

LOCAL FLYING ORDERS – ABBOTSFORD

AIRPORT OPERATING AGREEMENT

1. Gliding operations will be conducted IAW the Licence Agreement between City of Abbotsford and Regional Cadet Air Operations, and these Local Flying Orders.

AERODROME DESCRIPTION

2. The general airfield layout is as depicted in Figure 1 below. Note that this pictorial is provided for information only and does not replace or supersede information provided in the current Canada Flight Supplement.

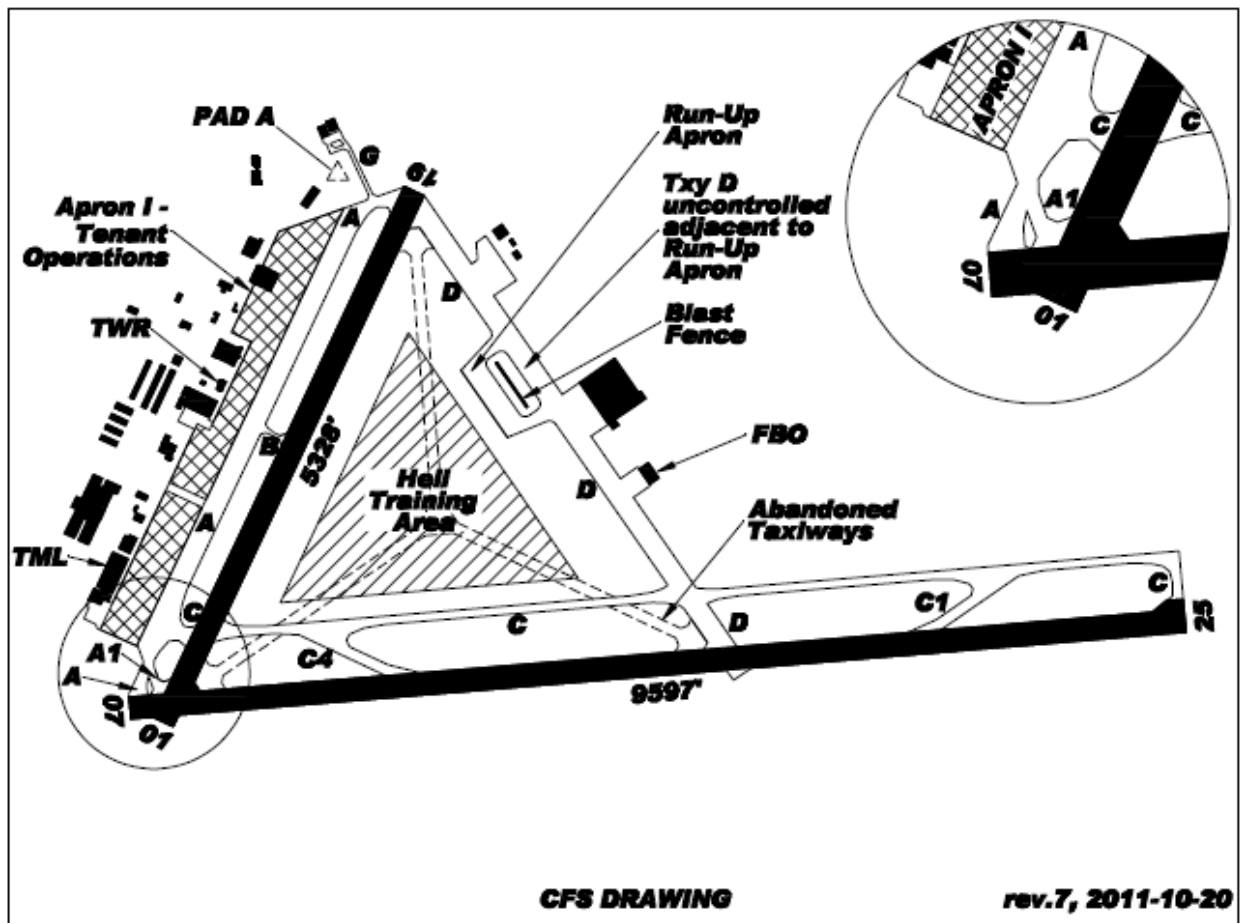


Figure 1 - General Airfield Layout

LOCAL FLYING ORDERS - PITT MEADOWS

AERODROME DESCRIPTION

1. **General.** The airport consists of two parallel and one crossing runway, seven taxiways and four aprons; a designated water aerodrome on the Fraser River adjacent and parallel to Runway 08R / 26L. The airport is the home for Skydive the City Ltd and a driver training track located on Apron IV. The parachute landing area is normally located in the grass east of Runway 18 and south of the approach to Runway 26R.
2. The airfield elevation is 11 feet ASL.
3. **Airfield Layout.** The general airfield layout is as depicted in Figure 1 below. Note that this pictorial is provided for information only and does not replace or supersede information provided in the Canada Flight Supplement.

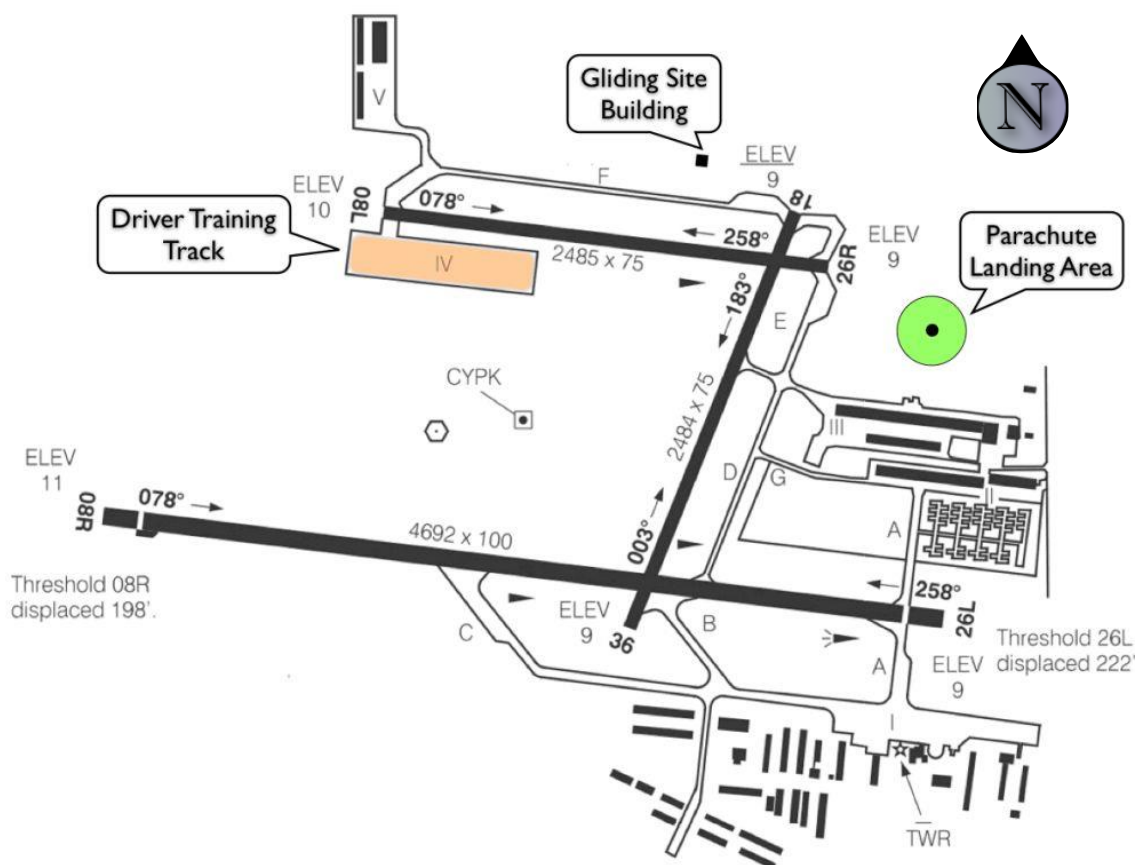


Figure 1 - Aerodrome Layout

4. **Aerodrome / Area Hazards.** Pilots shall be aware of the following hazards on the aerodrome and in the local flying area:

- a. HAZARD 1; Chain link fence, berm and roadway to driving complex aligned north/south 230 feet west of the threshold of Runway 08L;
- b. HAZARD 2; A berm aligned north/south about 100 feet north of the mid-point of taxiway F;
- c. HAZARD 3; A drainage ditch on the west side of the road from the north adjoining taxiway F, and extending westward for approximately 500 feet, parallel to and 30 feet north of taxiway F;
- d. HAZARD 4; A windsock located 400 feet south west of the Runway 18/36 R intersection; and
- e. HAZARD 5; Parachute landing area on the grass located south the approach to Runway 26R and west of Runway 18.



Figure 2 - Hazard Locations

GROUND OPERATIONS

5. **LCO Site Location.** For Runway 08L, the LCO table is to be set up within the Personnel and Equipment Zone (PEZ) in line with the numbers. For Runway 26R, the LCO table is to be set up within the PEZ approximately 200 feet west of Runway 18.
6. **Control of Personnel.** Ground crews and visiting cadets are to be well supervised at all times. Personnel are to remain clear of the landing and take-off areas unless given specific instructions by the LCO. The LCO shall exercise positive control over all ground crew movements for the purpose of glider launches, glider recoveries, or rope retrievals. Normal Gliding operations shall only take place when a NOTAM has been issued closing Runway 08L/26R.
7. **Vehicle Movements.** Vehicle movements on the airfield shall be restricted to necessary operational and emergency response vehicles. Airport vehicle ground operations is controlled by NAVCANADA and authorized by the Airport Authority. The glider operations vehicle will normally only operate on areas directly involved in glider operations.

AIR TRAFFIC CONTROL

8. **General.** The NAVCANADA controllers at Pitt Meadows Control Tower exercise control of all air and ground traffic at the airport. All personnel involved with ground and air operations shall comply with instructions issued by the Control Tower. Radio communications between ATC, LCO, tow planes and gliders shall be maintained both in the air and on the ground.
9. **Communications.** VHF frequencies at Pitt Meadows are:
 - a. TWR AIR FREQ. 126.3 (MF when tower closed);
 - b. GND FREQ. 123.8;
 - c. TML FREQ. 125.2 (Vancouver Terminal); and
 - d. ATIS. 125.0
10. **Local Procedures.** Only one escort person is permitted with the cadets. All other escort/drivers shall remain at the site building and 200 feet clear of taxi foxtrot. The sani-station is located at the site building and ***clearance to cross taxi foxtrot is required from both the LCO and ATC for every crossing.***

AIRFIELD OPERATING AREAS

11. **Runway 08L/26R:** Gliding operations shall take place on Runway 08L/26R as depicted in Figure 3. Take-offs and landings for both tow aircraft and gliders occur on the runway. LCO's and ground crews should conduct operations in a manner that ensures the runway is normally available for glider landings and care shall be taken to avoid situations where both gliders are landing simultaneously. Glider pilots shall ensure they do not stop within and block the intersection with runway 18/36.



Figure 3 – Operating Areas and Landing Lanes

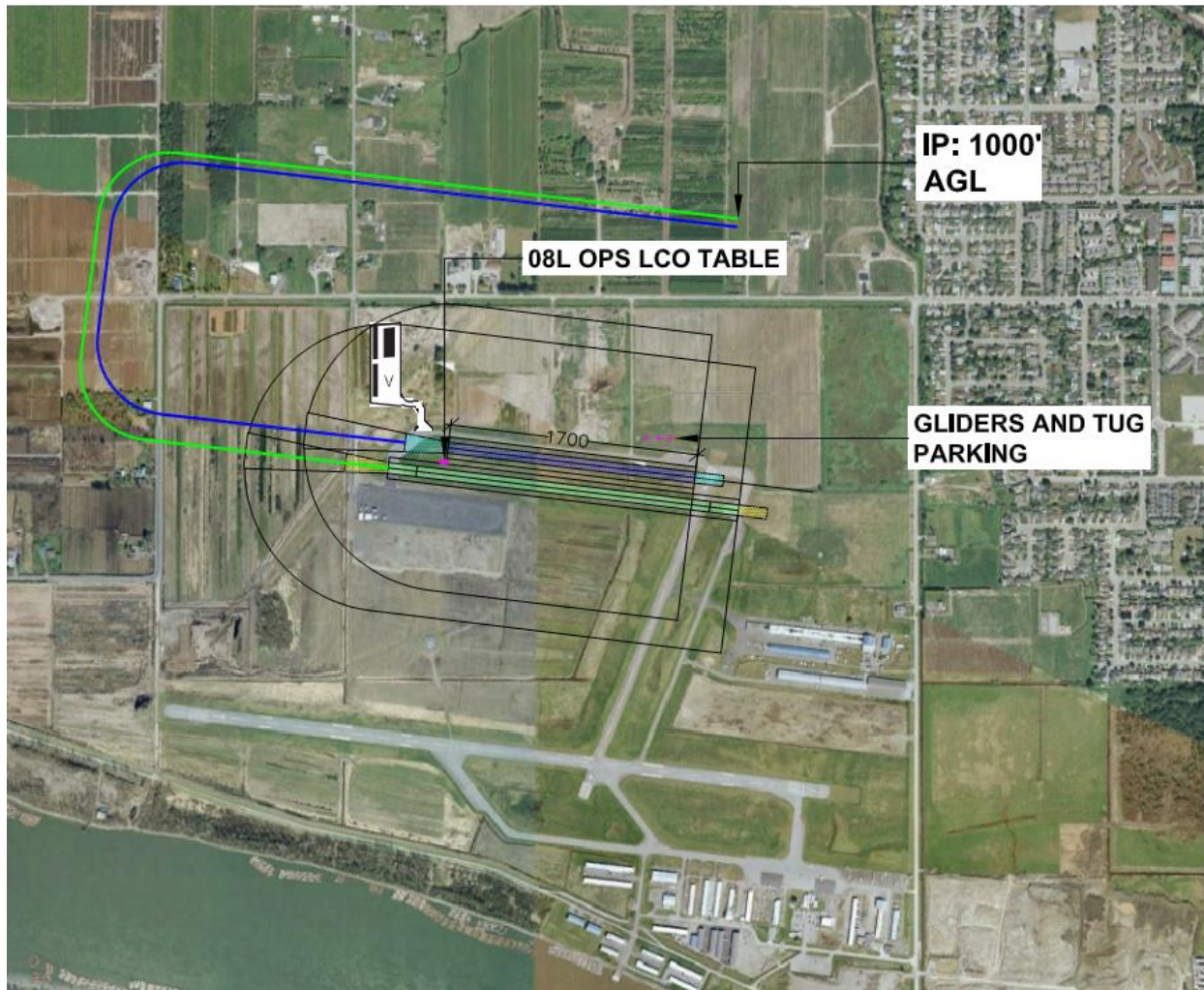
12. **Personnel and Equipment Zone (PEZ):** A 15' deep PEZ parallel to the runway is situated between 60' and 75' from the north edge of the runway. All personnel and equipment shall remain within the PEZ unless otherwise directed or authorized by the LCO. *A glider parked in the PEZ penetrates into the alternate landing lane lateral obstacle clearance area.* When a glider is required to land on the alternate with a glider parked in the PEZ, operations from the runway shall cease and the parked glider shall be moved closer to the runway and clear of the alternate landing lane lateral obstacle clearance area.

13. **First Alternate:** The first alternate glider landing lane is on the grass centered 75' from the south edge of taxiway Foxtrot (Figures 4 & 7). The grass alternate is not well maintained, has poor drainage properties, and tends to become soft and muddy following heavy or extended precipitation, therefore, routine planned use of the alternate is not permitted.

14. **Secondary Alternate – Runway 18:** Runway 18 is available as an alternate when winds are within limits (Figures 5 & 8). Entry to the Runway 18 circuit from either of the 08L or 26R circuits is unconventional, but permits the glider to be established on a downwind leg prior to turning onto base leg. From base leg to landing, the circuit is conventional.

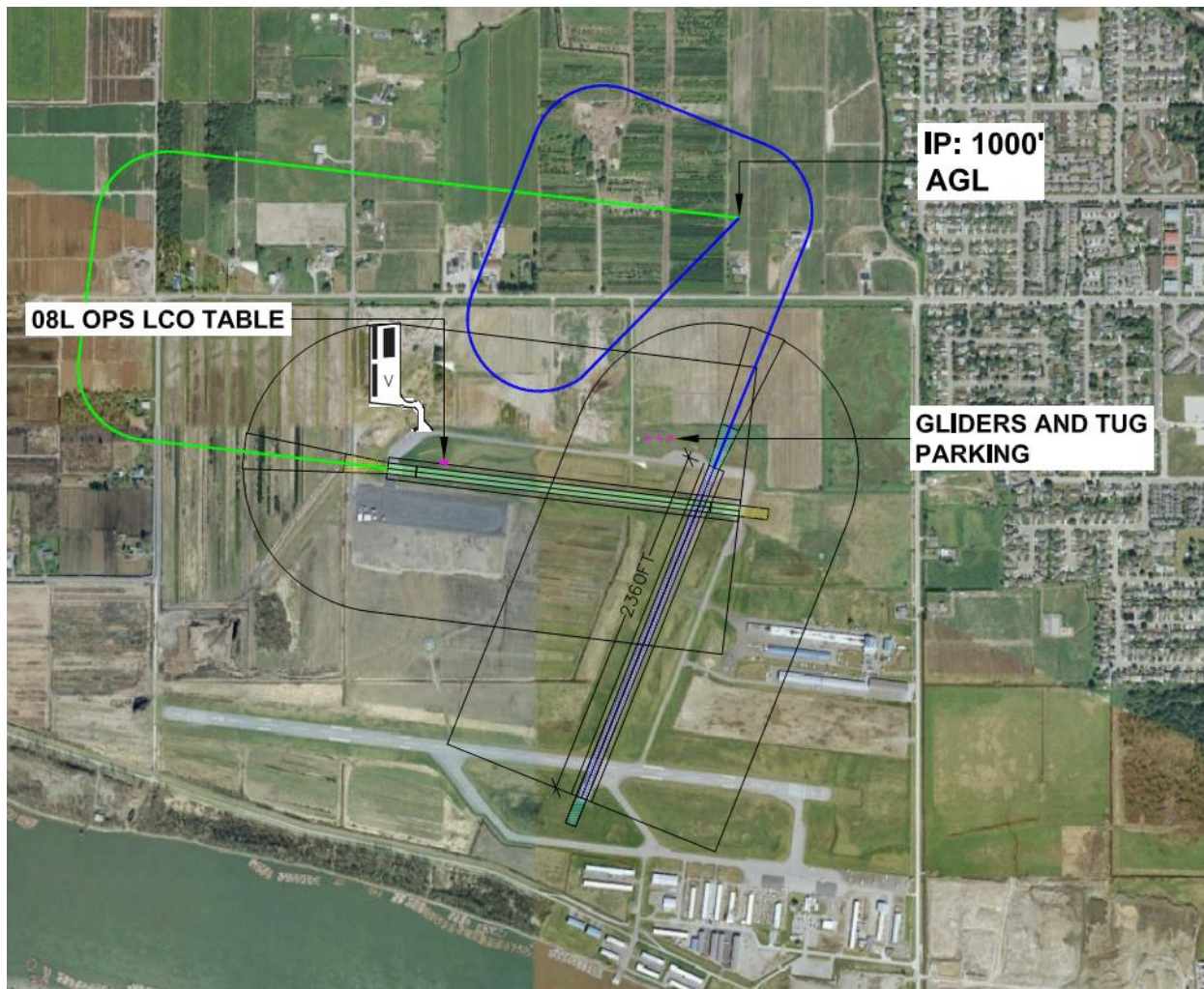
15. **Tertiary Alternate – Runway 08R/26L:** The Runway is located approximately 1800 feet south of 08L/26R and requires a long, angled base leg to intercept a normal final approach (Figures 6 & 9). Use for glider landings will have an operational impact on the airport, leaving other airport users without a landing surface until the glider has been cleared from the runway. Using 08R/26L as an alternate requires the glider pilot to commence their circuit to the alternate from approximately IP, therefore, it should only be used in an emergency or when conditions render the grass alternate and Rwy 18 unsuitable. If use of 08R/26L is planned as the main alternate, the Site Commander shall advise ATC prior to commencing operations. During these operations the LCO must be vigilant and ensure the runway is clear of aircraft and equipment before the airborne glider reaches the circuit IP.

16. Routinely landing on the runways as alternates is NOT AUTHORIZED, and if necessary constitutes a reportable flight safety occurrence.



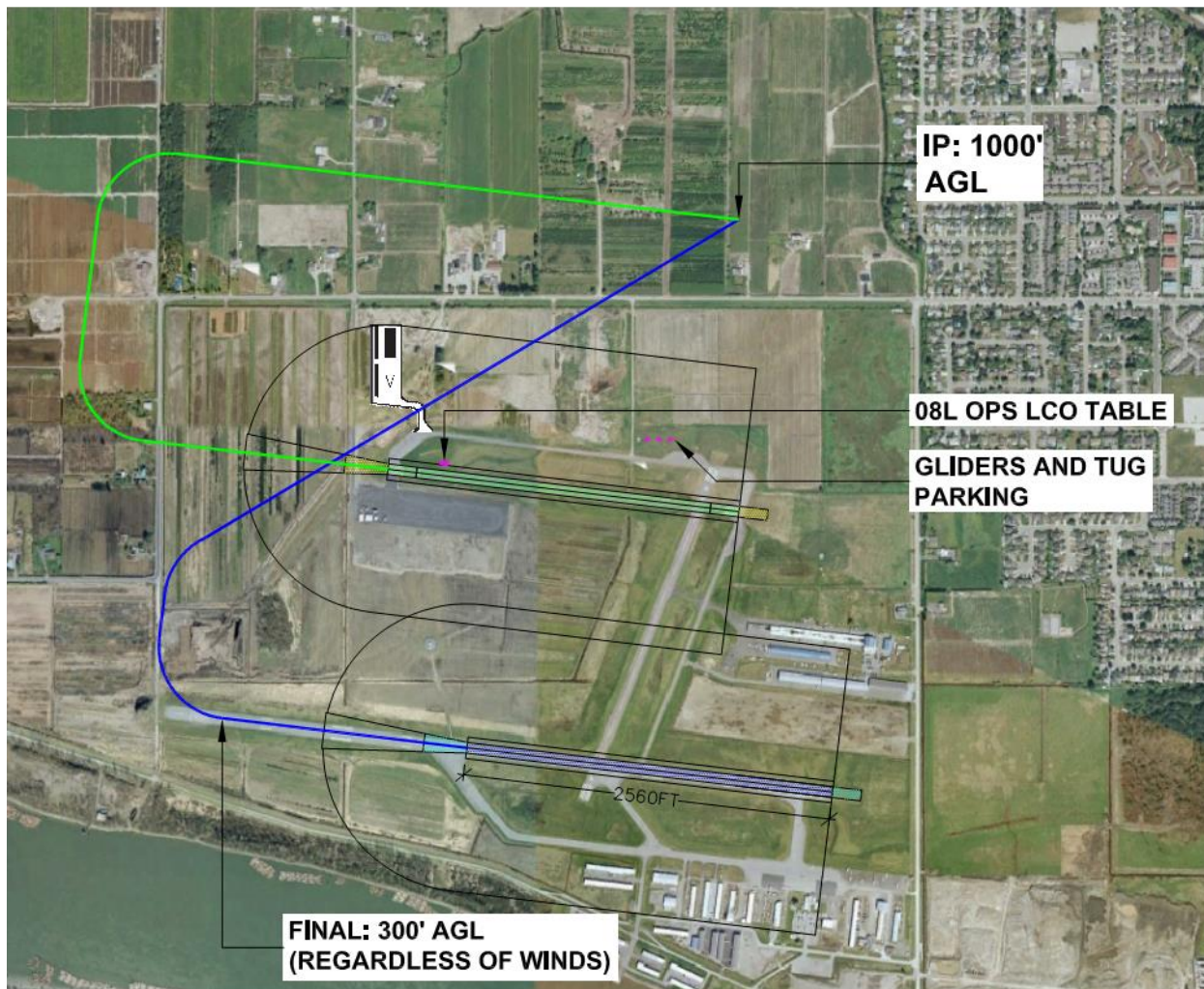
LEGEND	
	Primary Landing Lane
	Alternate Landing Lane
	Planned Touchdown Area
	Primary Lane – Under / Over Run
	Alternate Lane – Under / Over Run
	Significant Obstacle

Figure 4 – Runway 08L Ops and First Alternate



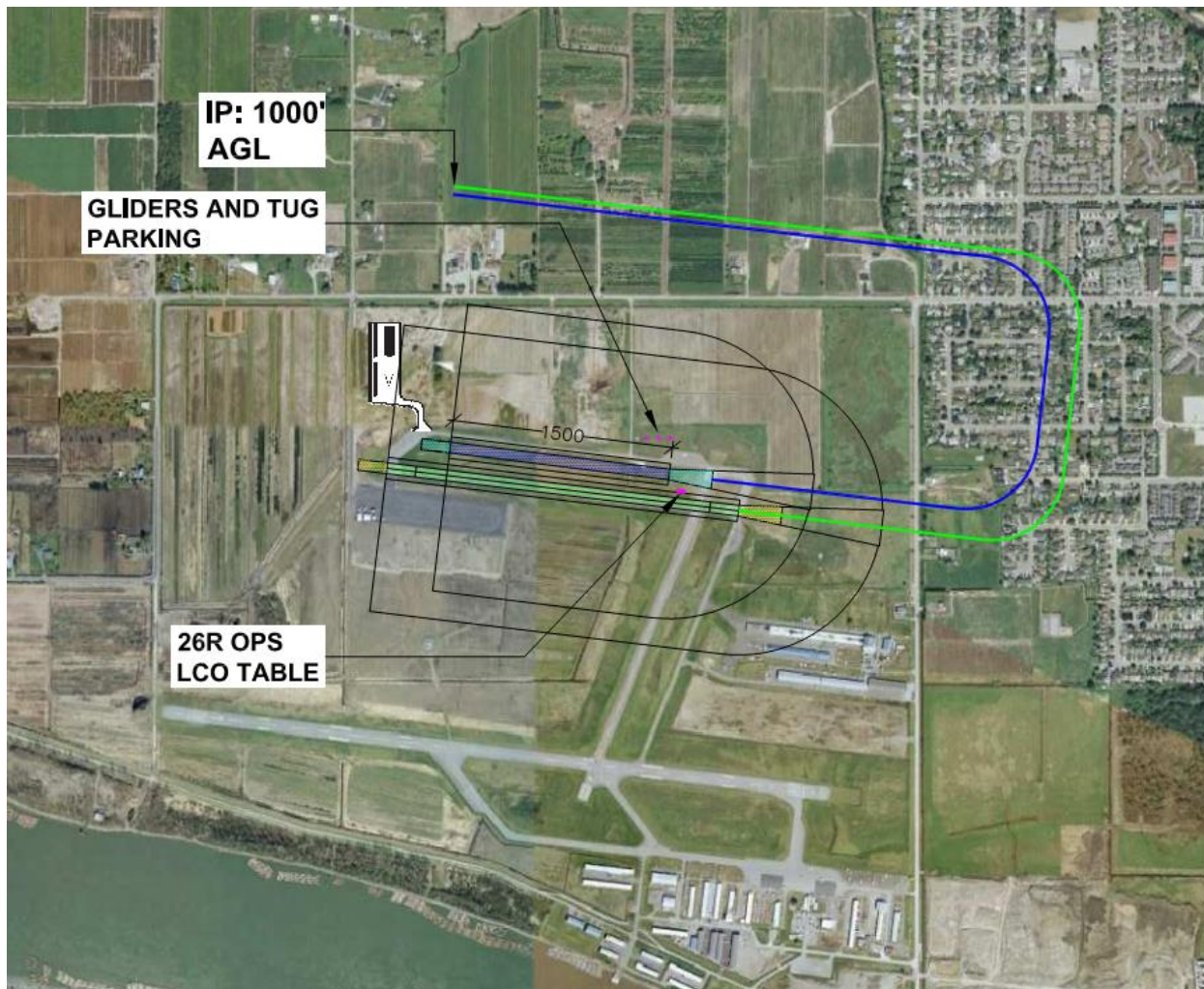
LEGEND	
	Primary Landing Lane
	Alternate Landing Lane
	Planned Touchdown Area
	Primary Lane - Under / Over Run
	Alternate Lane - Under / Over Run
	Significant Obstacle

Figure 5 – Runway 08L Ops and Second Alternate - Runway 18



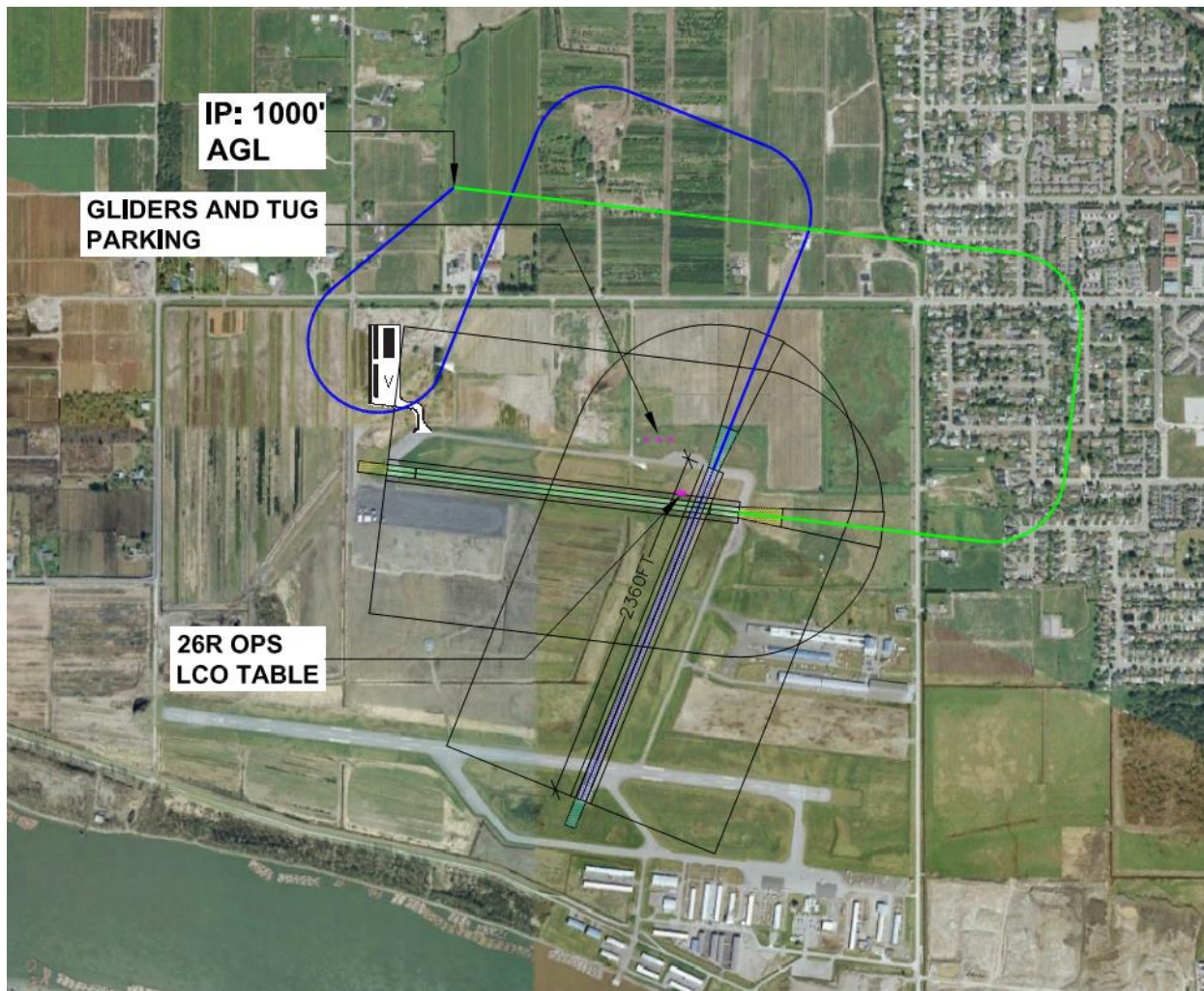
LEGEND	
	Primary Landing Lane
	Alternate Landing Lane
	Planned Touchdown Area
	Primary Lane - Under / Over Run
	Alternate Lane - Under / Over Run
	Significant Obstacle

Figure 6 – Runway 08L Ops and Tertiary Alternate - Runway 08R



LEGEND	
	Primary Landing Lane
	Alternate Landing Lane
	Planned Touchdown Area
	Primary Lane – Under / Over Run
	Alternate Lane – Under / Over Run
	Significant Obstacle

Figure 7 – Runway 26R Ops and First Alternate



LEGEND	
	Primary Landing Lane
	Alternate Landing Lane
	Planned Touchdown Area
	Primary Lane - Under / Over Run
	Alternate Lane - Under / Over Run
	Significant Obstacle

Figure 8 – Runway 26R Ops and Second Alternate - Runway18



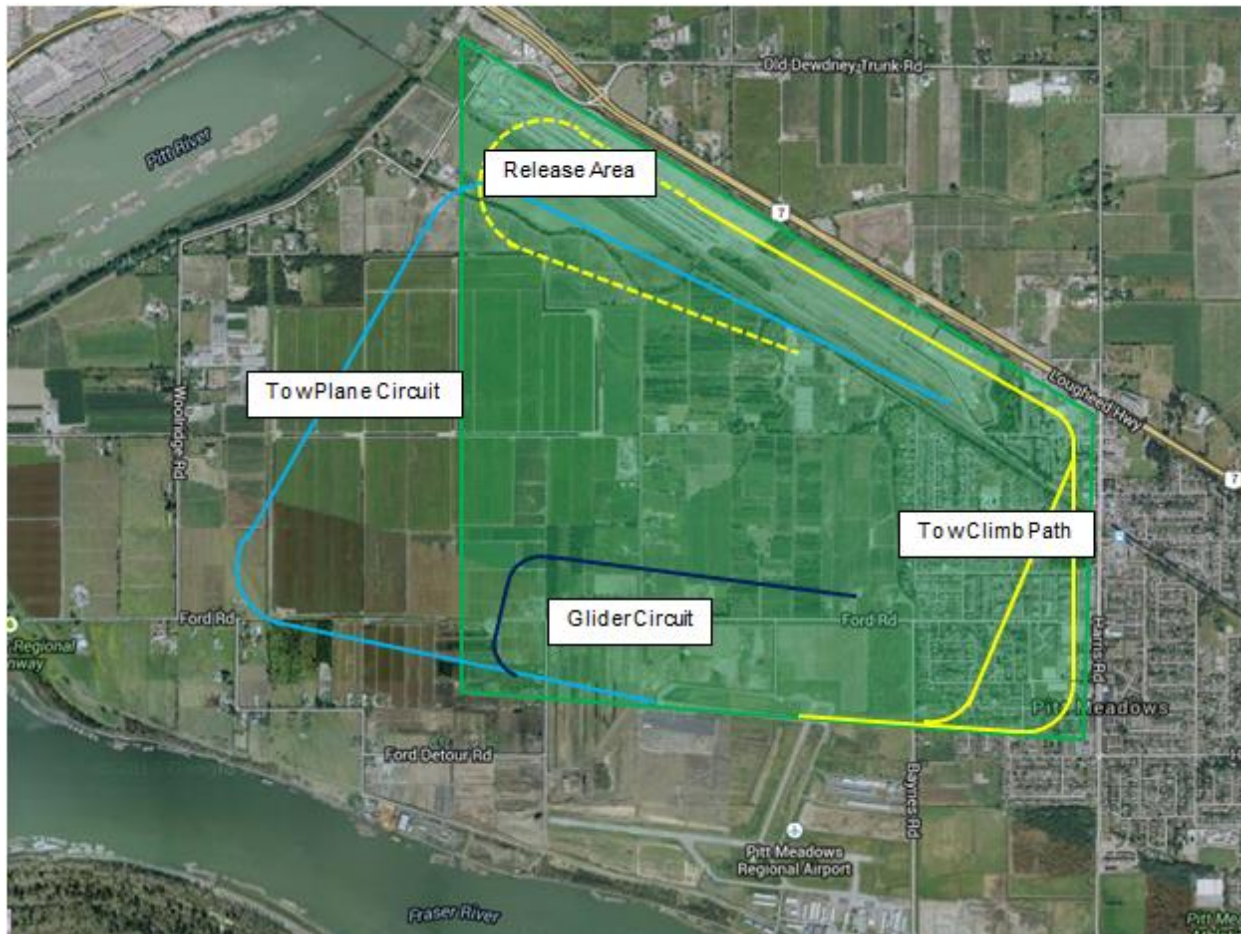
LEGEND	
	Primary Landing Lane
	Alternate Landing Lane
	Planned Touchdown Area
	Primary Lane - Under / Over Run
	Alternate Lane - Under / Over Run
	Significant Obstacle

Figure 9 – Runway 26R Ops and Tertiary Alternate - Runway 26L

TOWING AND CIRCUIT PATTERNS

17. **Runway 08L.** The standard procedure shall be a left hand circuit. The tow pilot should make every effort to vary, at a safe altitude, the initial departure path so as to avoid over flying the same residences constantly. At a safe altitude, a left turn to the north will be made, always remaining west of Harris Rd. A further left turn toward the west will be made south of the Lougheed Hwy followed by a rectangular or trapezoid tow pattern to arrive at the glider release point approximately abeam the launch site and not east of Baynes Rd. The normal release height is 2000' to 2500' ASL. Following glider release the tow plane flies a left hand circuit returning for runway 08L. The tow plane pilot should vary the decent path to avoid over flying the same residences on the ground. The glider will carry out the required air exercises and join a left hand circuit from a standard entry point.

18. On landing, the tow aircraft will cross the driving complex access road, (Figure 2 Hazard 1) not below 200' asl. The tow rope may be dropped at the launch site prior to entering the round out, or it shall remain attached for landing. The tow plane will normally backtrack to the launch position, and if the rope is attached, ground crews will use a gaff to re-position it for launch. ATC backtrack clearance is not required. With ATC clearance, the tow plane may also clear at the Rwy 18/36 intersection, or the end of the runway, and taxi back on Foxtrot with the rope attached.

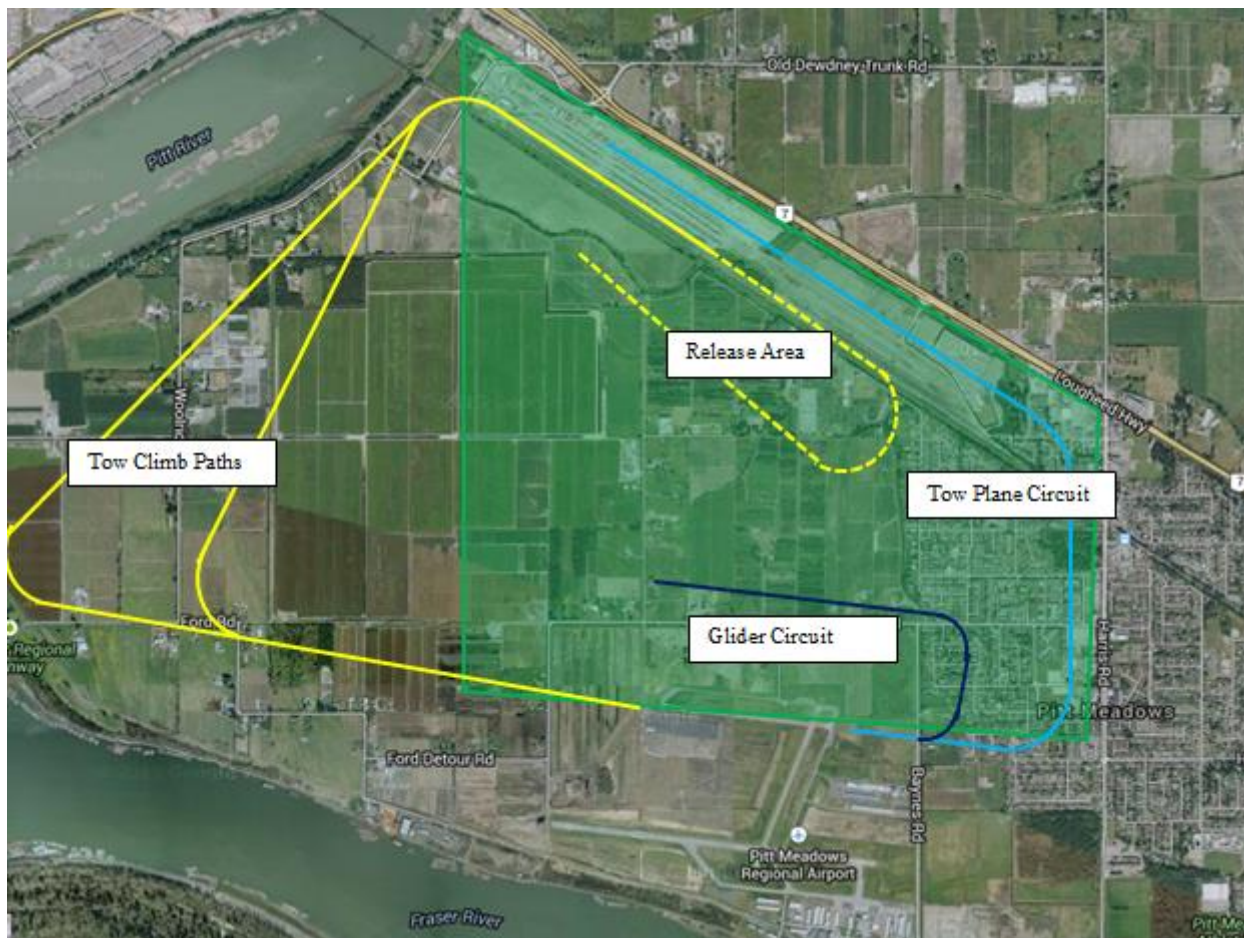


LEGEND	
	Glider Training Area
	Tow Departure Paths
	Tow Plane Circuits
	Glider Circuit

Figure 10 – Runway 08L Tow and Circuit Patterns

19. **Runway 26R.** The standard procedure shall be a right hand circuit. The tow plane/glider shall climb straight out or make a partial right turn and climb to the Pitt River, make a right turn northbound toward the Pitt River Bridge. Approaching the Pitt River Bridge, an eastbound turn will be made south of and parallel to the Lougheed Hwy. Glider release will normally be at 2000' to 2500' ASL abeam the threshold of Runway 08L. A 270 degree left run will allow for adequate separation and the tow plane to establish itself for a right hand circuit for Runway 26R. The tow plane pilot should avoid flying over the same residence on base or too low. The glider will carry out the required air exercises and join a right hand circuit from a standard IP.

20. On landing, the tow aircraft will cross Baynes Rd not below 250' asl, touchdown with the tow rope attached, roll-out and backtrack to the launch position. Ground crews will use a gaff to re-position the rope. ATC backtrack clearance is not required. The tow plane may also clear at the end of the runway with the rope attached, and taxi back on Foxtrot with ATC clearance.



LEGEND	
	Glider Training Area
	Tow Departure Paths
	Tow Plane Circuits
	Glider Circuit

Figure 11 - Runway 26R Tow and Circuit Patterns

NOTE 1: The LCO shall exercise positive control over all crew movements on the runway. When Runway 26R is in use, the launch area shall be situated so as not to interfere with any traffic using Runway 18 / 36.

NOTE 2: To expedite operations, the tow aircraft will automatically backtrack to position. ATC clearance is not required.

GLIDER TRAINING AREAS

21. **Runway 08L / 26R:** The following landmarks mark the glider training area boundaries as depicted in Figures 10 and 11:

- a South: Extension of runway 08L/26R centreline;
- b West: A straight line drawn from the east abutment of Pitt River bridge to the wood dust mill by the Fraser River;
- c North: Along the South side of Lougheed Highway; and
- d East: Along West side of Harris Road.

FLYING ACCIDENTS

22. Emergency response services shall be initiated by notification to Pitt Meadows tower. If the tower is closed, emergency services can be initiated by calling 911.

OTHER CONSIDERATIONS

23. **Tie Down Areas.** Glider and tow aircraft tie downs are located north of Taxiway Foxtrot, and east of the north access road adjacent to the glider ops shed.

24. **Noise Abatement.** Tow pilots must comply with any noise abatement procedures published in the CFS, and additionally should avoid flying the same pattern over residences. The Airport Authority as the operator of the airport is responsible for noise complaints. It is incumbent upon us, as an airport user, to operate in a manner that minimizes the noise impact on the surrounding community.

25. **Skydiving Operations.** There is an active skydiving operation using a designated "Drop Zone" on the north east side of the airport (see Figure 1). The following procedures must be followed when the jump aircraft has advised of an impending jump

26. **Runway 08L**. If the jump aircraft has transmitted the "One minute to Drop" signal, ATC may decline a request for takeoff clearance, or may issue a clearance with a restriction on the flight path to be flown. Such restrictions would normally require that the tow and glider commence a northbound turn before crossing the intersection of runways 18/36 and 08L/26R. Any restriction requiring the tow pilot to commence a turn below 100 ft. shall be declined. As there is minimal risk of conflict in the circuit area, all circuits shall be flown normally. Navigation and control of a parachute is not as precise as that of an aircraft, pilots must be prepared to modify circuits if a conflict becomes apparent.

27. **Runway 26R**. As there is minimal risk of conflict on the departure path, departures will be flown normally. However, pilots and controllers shall be aware of the location of descending parachutists and clearance shall be denied if it is likely that a parachutist may come in conflict with the departing aircraft. Due to the proximity of the parachutist landing area to the approach path of runway 26R, no approaches may be flown to this runway while parachutists are in descent. The jump aircraft is required to advise the tower before and obtain a clearance for the drop. Should a glider be entering or be established in the circuit, drop clearance will be withheld until it is certain that the glider will be clear of the parachutist's landing area.

28. Should a glider be operating in free flight, the controller shall advise the glider pilot of the impending drop and instruct the pilot to remain west of runway 18 and fly either a right circuit to runway 18 or left circuit to runway 08L. Once the glider pilot has acknowledged the ATC instruction to land on runway 18, ATC will clear the jump aircraft for the drop. ATC clearance is required to retrieve the glider.

29. If a glider is on tow, ATC may decline release clearance until the parachutists are clear, or impose other restrictions on the glider pilot in order to ensure separation. If a glider is held on tow, a holding pattern will be flown north of the Pitt River Bridge. When cleared to release, glider shall not release from the tow plane until it is towed back into the practice area.

30. Tow pilots will respond to ATC instructions as required to avoid conflict with the parachutists and jump aircraft.

AERODROME HAZARDS

3. Pilots shall be aware of the following hazards on the aerodrome:
 - a. HAZARD 1; PAPI on grass eastside of Runway 19;
 - b. HAZARD 2; Airshow ATCO trailers in the infield on the edge of the paved unmaintained spokes;
 - c. HAZARD 3; Grass separating the area between Runway 01/19 and Taxiway Alpha north of Taxiway Bravo. It is a drainage ditch with culverts at each end; and
 - d. HAZARD 4; Ring road airport fence from Campbell Helicopters to Forest Service apron and building.



Figure 2 - Aerodrome Hazards

GROUND OPERATIONS

4. **LCO Site Location.** The LCO sites are to be set up 75 feet east of the edge of Runway 01/19. For Rwy 01 ops, it is positioned approximately 100' north of the Taxiway B intersection. For Rwy 19 ops, it is positioned on the concrete approximately 300' south of the runway threshold and adjacent to taxiway D.
5. **Control of Personnel.** Ground crews and visiting cadets are to be well supervised at all times. Personnel are to remain clear of the landing area unless given specific instructions by the LCO. The LCO shall exercise positive control over all ground crew movements for the purpose of glider launches, glider recoveries, or rope retrievals.
6. **Vehicle Movements.** Vehicle movements on the airfield shall be restricted to necessary operational and emergency response vehicles. Airport vehicle ground operations are controlled by NAVCANADA and authorized by the Airport Authority. The glider operations vehicle will normally only operate on areas directly involved in glider operations. Normal gliding operations shall only take place when a Site Commander with a valid AVOP is on site.

AIR TRAFFIC CONTROL

7. **General.** Abbotsford ATC exercises control of all air and ground traffic at the airport. All personnel involved with ground and air operations shall comply with all instructions issued by the Control Tower. Radio communications between ATC, tow planes and gliders shall be maintained both in the air and on the ground.
8. **Communications.** VHF frequencies at Abbotsford are:
 - a. TWR AIR FREQ. 119.4(inner) 121.0(outer)
 - b. GND FREQ. 121.8
 - c. TML FREQ. 132.7 (Vancouver Terminal)
 - d. ATIS. 119.8
9. **Local Procedures.** Pilots shall adhere to the following special local operating procedures:
 - a. avoid operating over the main terminal building when jet aircraft are parked at the gate;

- b. avoid operating over Campbell Helicopters located at the northwest section of the airport, north of Taxiway Golf;
 - c. aircraft approaching for Runway 01 shall remain north of the approach for Runway 07; and
 - d. aircraft departing Runway 19 shall remain north of the approach for Runway 07, unless ATC authorizes a turn south of the main terminal building due jet aircraft parked at the main terminal.
10. **NOTAM Requirements.** Abbotsford Airport Operations will issue two NOTAMs based on the published gliding schedule. Exact wording may vary at the discretion of Airport Operations.
- a. ***"Runway 01/19 restricted north of taxi Bravo for glider operations only from 1500Z (0800 local) to 0100Z (1800 local); runway available 30 PNR airport ops 604-864-5544."***
 - b. ***"Taxi D closed north of the Tanker Base from 1500Z (0800 local) to 0100Z (1800 local)."***
11. The LCO must notify Airport Operations (604-864-5544) when planned flying will not be conducted so that the NOTAMs may be cancelled.

AIRFIELD OPERATING AREAS

12. Gliding operations shall take place on Runway 01 / 19 in the section bounded by the threshold of Rwy 19 and taxiway Bravo. This provides for two landing lanes 2500 feet long and 100 feet wide. All personnel and equipment shall be staged east of the runway. The glider launch point for Rwy 01 is approximately 100' north of Taxiway B, and approximately 100' south of the threshold for Rwy 19.
13. **Gliders.** The primary glider landing lane is centred on the eastern half of the runway, and the alternate is centred on the western half of the runway. The glider touch down point should be approximately 150' within the landing lanes for both Rwy 01 and 19. Tow aircraft, gliders and launch personnel may occupy the primary lane when a glider is landing in the alternate, however, simultaneous take-offs and landings are not authorized.
14. **Tow Aircraft – Rwy 01.** Tow aircraft shall land on the runway centreline with their rope attached. Normally, the tow aircraft will land, decelerate to a safe speed using no more than moderate braking, and then manoeuvre directly into the launch position. Landing or rolling beyond the launch site may occur as required, followed by back tracking to the launch position without specific ATC approval.

When back tracking, the rope should remain attached and ground crews will use a gaff to snag and re-position the rope. Landings are not authorized when gliders or personnel are on the runway.

15. **Tow Aircraft – Rwy 19.** Tow aircraft shall land beyond the launch site with their tow rope attached and then back track to the launch position without specific ATC approval. Tow pilots are to ensure they cross the fence on approach above 200 feet agl (Figure 2 & 3). When back tracking, the rope should remain attached and ground crews will use a gaff to snag and re-position the rope. Landings are not authorized when gliders or personnel are on the runway.



LEGEND	
	Primary Landing Lane
	Alternate Landing Lane
	Planned Touchdown Area
	Landing Lanes Under / Over Run
★	Launch Site
	Significant Obstacle

Figure 3 - Runway 01 / 19 Operating Areas

GLIDER TRAINING AREA

16. The glider training area is depicted in Figures 4 & 5. The eastern boundary is Rwy 01/19. The northern boundary aligns with an extended centreline from taxiway D to provide a narrow buffer from regular traffic that is normally restricted to remain north of Hwy 1. A ridgeline approximately 1.5 nm to the west and oriented parallel to Rwy 01/19 is the western boundary. The southern boundary is a line extending westward from the south side of the terminal building. While all boundaries must be respected, not crossing the southern boundary is especially important because of the steady flow of IFR aircraft using the Rwy 07 ILS.

TOWING AND CIRCUIT PATTERNS

17. **Runway 01.** For noise abatement and ATC traffic management, runway 01 is the preferred runway. The standard departure procedure shall be a left hand turn well south of Hwy 1 after take-off, with the climb to release altitude made inside the glider training area. Tow pilots shall vary, at a safe altitude, the initial departure path and crosswind leg to avoid constantly flying over the same residences (Examples depicted in Figure 4). Tow pilots should vary the tow pattern within the training area for noise abatement, with due consideration for their climb rate, traffic, clouds, and the target altitude. The normal glider release point should be approximately abeam the control tower.

18. Following glider release, the tow plane shall descend for a left hand circuit while remaining well clear of the gliders. The decent path and downwind leg (Examples in Figure 4) should be varied for noise abatement. The tow aircraft base leg shall be within the southern boundary of the glider training area, remaining north of a line extending west from the runway 07 hold short line on runway 19. Tow plane pilots shall avoid flying over jet aircraft parked at the main terminal building. The glider circuit may pass over, but shall not extend south of the terminal building to remain clear of the approach for runway 07.

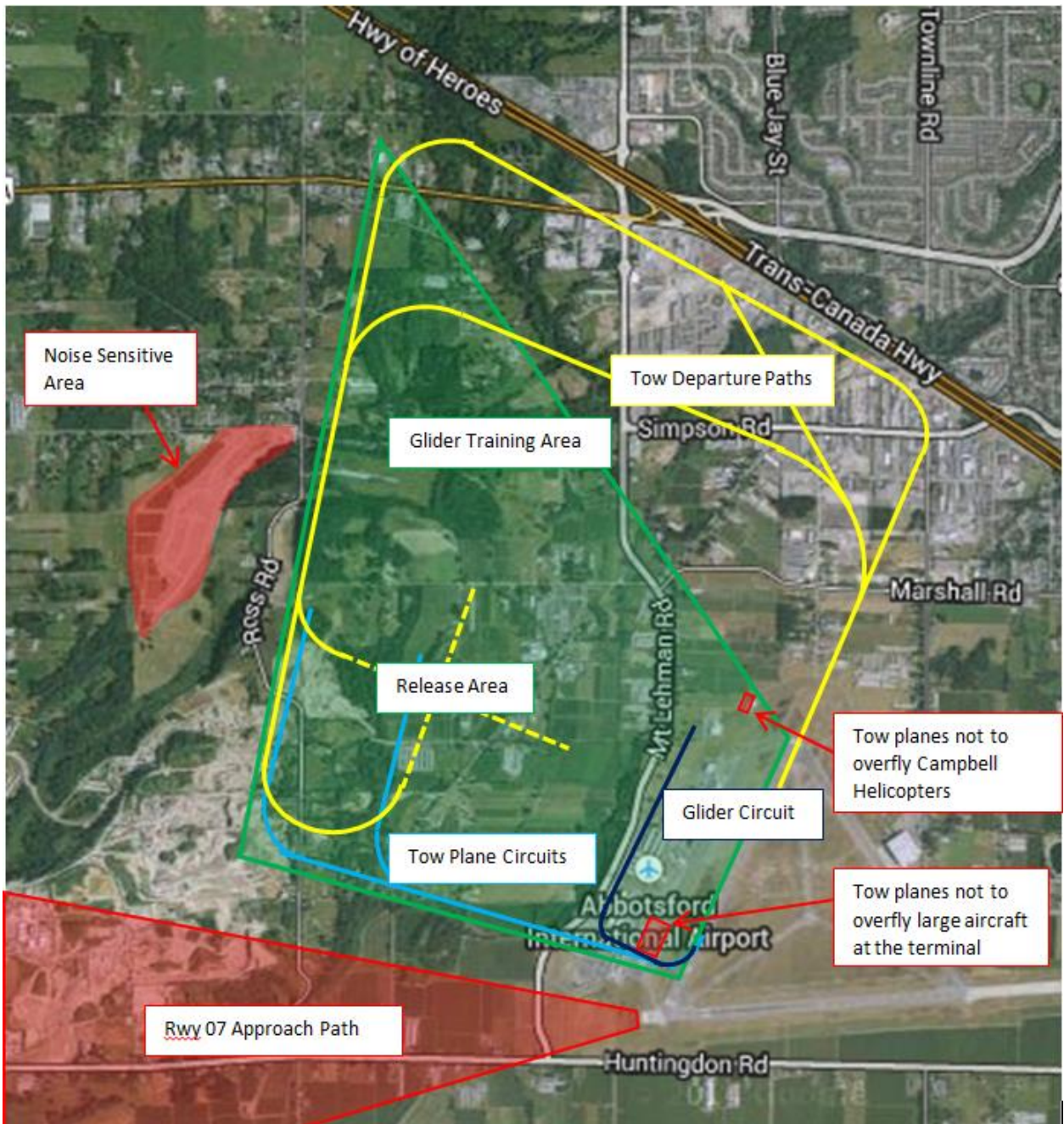


Figure 4 - Runway 01 Tow and Circuit Patterns

LEGEND	
	Glider Training Area
	Tow Departure Paths
	Tow Plane Circuits
	Glider Circuit
	Restricted Areas

19. **Runway 19.** The tow plane & glider shall commence a right crosswind turn as soon as safe after take-off to remain north of the terminal building. They will then fly westbound perpendicular to Runway 01/19 followed by a climb to release altitude within the glider training area. Tow Pilots shall, if they intend to or believe that they may turn south of the terminal, request take-off clearance using the phraseology, "Tug XX plus 1 ready, request right turn south of runway 07, XX feet (release alt)".

20. ATC will respond with a:

- a. Take-off Clearance, or
- b. "Negative," with a reason, or
- c. Take-off Clearance with at straight out until advised.

21. For noise abatement, tow pilots should:

- a. vary the tow pattern within the training area with due consideration for their climb rate, traffic, clouds, and the target altitude, and
- b. vary their descent path and downwind leg,
- c. prior to 10:00, request right turns south of runway 07.

22. The normal glider release point should be approximately abeam the control tower. Following glider release, the tow plane shall descend for a right hand circuit while remaining well clear of the gliders.

NOTE: Tow plane circuits for Runway 19 shall not fly over the building and aircraft adjacent to Taxi Alpha. The base and final turn for Runway 19 shall stay east and north of these buildings and parked aircraft.

NOTE: Glider when joining the circuit shall not over fly the departing tow plane/glider climbing on the crosswind leg.

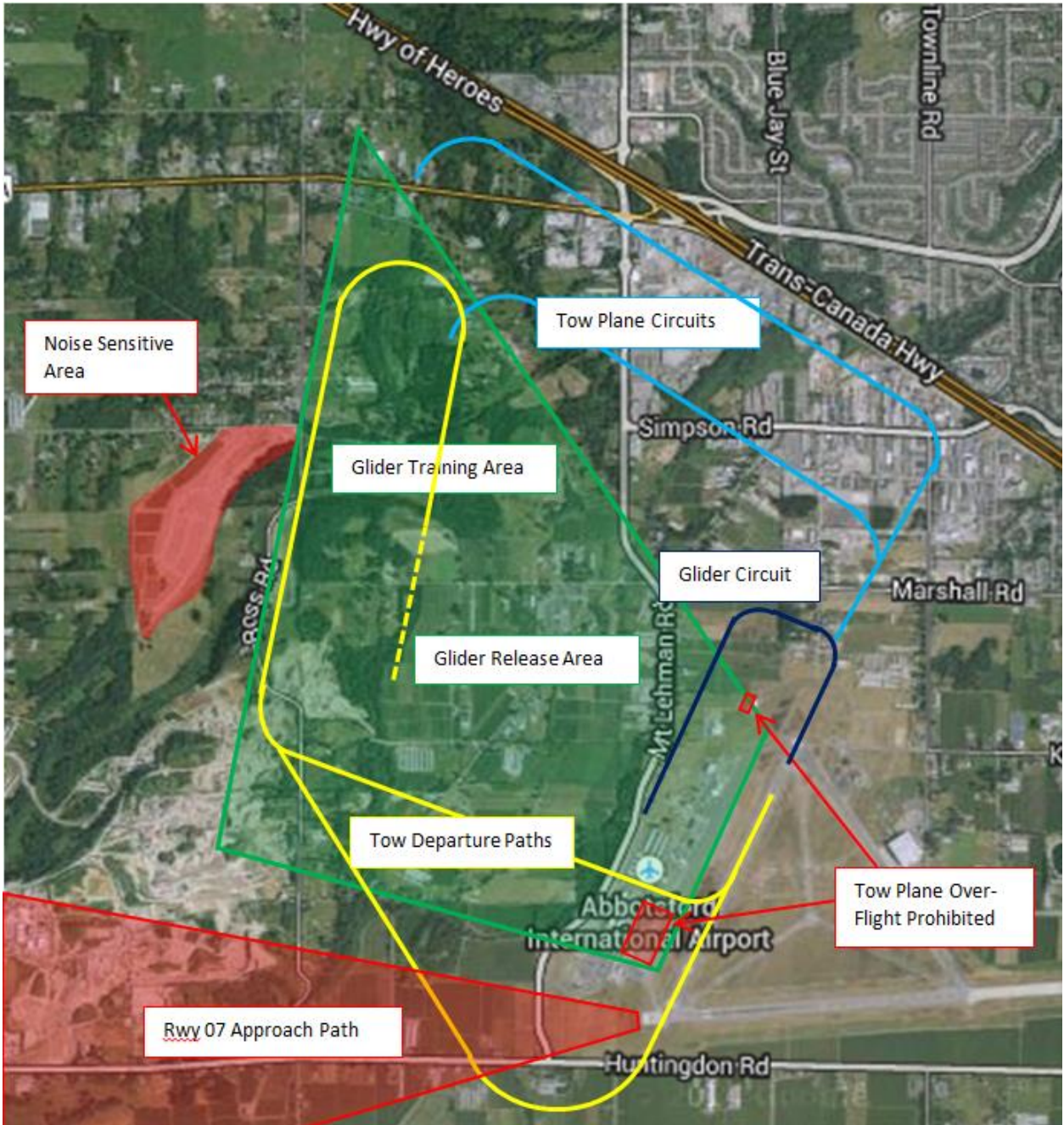


Figure 5 - Runway 19 Tow and Circuit Patterns

LEGEND	
	Glider Training Area
	Tow Departure Paths
	Tow Plane Circuits
	Glider Circuit
	Restricted Areas

FLYING ACCIDENTS

23. Emergency response shall be initiated by notification to Abbotsford Tower.

REFUELLING

24. Aircraft refuelling is at Godspeed Aviation located at the entrance to the Compound parking. Alternate fuelling is located at Carson Air on the east side of the airport at the FBO.

TIE DOWNS

25. The ACGP building and tie down compound is located east of the Rwy 19 threshold, adjacent to the Shell fuel tank compound. Parking in other airport locations requires prior coordination with Airport Operations. ACGP aircraft and vehicles shall remain outside, and not block access to, the Shell fuel tank compound.

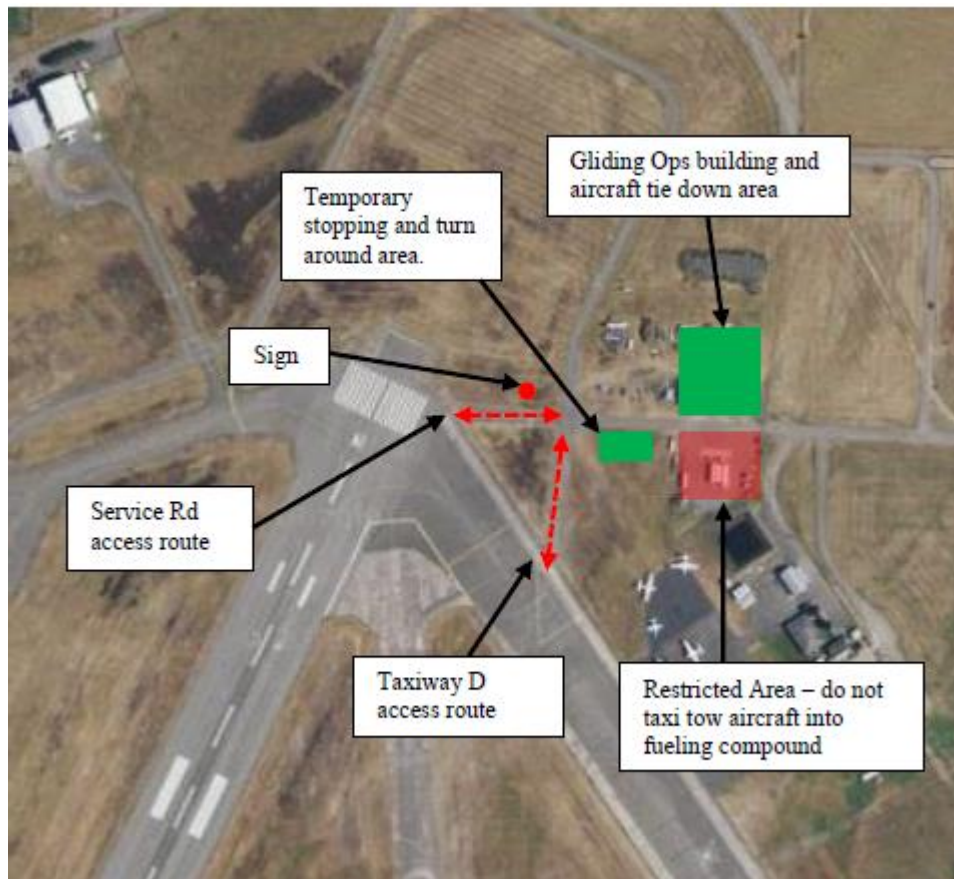


Figure 6 – Glider Ops Compound and Parking Area