



KF AEROSPACE – CENTER FOR EXCELLENCE

Kelowna Public Hearing – Nov 17, 2020

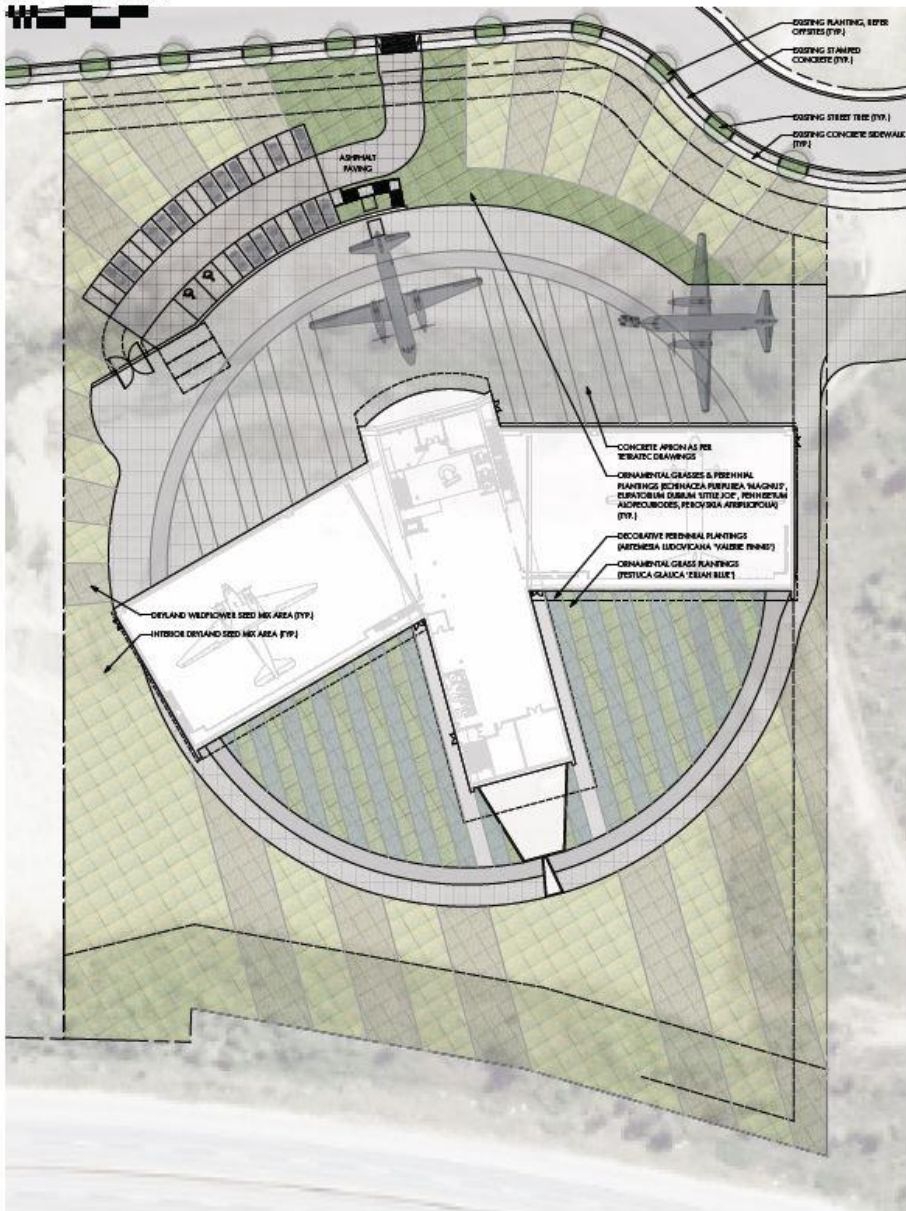


Location



Aerial View

0 5 10 15 20 25 M



NOTES

1. PLANT MATERIAL AND CONSTRUCTION METHODS SHALL MEET OR EXCEED THE CANADIAN LANDSCAPE STANDARD.

2. ALL SOFT LANDSCAPE AREAS SHALL BE WATERED BY A FULLY AUTOMATIC TIERED UNDERGROUND IRRIGATION SYSTEM.

3. TREE AND SHRUBS SHALL BE TO BE SPECIES BY A MINIMUM 50mm DOUGLAS RED FIBRE, AS SHOWN IN PLANS. DO NOT PLACE VEED MAT UNDERNEATH TREE AND SHRUB BEDS.

4. TREE AND SHRUBS SHALL RECEIVE A MINIMUM 300mm DEPTH TORSOL PLACEMENT.

5. TURF AREAS FROM SOD SHALL BE NO. 1 GRADE GROWN FROM CERTIFIED SEED OF IMPROVED CULTIVARS REGISTERED FOR SALE IN B.C. AND SHALL BE TO BE SPECIES OF DOUGLAS RED FIBRE. A MINIMUM OF 100mm DEPTH OF GROWING MEDIA IS REQUIRED FOR TURF AREAS. TURF AREAS SHALL MEET EXISTING GRASSES AND TURF SURFACES.

6. SITE GRADING AND DRAINAGE WILL ENSURE THAT ALL STRUCTURES HAVE POSITIVE DRAINAGE AND THAT NO WATER OR LOGS IMPEDIMENTS WILL BE DISCHARGED FROM THE SITE ONTO ADJACENT PUBLIC, COMMON, OR PRIVATE PROPERTIES.

7. HYDROSEEDING DRYLAND SEED AREAS:
INTERIOR DRYLAND SEED MIXTURE BY WEIGHT: WILDOVER SEED MIXTURE BY WEIGHT
CRESTED WHEATGRASS 40% GRAY LUPINE 30%
TALL WHEATGRASS 20% BASIN BROOM 30%
SERICE WHEATGRASS 30% BROWN EYED SUSAN 30%
HARD FESCUE 10%

HYDROSEEDING AGRICULTURE SEED AREAS:
NATIVE SEED INTERIOR DRYLAND SEED MIXTURE 750G/HECTARE
WILDOVER SEED MIXTURE 100G/HECTARE
PERFUMER 10-18-18-2 50G
SUNFLOWER COATED UREA 300G/HECTARE
MULCH CANFOR ECOMIXE RUS TAC 2,800G/HECTARE
TACOFER GAIA 2% OF MIX

THE HYDROSEEDING MIXTURE IS TO BE APPLIED TO THE DRYLAND SEED AREA AS SHOWN ON THE DRAWING. SEED MIX TO BE CERTIFIED #1 GRADE BY AGRICULTURE CANADA. REFER MANUFACTURER'S SPECIFICATIONS FOR PRODUCT DELIVERY, STORAGE & PROTECTION.

PLANT LIST

BOTANICAL NAME	COMMON NAME	QTY	SIZE/SPACING & REMARKS
SHRUBS, PERENNIALS, GRASSES & GROUNDCOVERS			
ARTEMESIA LUDOVICIANA 'VALENTINE PINES'	WHITE SAGE	1102'	RUGS / 1.0M O.C. SPACING
ECHEVERIA 'PETER PAN'	MACHADO'S CORNERS	192	RUGS / 1.0M O.C. SPACING
DIANTHUS 'LITTLE JOE'	LITTLE JOE DWARF JOE PINE	192	RUGS / 1.0M O.C. SPACING
DIANTHUS 'LITTLE JOE'	BLUE PEECIE	1102'	RUGS / 1.0M O.C. SPACING
DIANTHUS 'LITTLE JOE'	FOUNTAIN GRASS	426	RUGS / 1.0M O.C. SPACING
DIANTHUS 'LITTLE JOE'	RUSSIAN SAGE	192	RUGS / 1.0M O.C. SPACING



OUTLAND DESIGN
LANDSCAPE ARCHITECTURE

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PROJECT TITLE

KF AEROSPACE CENTER
FOR EXCELLENCE
5800 & 5930 LA JOLITE DRIVE

Kelowna, BC

CONCEPTUAL TITLE

CONCEPTUAL
LANDSCAPE PLAN

ISSUED FOR / REVISION

NO.	DESCRIPTION	DATE
1	ISSUED FOR	2020-08
2		
3		
4		
5		

PROJECT NO.	2020-08
DESIGNED BY	ME
CHECKED BY	ME
DATE	2020-08-10, 2020-08-10
SCALE	1:1000
PAPER SIZE	24x36"

DATE

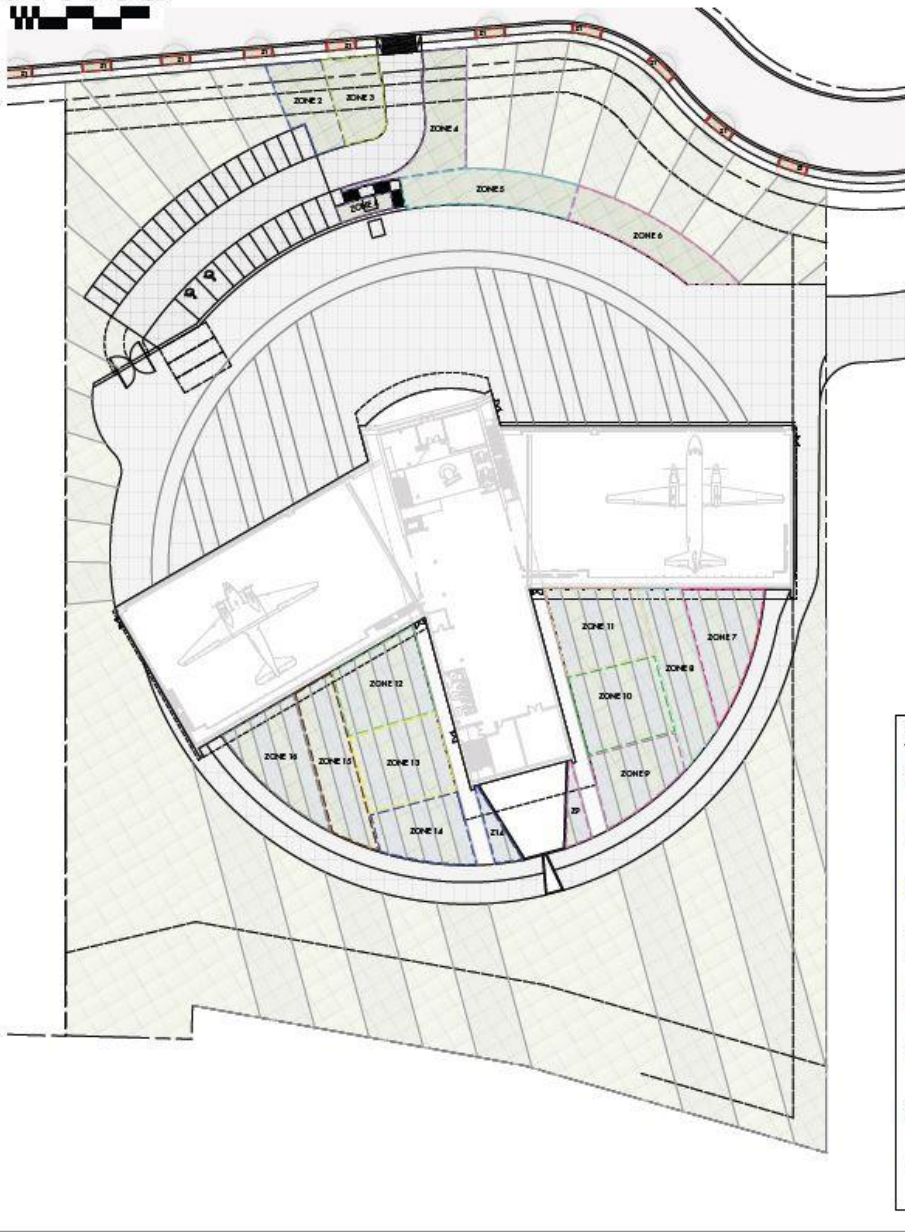
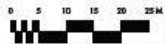


ISSUED FOR

L1/2

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Landscape Concept



WATER CONSERVATION CALCULATIONS

LANDSCAPE MAXIMUM WATER BUDGET (MW) = 12,274 cu.m. / year
ESTIMATED LANDSCAPE WATER USE (LWU) = 1,054 cu.m. / year
WATER BALANCE = 11,220 cu.m. / year
REFER ATTACHED IRRIGATION APPLICATION FOR DETAILED CALCULATIONS

- IRRIGATION NOTES**
1. IRRIGATION PRODUCTS AND INSTALLATION METHODS SHALL MEET OR EXCEED THE REQUIREMENTS OF THE WATER USE REGULATION BYLAW NO. 15693 AND THE SUPPLEMENTARY SPECIFICATIONS IN THE CITY OF KEDAHAWA BYLAW 7900 (PART 8, SCHEDULE 3).
 2. THE IRRIGATION SYSTEM SHALL MEET THE REQUIREMENTS, REGULATIONS, AND BYLAWS OF THE WATER PURVEYOR.
 3. THE IRRIGATION SYSTEM SHALL BE EQUIPPED WITH AN APPROVED BACKFLOW PREVENTION DEVICE, WATER METERS, AND SHUT OFF VALVE LOCATED OUTSIDE THE BUILDING ACCESSIBLE TO THE CITY.
 4. AN APPROVED SMART CONTROLLER SHALL BE INSTALLED. THE IRRIGATION SCHEDULING TIME SHALL UTILIZE A MAXIMUM SET VALUE OF 77° F. MONTH (KEDAHAWA JULY 01), TAKING INTO CONSIDERATION SOIL TYPE, SLOPE, AND MICROCLIMATE.
 5. DRIP LINE AND EMBERS SHALL INCORPORATE TECHNOLOGY TO LIMIT SOFT INJECTION.
 6. IRRIGATION LINES SHALL BE INSTALLED TO ROUTE IRRIGATION LINES UNDER HARD SURFACES AND FEATURES.
 7. IRRIGATION PIPE SHALL BE SIZED TO ALLOW FOR A MAXIMUM FLOW OF 1.5m / SEC.
 8. A FLOW SENSOR AND MASTER VALVE SHALL BE CONNECTED TO THE CONTROLLER AND PROGRAMMED TO STOP FLOW TO THE SYSTEM IN CASE OF AN IRRIGATION WATER LEAK.

IRRIGATION LEGEND			
	ZONE 01: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 80 sq.m. MICROCLIMATE: SOUTHEAST EXPOSURE, FULLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 27 cu.m.		ZONE 09: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 227 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, PARTIALLY SHADED BY BUILDING ESTIMATED ANNUAL WATER USE: 76 cu.m.
	ZONE 02: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 141 sq.m. MICROCLIMATE: SOUTH EXPOSURE, FULL SUN ESTIMATED ANNUAL WATER USE: 47 cu.m.		ZONE 10: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 241 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, PARTIALLY SHADED BY BUILDING ESTIMATED ANNUAL WATER USE: 80 cu.m.
	ZONE 03: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 136 sq.m. MICROCLIMATE: SOUTH EXPOSURE, FULL SUN ESTIMATED ANNUAL WATER USE: 44 cu.m.		ZONE 11: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 234 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, PARTIALLY SHADED BY BUILDING ESTIMATED ANNUAL WATER USE: 79 cu.m.
	ZONE 04: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 226 sq.m. MICROCLIMATE: SOUTH EXPOSURE, FULL SUN ESTIMATED ANNUAL WATER USE: 64 cu.m.		ZONE 12: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 226 sq.m. MICROCLIMATE: WEST EXPOSURE, PARTIALLY SHADED BY BUILDING ESTIMATED ANNUAL WATER USE: 79 cu.m.
	ZONE 05: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 196 sq.m. MICROCLIMATE: SOUTH EXPOSURE, FULL SUN ESTIMATED ANNUAL WATER USE: 64 cu.m.		ZONE 13: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 240 sq.m. MICROCLIMATE: WEST EXPOSURE, PARTIALLY SHADED BY BUILDING ESTIMATED ANNUAL WATER USE: 80 cu.m.
	ZONE 06: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 197 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, FULL SUN ESTIMATED ANNUAL WATER USE: 64 cu.m.		ZONE 14: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 225 sq.m. MICROCLIMATE: WEST EXPOSURE, PARTIALLY SHADED BY BUILDING ESTIMATED ANNUAL WATER USE: 75 cu.m.
	ZONE 07: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 225 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, PARTIALLY SHADED BY BUILDING ESTIMATED ANNUAL WATER USE: 74 cu.m.		
	ZONE 08: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 225 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, PARTIALLY SHADED BY BUILDING ESTIMATED ANNUAL WATER USE: 75 cu.m.		

Landscape - Water Conservation Plan



Architecture - Materials

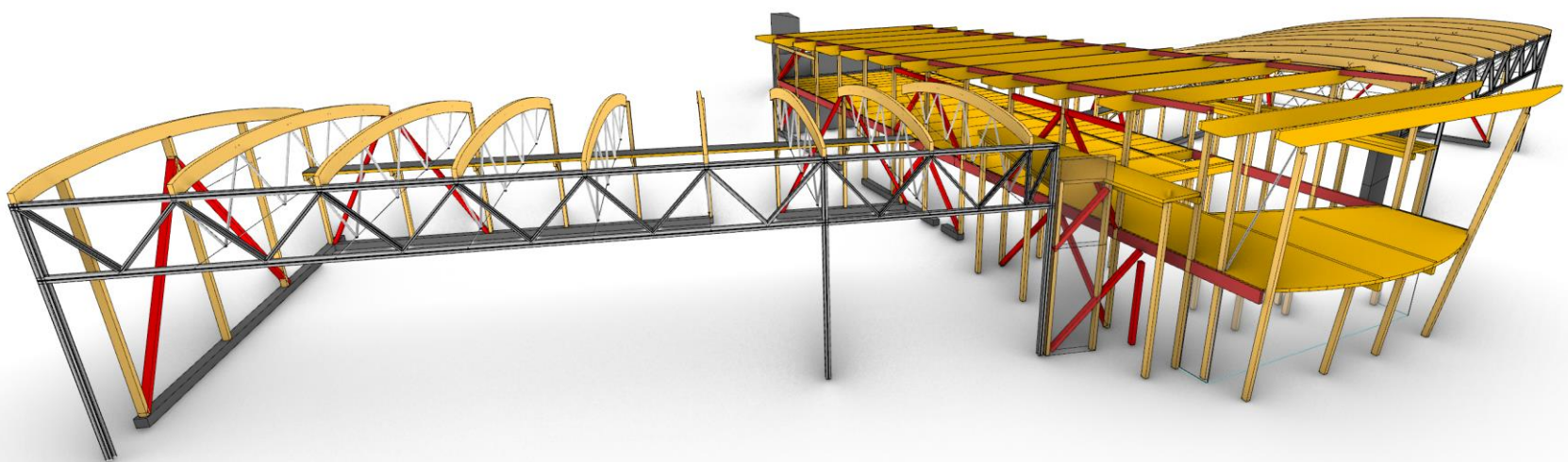


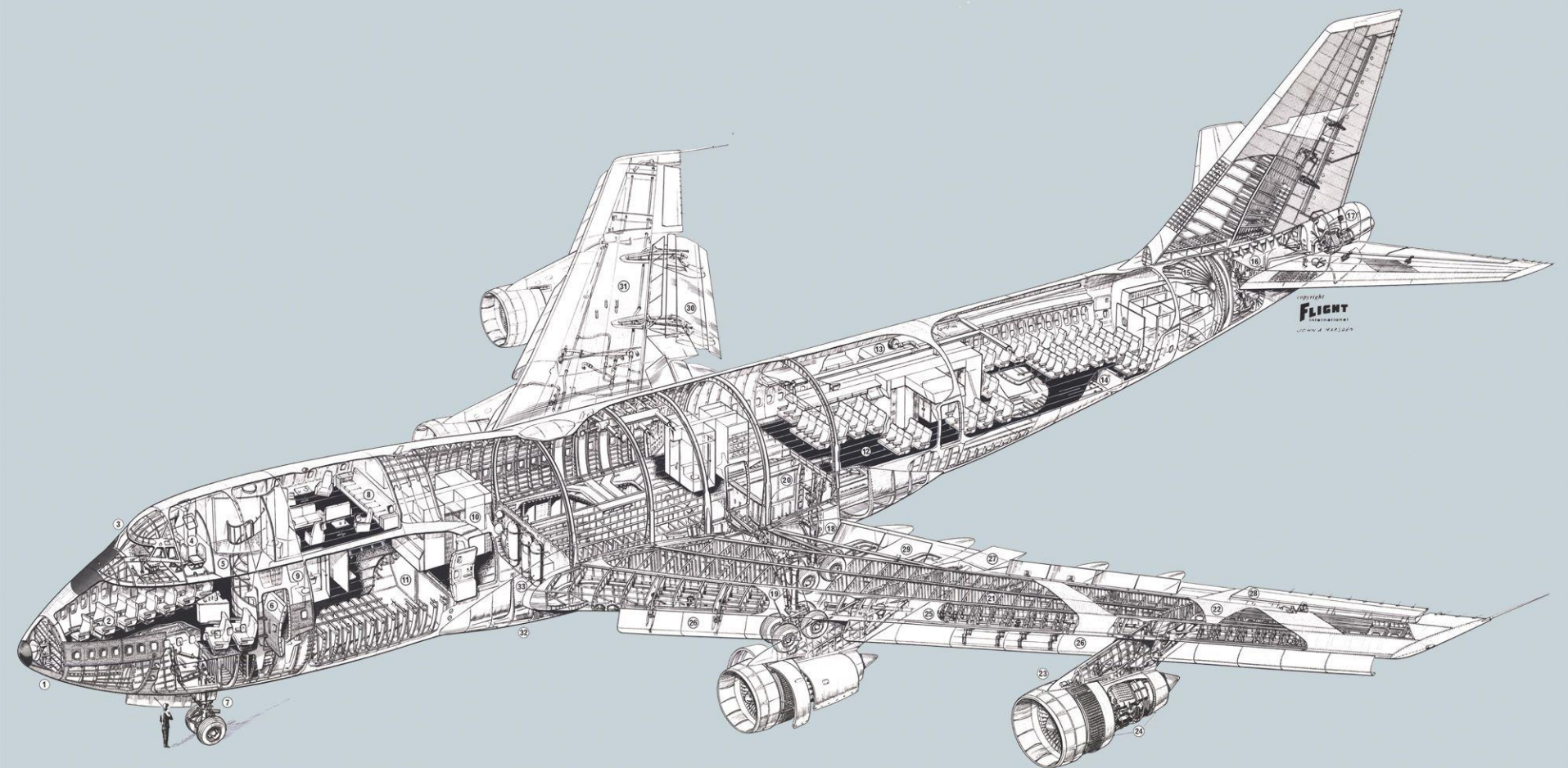
Architecture - Image

KF AEROSPACE – CENTER FOR EXCELLENCE

Roof Structure Update
(GC Wood Program)







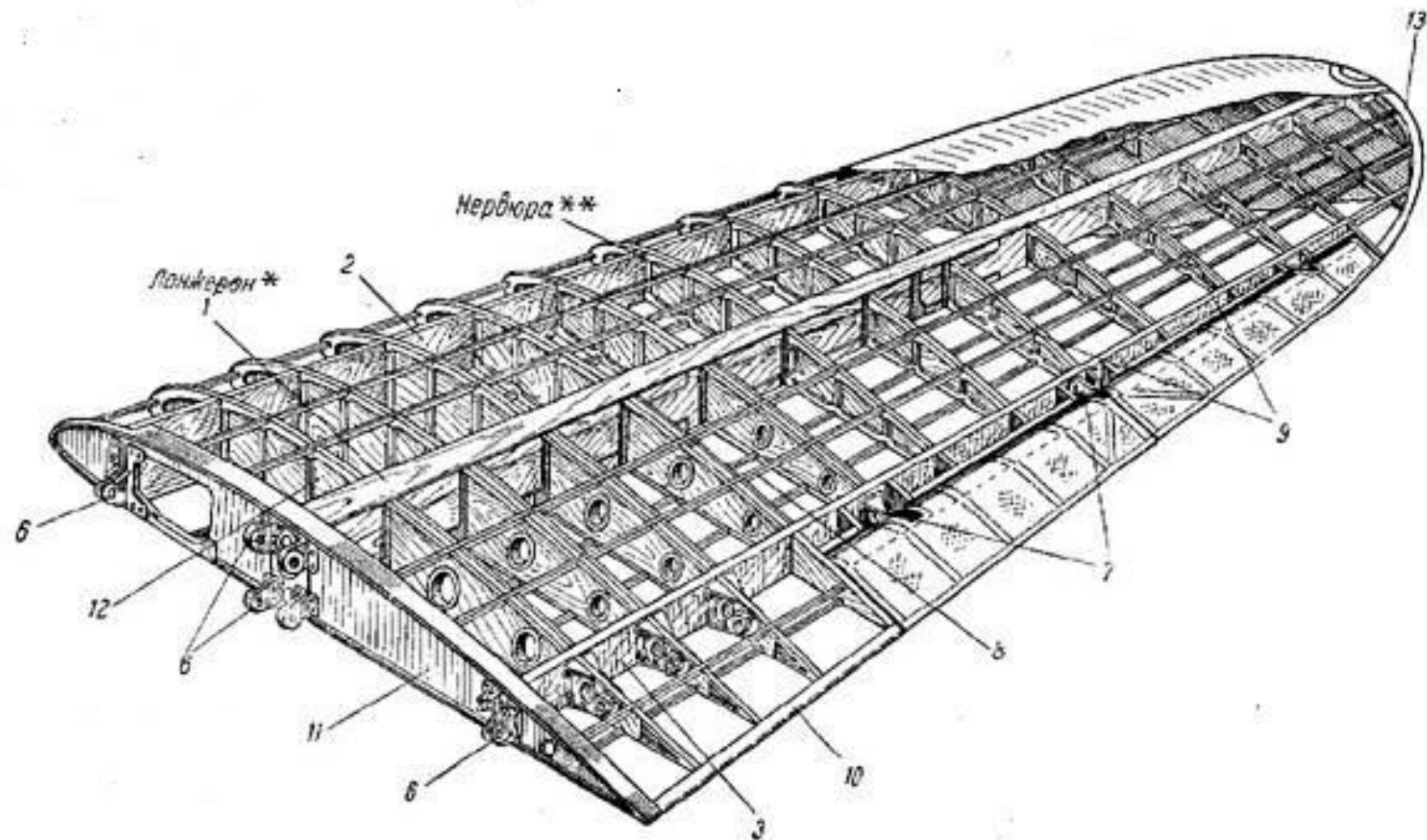
- 1 Split axis dual weather radar scanner and wave-guide (glassfibre honeycomb radome)
- 2 First-class cabin
- 3 Cockpit windscreen panels (curved glass/acrylic laminates)
- 4 Five-position crew flightdeck
- 5 Staircase to flightdeck and upper-deck lounge
- 6 Passenger entry door, 42in x 76in (plug-type)
- 7 Nose undercarriage hydraulically retracted (forward)

- 8 Upper-deck first-class lounge (eight seats for take-off and landing)
- 9 Toilets
- 10 Galley units
- 11 Forward belly hold (2,800ft³)
- 12 Rear belly hold (2,450ft³)
- 13 Life-raft stowage and escape rope
- 14 Aft belly hold (bulk load 1,000ft³)
- 15 Pressure dome (rear)
- 16 Tailplane centre-section (hinged to fuselage frame on rear face)

- 17 Garrett APU
- 18 Body main undercarriage, hydraulically retracted (forwards) with bogie steering (not on first prototype)
- 19 Wing main undercarriage hydraulically retracted (inwards with large angular rotation of bogie on screw hinge). Oleo-pneumatic suspension interlinked with body main undercarriage on same side
- 20 Body undercarriage bay (unpressurised)
- 21 Four-spar wing

- 22 Four panel skins (top and bottom)
- 23 Pratt & Whitney JT9D-3 high by-pass two-spool turbofan
- 24 Reverser cowlings
- 25 Leading-edge fixed upper structure (glassfibre honeycomb skin with light alloy support ribs and light-alloy box leading edge)
- 26 Leading-edge flap
- 27 Inner aileron
- 28 Outer aileron
- 29 Spoilers

- 30 Triple-slotted trailing-edge flaps
- 31 Fuel tank contents probes
- 32 Air conditioning packs behind wing-to-body fairing
- 33 Water tanks

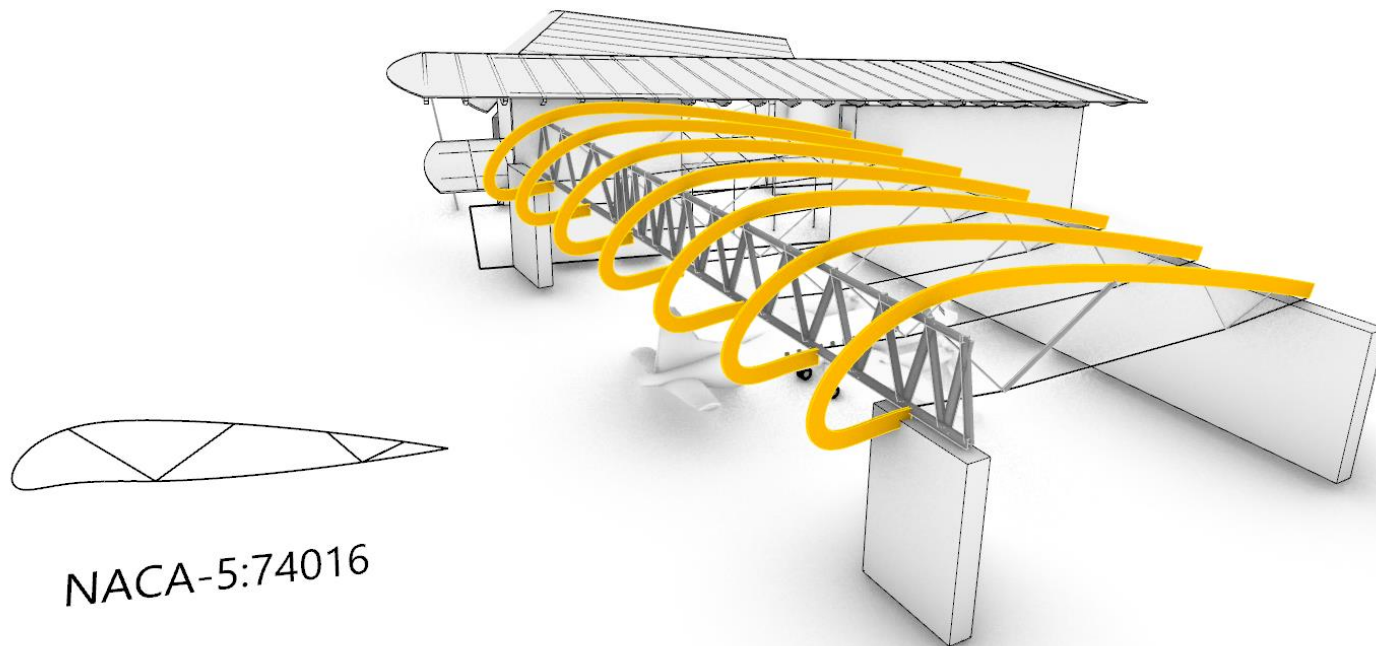


FRONT SPAR TRUSS

RIB TRUSSES



Wing structure topology





Thank You!

NOTES:

1. OCCUPANT LOADS NOTED ABOVE ARE FOR EXIT WIDTH CALCULATIONS ONLY.
2. BUILDING OCCUPANT LOAD TO BE POSTED AT 400 PERSONS MAXIMUM FOR DAILY OPERATIONS.
WASH ROOM COUNT TO BE BASED ON THE POSTED OCCUPANT LOAD.
3. DETAILED OCCUPANT LOADS AND EXITING CALCULATIONS TO BE ADDRESSED IN G-8. CODE REPORT.

	(m)	(mm)	(m)	(mm)
LEVEL 1				
HUB-1			13.875	1.288
HANGAR-1	18,100	1,496		
HANGAR-2	18,100	1,496		
LEVEL 2				
HUB-2			11,820	1,107
TOTAL	32,200	2,991	25,795	2,395

FIRE PROTECTION:		3.2.4 / 3.2.5 / 3.2.6
LOCATION OF HYDRANT TO BARBERS CONNECTION	40 m MAX	3.2.6.5.
STANDPIPEPRESSURE	YES (IN EACH STAIR SHAFT)	3.2.6.6
SPRINKLERS	YES	
FIRE ALARM SYSTEM	YES	3.2.4.1 (xxx)
EXIT LIGHTS	YES	
EMERGENCY LIGHTING	YES	

BUILDING FIRE SAFETY		
SMFRT PROTECTION	N/A (SPRINKLERED)	3.3.3.16.
FLAME SPREAD RATINGS	COMPLY WITH	3.3.15.2
METAL JOINT ASSEMBLIES	N/A	3.3.16.2
ROOF COVERING CLASSIFICATION	CLASS "A"	3.3.16.2
ATTIC FIRESTOPPERS	N/A	3.3.11.
MAX. ATTIC AREA	N/A	3.3.11.5.
MAX. CRAWLSPACE AREA	N/A	3.3.11.6.
CONCEALED FLOOR AREA	N/A	3.3.11.6.

ACCESSIBILITY REQUIREMENTS		3.8
	REQUIRED	PROVIDED
ACCESS TO MAIN ENTRANCES	YES	YES
ACCESS TO ALL FLOORS	YES	YES
ACCESS TO ALL PROGRAMS		YES

SPATIAL SEPARATION:		3.2.3.1.E
	EASTWEST WALL	NORTHSOUTH WALL
WALL AREA	Window openings & wall construction as specified	± 402mm max
OPENING AREA	as specified	0
% PROVIDED	Limiting distance exceeds 10.0m or building faces a street in accordance with 3.2.3.1.5 (2)	0%
LIMITING DISTANCE		± 5.0m MIN.
% PERMITTED		22%
CONSTRUCTION TYPE		CONCRETE MASONRY
CLADDING MATERIAL		NON-COMBUSTIBLE
REGULATORY NOTES:		See 3.2.3.1.5 (2), (3) & (4)

PARKING REQUIREMENTS:	0.5 spaces per 100sf GFA (min 2 spaces)		
	2.5 spaces per 100sf GFA (accessory activities)		
	AREA (sqft)	MIN. REQUIRED	No of stalls
HANGARS - 1,2	2,891	2,891 / 100 x 0.5 SPACE	15
LEVEL 1 HUB	1,289	1,289 / 100 x 0.5 SPACE	7
LEVEL 2 HUB	1,107	1,107 / 100 x 0.5 SPACE	6
		REQUIRED (MIN.)	28
		PROVIDED	30

LOADING CALCULATIONS			
LOADING SIZE	WIDTH	AREA	
	3.5m	20.5m ²	
LOADING REQUIREMENTS:	1 per 1,800 m ² OPA		
		AREA (m ²)	no of CRP
	(LIVE) - 1 & 3 AREA)	0.811	0.811 / 1.800
			2.8
		REQUIRED	3.1
		PROVIDED	3.2



No.	Date	Revision
1	2020-09-10	DP-SI/00155030



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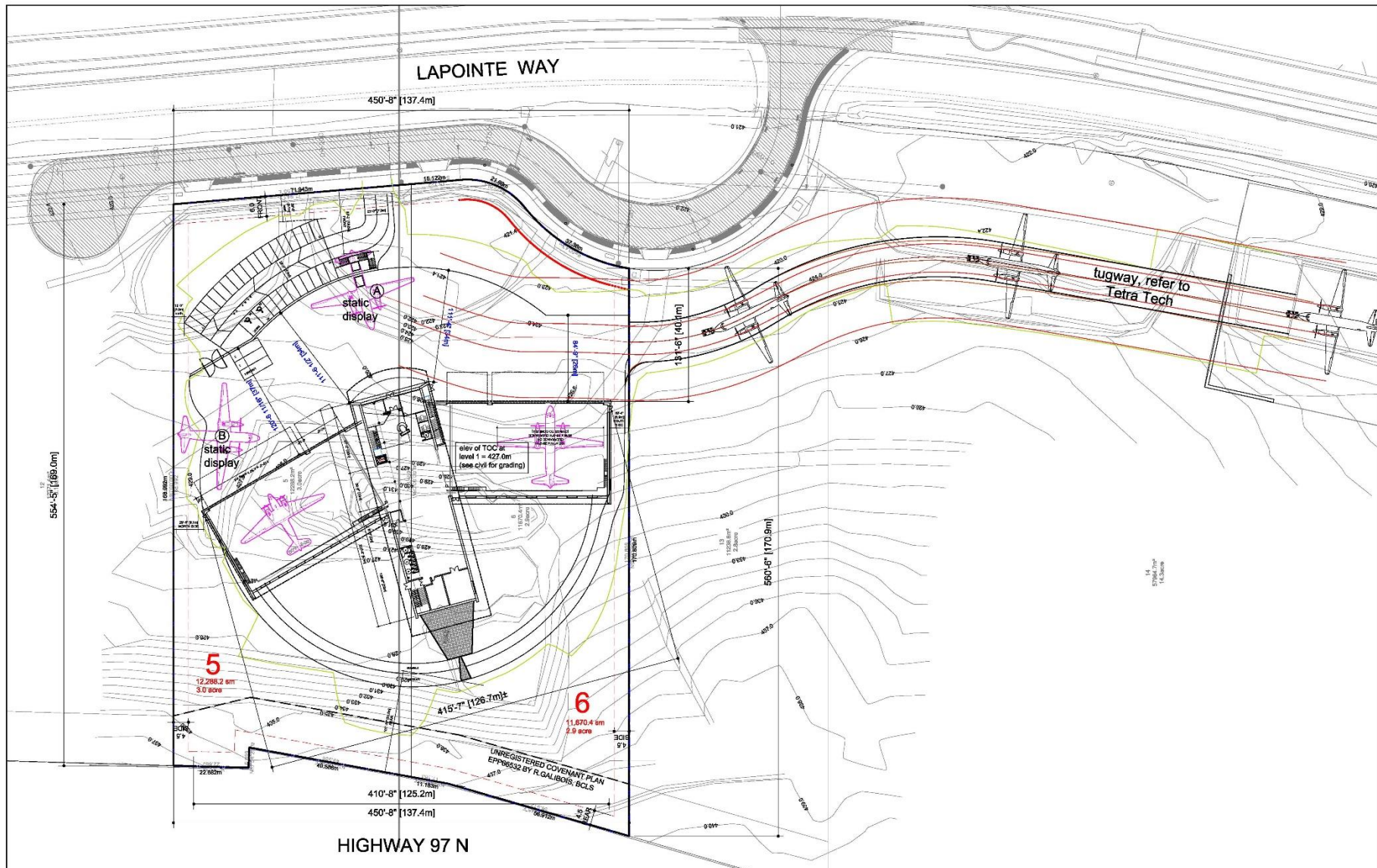
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Drawing Number

A1.01

DRAWINGS ARE NOT TO BE SCALED.
ALL DIMENSIONS SHALL BE VERIFIED ON JOB



2020-09-10
DP

No.	Date	Revision
1	2020-09-10	DP 10/10/2020



Project Title
KF Aerospace
Centre for Excellence



Consultant Seal

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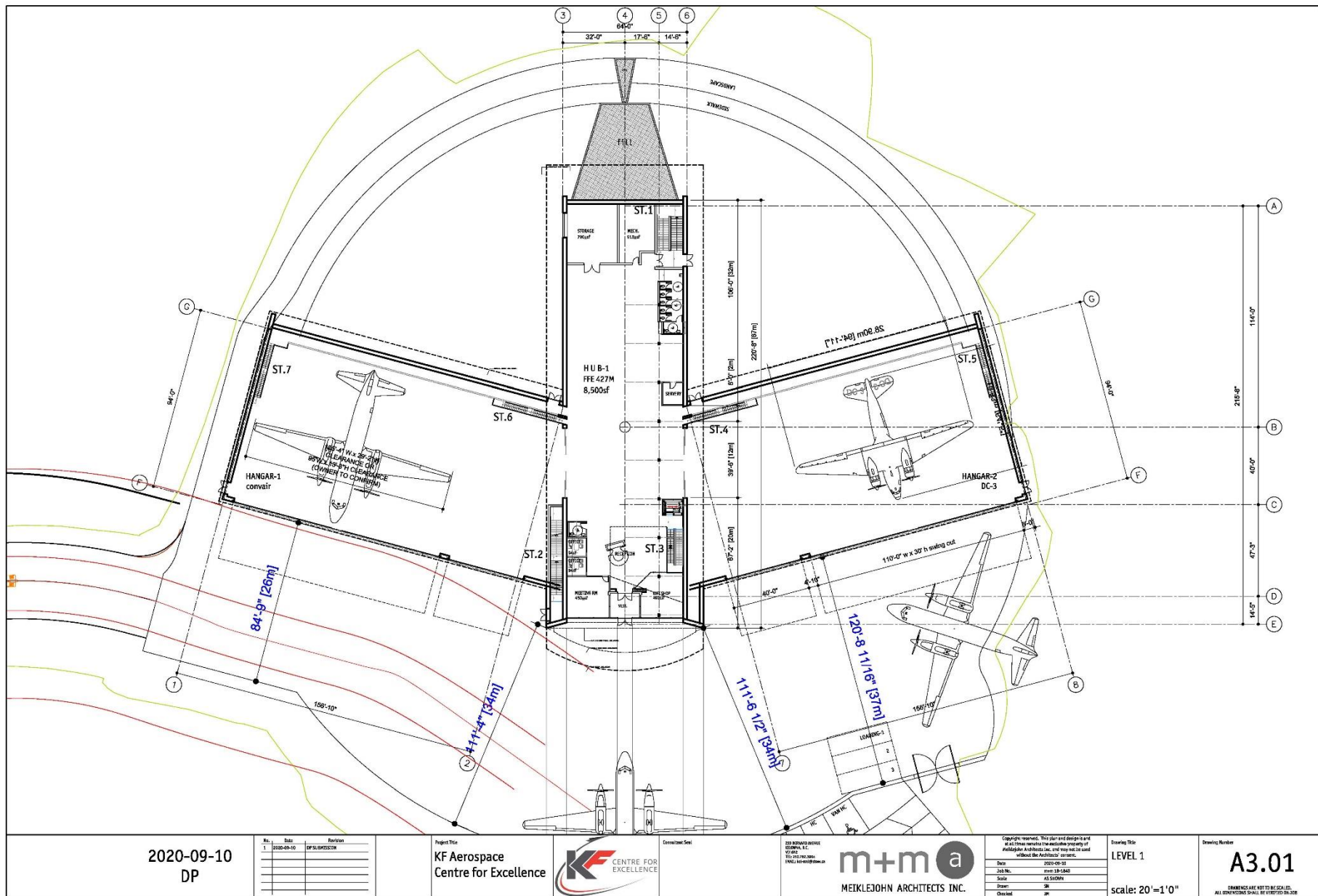
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Drawn	10/10/2020
Scale	AS SHOWN
Drawn	SM
Checked	JM

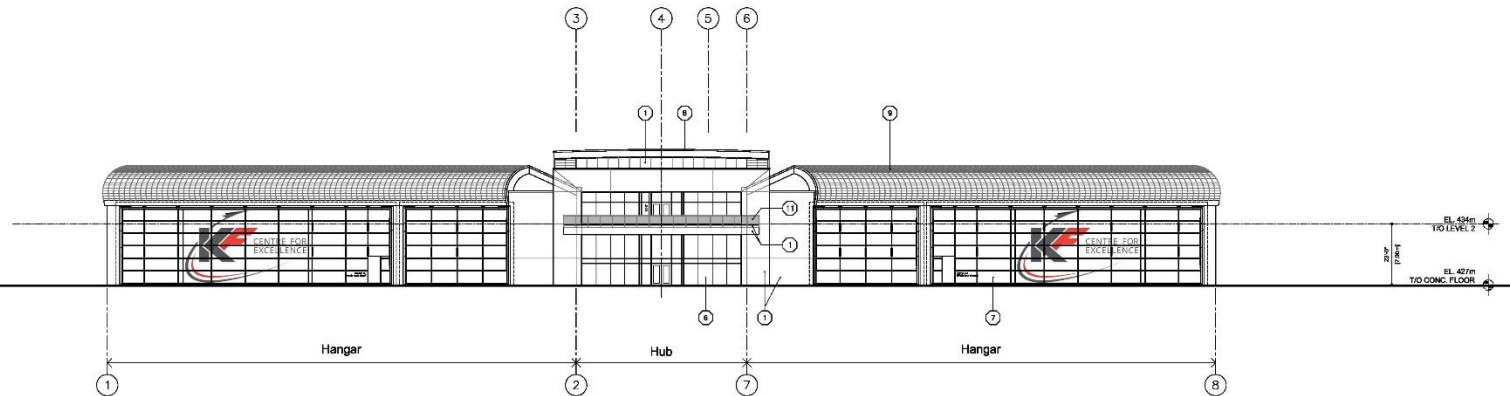
Drawing Title
SITE PLAN
scale: 40' = 1"0"

Drawing Number
A2.01
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ALL DIMENSIONS SHALL BE TO THE CENTER OF THE LINE.



ELEVATION KEY NOTE:
ALL COLOURS TO BE CHOSEN BY ARCHITECT FROM APPROVED PRODUCT MANUF'S STANDARD LINE OF COLOURS.

①	PREFIN METAL CLADDING PANELS
②	PREFIN HORIZ CORRUGATED METAL CLADDING
③	PREFIN METAL LOUVERED GRILLES (SEE MECH)
④	EXPOSED BOARD FORMED CONCRETE FINISH
⑤	ALUM WINDOW: CLEAR ANODISED
⑥	ALUM CURTAIN WALL: CLEAR ANODISED
⑦	ALUM GLASS OVERHEAD DOOR
⑧	PREFIN SHEET METAL FLASHING
⑨	PREFIN HEAVY GAUGE METAL ROOF CLADDING C/W STANDING SEAM JOINTS
⑩	FINISHED GRADE (SEE CIVIL)
⑪	GLASS GUARDRAIL



2020-09-10
DP

No.	Date	Revision
1	2020-09-10	DP SUBMISSION

Project Title
**KF Aerospace
Centre for Excellence**



External East

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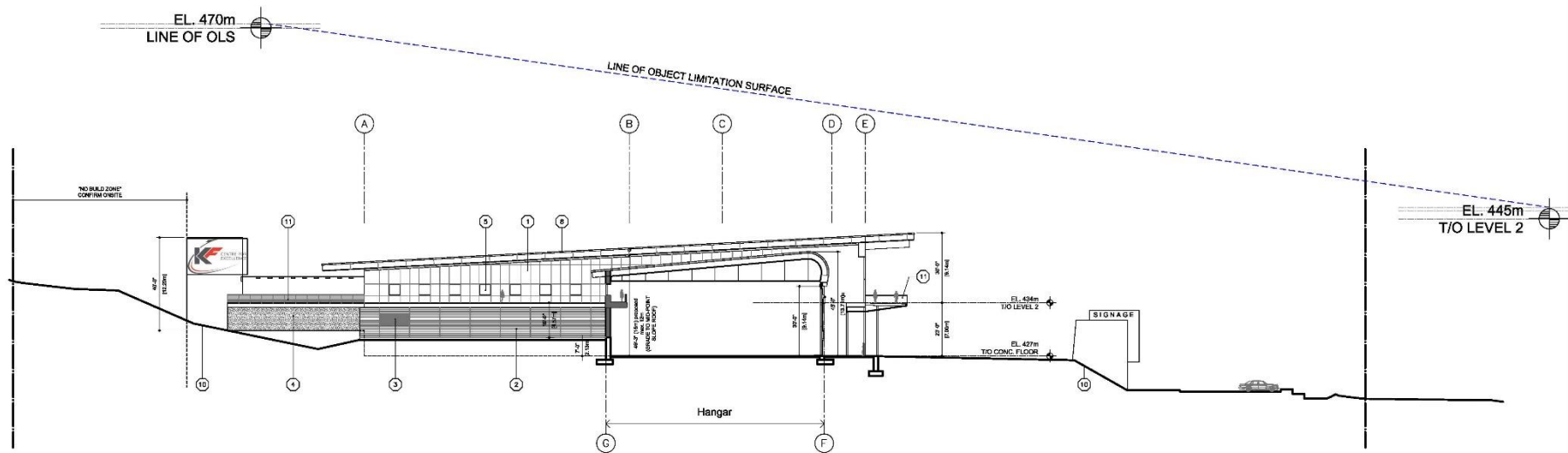
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Date:	2020-09-10
Job No.:	100-18-040
Scale:	AS SHOWN
Drawn:	SM
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Drawing Title
**FRONT ENTRY
ELEVATION**
scale: 20' = 1'0"

Drawing Number
A4.01
DRAWINGS ARE NOT TO BE SCALED.
ALL DIMENSIONS SHALL BE FURNISHED BY THE

NOTE:
SEE A4.01 FOR ELEVATION
KEY NOTE LEGEND



2020-09-10
DP

No.	Date	Revision
1	2020-09-10	DP SUBMISSION

Project Title
KF Aerospace
Centre for Excellence



Construction Set

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FOR CONSTRUCTION

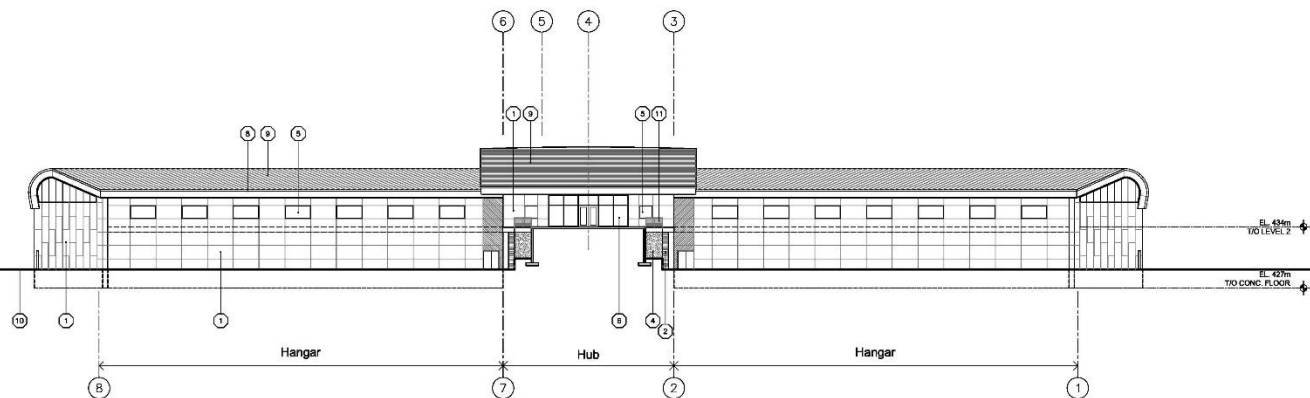
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Drawn: SM
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Drawing Title
SIDE SECTIONAL
ELEVATION
scale: 20' = 1'0"

Drawing Number
A4.02
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ALL DIMENSIONS SHALL BE FORTIFIED THEREON

NOTE:
SEE A4.01 FOR ELEVATION
KEY NOTE LEGEND



2020-09-10
DP

No.	Date	Revision
1	2020-09-10	DP SUBMISSION

Project Title
**KF Aerospace
Centre for Excellence**



External East

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Date:	2020-09-10
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Drawn:	SM
Checked:	JM

Elevation Title
**REAR PATIO
ELEVATION**
scale: 20' = 1' 0"

Drawing Number
A4.03
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