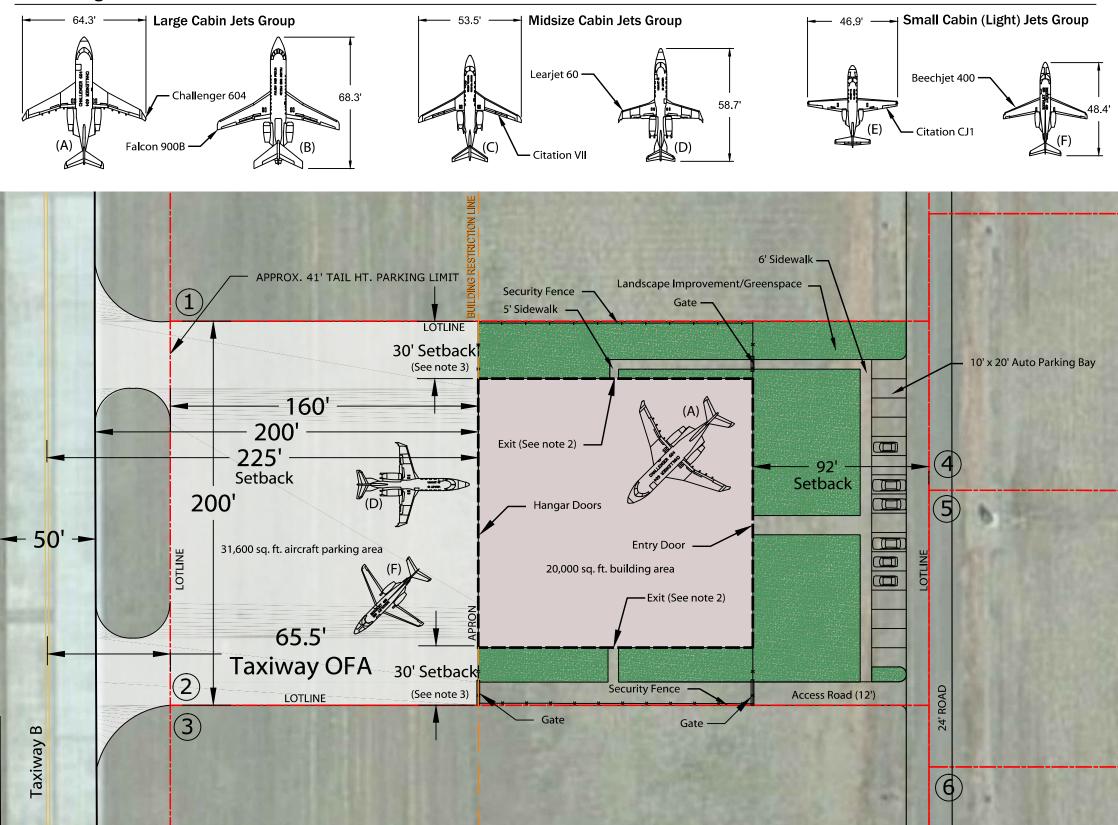
Notes:

- 1. See National Fire Protection Association (NFPA) 409 "Standard on Aircraft Hangars" (2011 Edition or Latest) for minimum requirements specifying aircraft hangar construction types, fire protection, hangar floor gradient, trench drains, and oil/gas separation.
- 2. See NFPA 101 "Life Safety Codes" (2012 Edition or Latest) for minimum requirements specifying the number of pedestrian exits for each hangar.
- 3. See International Building Code (IBC)-2012 Edition or latest for regulations regarding clear space distance between hangars and NFPA 409 for fire wall protection requirements. Separation criteria can range between 60 feet and zero feet depending upon fire resistance rating specification of exterior wall.
- 4. A landscape plan for the designated landscape/greenspace areas associated with each lot is to be prepared by the lessee and submitted to the OKC Department of Airports for approval. All landscaping is to be maintained by the lessee.
- 5. The taxiway and taxilane object free area (TOFA) must remain clear of parked airplanes, parked automobiles, and above ground objects, except for those objects needed for air navigation or aircraft maneuvering.

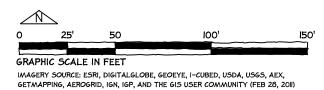
Attachment 2 Aircraft Hangar Group I/Lot 1 **Example Layout Detail**

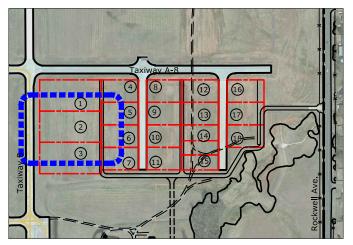


Aircraft Legend









Location Map

Example Aircraft Hangar Group I Layout Detail/Lot 2

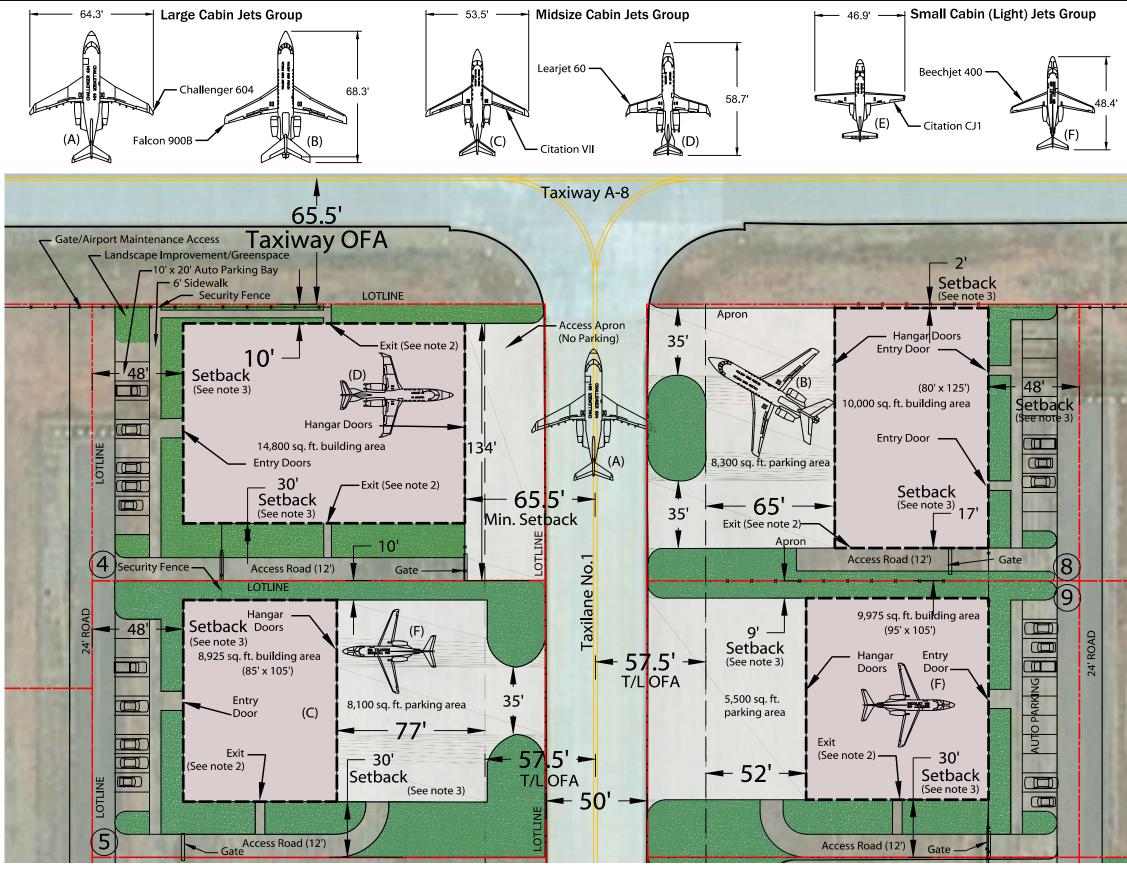
- Lot Size @ 79,000 ft.²
- Minimum hangar size @ 20,000 ft.²
- Aircraft Access Door Height > 28 ft.
- Taxiway Access with Aircraft Parking Apron (31,500 ft.²)
- Auto Parking with Controlled Airside Access Road
- Landscape/Green Space Area

Notes:

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- 5. The taxiway and taxilane object free area (TOFA) must remain clear of parked airplanes, parked automobiles, and above ground objects, except for those objects needed for air navigation or aircraft maneuvering.

Attachment 3 Aircraft Hangar Group I/Lot 2 Example Layout Detail



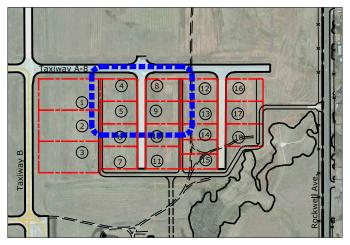




Mead & Hunt, Inc. 1616 E 15th St. Tulsa, OK 74120 phone: (918) 585-8844 meadhunt.com



IMAGERY SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, AND THE GIS USER COMMUNITY (FEB 28, 2011)



Location Map

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Example Aircraft Hangar Group II or III Layout Detail/ Lots 4, 5, 8, & 9

- Lot Size @ 33,400 ft.²
- Lot 4 hangar size @ 14,800 ft.² (minimum 10,000 ft.²)
- Lot 8 hangar size @ 10,000 ft.² (minimum 10,000 ft.²)
- Lot 5 hangar size @ 8,925 ft.² (minimum 8,000 ft.²)
- Lot 9 hangar size @ 9,975 ft.² (minimum 8,000 ft.²)
- Aircraft Access Door Height < or = 28 ft.
- Taxilane Access with Optional Aircraft Parking Apron
- Auto Parking with Controlled Airside Access Road
- Landscape/Green Space Area

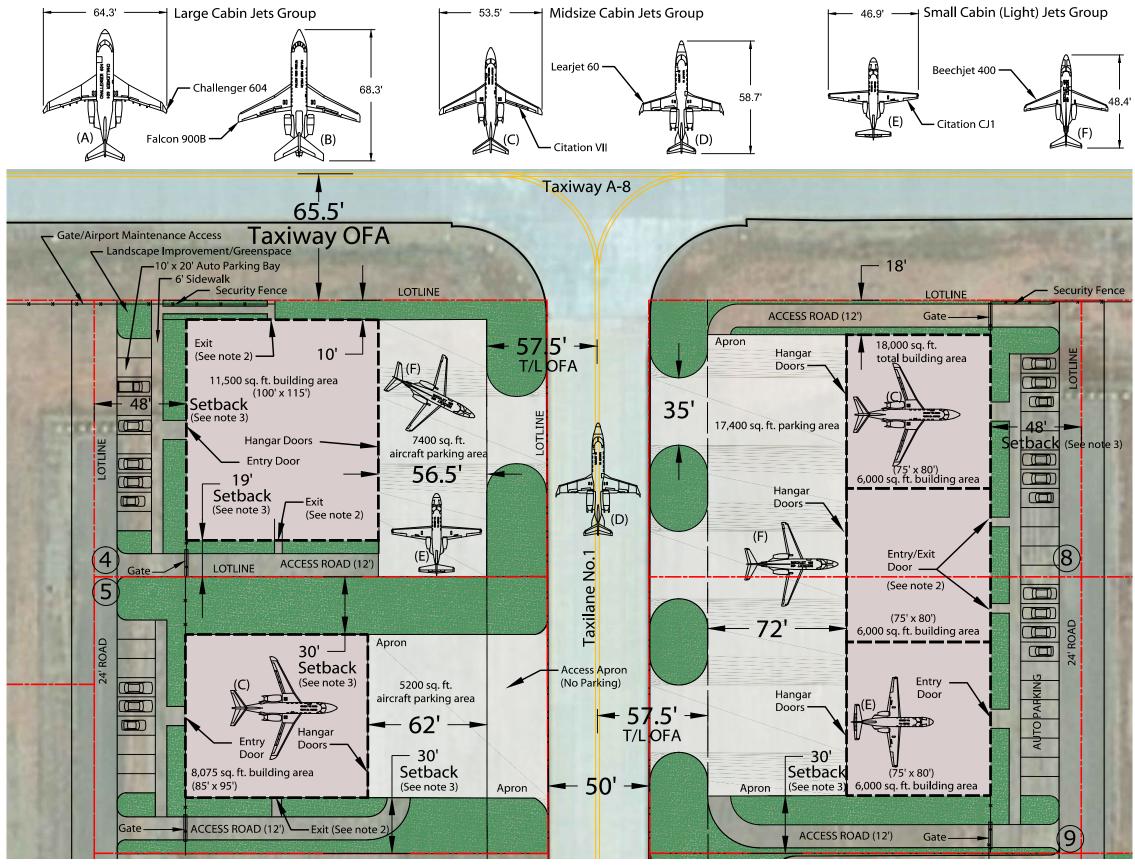
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- See International Building Code (IBC)-2012 Edition or latest for regulations regarding clear space distance between hangars and NFPA 409 for fire wall protection requirements. Separation criteria can range between 60 feet and zero feet depending upon fire resistance rating specification of exterior wall.
- 4. A landscape plan for the designated landscape/greenspace areas associated with each lot is to be prepared by the lessee and submitted to the OKC Department of Airports for approval. All landscaping is to be maintained by the lessee.
- The taxiway and taxilane object free area (TOFA) must remain clear of parked airplanes, parked automobiles, and above ground objects, except for those objects needed for air navigation or aircraft maneuvering.

Attachment 4 Aircraft Hangar Group II or III/Lots 4, 5,

8, & 9 Example Layout Detail

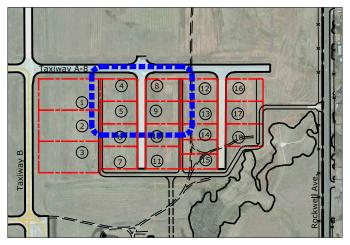








IMAGERY SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, AND THE GIS USER COMMUNITY (FEB 28, 2011)



Location Map

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Example Aircraft Hangar Group II or III Layout Detail/ Lots 4, 5, 8, & 9

- Lot Size @ 33,400 ft.²
- Lot 4 hangar size @ 11,500 ft.² (minimum 10,000 ft.²)
- Lot 8 & 9 hangar size 3 @ 6,000 ft.² ea.
- Lot 5 hangar size @ 8,075 ft.² (minimum 8,000 ft.²)
- Aircraft Access Door Height < or = 28 ft.
- Taxilane Access with Optional Aircraft Parking Apron
- Auto Parking with Controlled Airside Access Road
- Landscape/Green Space Area

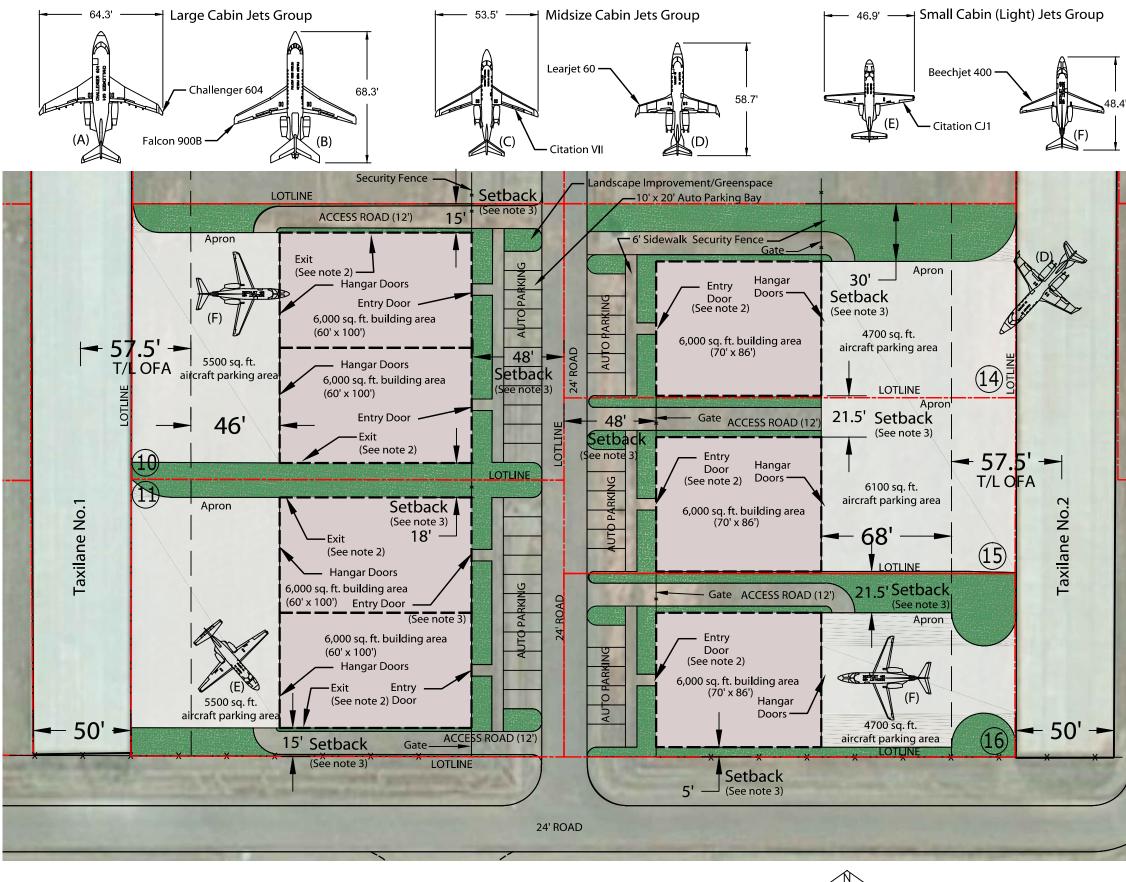
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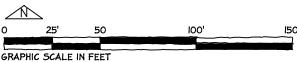
Attachment 5 Aircraft Hangar Group II or III/Lots 4, 5,

8, & 9 Example Layout Detail

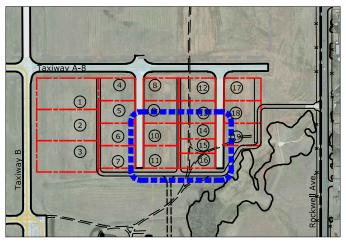








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Location Map

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Example Aircraft Hangar Group II or III Layout Detail/ Lots 10, 11, 14, 15 & 16

- Lot sizes @ 33,400 ft.² (Lots 10 & 11)
- Lots 10 & 11 minimum hangar size: 2 @ 6,000 ft.² ea.
- Lot sizes @ 21,300-23,700 ft.² (Lots 14, 15 & 16)
- Lots 14, 15 & 16 minimum hangar sizes @ 6,000 ft.² ea.
- Aircraft Door Height @ < or = 28 ft.
- Taxilane Access with Optional Aircraft Parking Apron
- Direct taxilane and connector taxiway access (Taxiway 'A-8' to Taxiway 'B')
- Controlled landside vehicular access to aircraft apron
- Auto parking

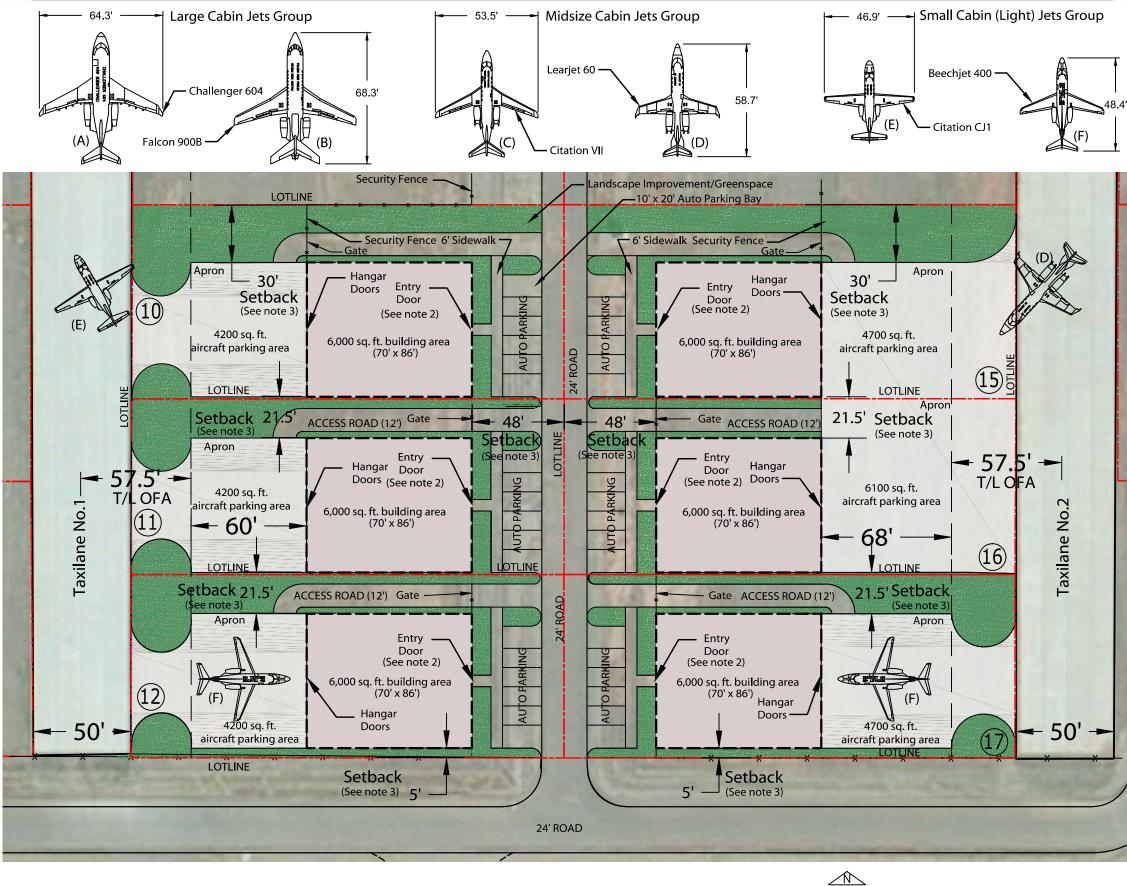
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- 4. A landscape plan for the designated landscape/greenspace areas associated with each lot is to be prepared by the lessee and submitted to the OKC Department of Airports for approval. All landscaping is to be maintained by the lessee.
- The taxiway and taxilane object free area (TOFA) must remain clear of parked airplanes, parked automobiles, and above ground objects, except for those objects needed for air navigation or aircraft maneuvering.

Attachment 6 Aircraft Hangar Group II or III/Lots 10

11, 14, 15 & 16 Example Layout Detail

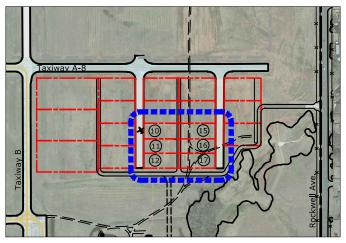








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Location Map

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Example Aircraft Hangar Group II or III Layout Detail/ Lots 10-12 & 15-17

- Lot sizes @ 20,600-23,800 ft.²
- Minimum hangar sizes @ 6,000 ft.² ea.
- Aircraft Door Height @ < or = 28 ft.
- Taxilane Access with Optional Aircraft Parking Apron
- Direct taxilane and connector taxiway access (Taxiway 'A-8' to Taxiway 'B')
- Controlled landside vehicular access to aircraft apron
- Auto parking

Notes:

- See National Fire Protection Association (NFPA) 409 "Standard on Aircraft Hangars" (2011 Edition or Latest) for minimum requirements specifying aircraft hangar construction types, fire protection, hangar floor gradient, trench drains, and oil/gas separation.
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- The taxiway and taxilane object free area (TOFA) must remain clear of parked airplanes, parked automobiles, and above ground objects, except for those objects needed for air navigation or aircraft maneuvering.

Attachment 7 Aircraft Hangar Group II or III/Lots 10-

12 & 15-17 Example Layout Detail





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