

NAME: TLM Holdings

Hearing Date: March 6, 2025

CASE NO(s).:CPC24-038

EXHIBITS

[illegible]

March 5, 2025

Via Electronic Mail

Wendie Kellington
Kellington Law Group PC
PO Box 2209
Lake Oswego Or 97035

RE: Drones and Other Aircraft

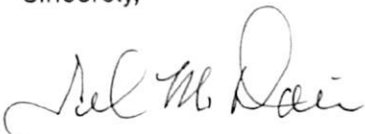
Dear Ms. Kellington

Pursuant to your request, this letter responds to objections presented by opponents to your client's aviation-related land use application. Specifically, I understand that your client has applied to Marion County to extend the land use boundary for the Aurora Airport to include the client's property to establish a Heliport/Vertiport and fixed wing aircraft facility with hangars, aircraft maintenance shops, tie downs and access to the Aurora Airport Runway. The proposal will also have facilities to energize electric aircraft including Electric Vertical Take Off and Landing (eVTOLs) when they come to market. Opponents of the proposal have taken a number of positions about uncrewed aircraft (*i.e.* drones), eVTOLS, and aircraft generally that are mistaken. You have asked that I respond to those positions.

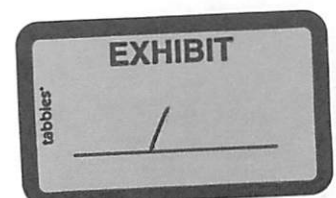
My cv demonstrating my credentials to opine is attached. In general, however, I hold a PhD in aeronautical engineering. I am a commercial pilot with FAR 135 experiences, instrument rated in single and Multi-Engine Aircraft and hold a Remote Pilot's license – which is the license to commercially operate drones. I am an FAA appointed Safety Team Representative and a "Trusted Operator Program" or "TOP" Operator, Level 2 Instructor. I joined the Columbia Gorge Community College faculty in 2016 as an expert in small uncrewed vehicle systems (sUAS) and have qualified the college in the TOP program at the American Society for Testing and Materials (ASTM) level for sUAS flight training.

The assertions made by opponents are reproduced on the following pages, with my responses.

Sincerely,



Irl M. Davis, PhD



Response to Assertions in Opposition to the Proposed Aurora Airport Expansion

Assertion 1: Claim of Farmer across Airport Road from the Aurora Airport, whose property is within 4 miles of the airport, that he does not now need to follow instructions from the control tower to operate farm drones.

This is incorrect. Any drone operator – on a farm or otherwise - who is within controlled airspace is now required to get approval from the Air Traffic Control Tower before undertaking almost any drone mission. A farmer using a drone in farm operations would be considered by the FAA to be using the drone for commercial purposes and would then be required to have a Part 107 Remote Pilot license to undertake a mission. Controlled airspace classifications include Class A, B, C, D, and E. Class G airspace is uncontrolled. Aircraft operating within controlled airspace are subject to varying levels of air traffic control that are unique to each airspace classification. Drones are aircraft. The airspace around Aurora Airport to include over the property of the farmer who wrote the objection (Aurora Farms) is controlled airspace. The specific controlled airspace designation surrounding Aurora State Airport is dependent on the operational status of the Air Traffic Control Tower. When the Air Traffic Control Tower is operating (daily between 7 am and 8 pm), the surrounding airspace is Class D from the surface to 2,500 feet AGL and extends outward in a four-mile radius. When the tower is not operating (daily between 8:01 pm until 6:59 am), then the airspace is controlled Class E airspace from the surface upward and, in this airspace, pilots including drone pilots, are responsible monitoring the Common Traffic Advisory Frequency (CTAF) with ground facilities and other aircraft operating around the airport. In addition, in Class E airspace, drone pilots must still obtain ATC approval for their operations from Seattle Center (the nearest source when the Aurora ATC is not in operation).

The net result is that there is no date or time when it is possible to simply launch a drone from a farm in this controlled airspace that is within a 4-mile radius of the Aurora State Airport, and expect not to have federal control over the flight – through authorization from Air Traffic Control Tower and under federal responsibilities imposed on all aircraft pilots including drone pilots, of monitoring the assigned CTAF. Therefore, the introduction of new rotorcraft pads, will have no influence on whether the farm must obtain federal permission to operate a drone in this controlled airspace. The farm is required to be obtaining that permission now. Operating a drone in controlled airspace and not adhering to controlled airspace rules is a federal crime.

Assertion 2. The same farmer alleges that allowing the proposed facility poses a “risk that a drone may be destroyed while working on my farm” and that this is a “significant cost of operating” the farm.

It is not clear, but I understand the farmer to be saying that if he chose to use a drone in his farm operation, that the proposed facility would present a risk that the drone will be destroyed by aircraft taking off or landing at the facility. This is mistaken. First, I note that the farmer’s lack of understanding of federal and state airspace rules means that he cannot be a drone pilot and that the concerns he raises are hypothetical. Regardless, as stated above, both the drone operator and the pilot of any aircraft, to include any type of rotorcraft including eVTOLS, taking off from the subject property or preparing to land at it, are all subject to the same rules that apply to this

controlled airspace which have never resulted in a reported collision - nationwide - between a drone and aircraft. Such a collision could only result if ATC or one of the pilots in command failed to lawfully perform their duties. If the writer believes otherwise, his basis for asserting such collision should be provided.

Assertion 3: Claim that the approval of the proposed facility will preclude the use of drones on the farm.

This is mistaken. Drones operate in the National Airspace System which is controlled by the federal government and not private landowners. No landowner's use of drones is made more or less viable when other aircraft in controlled airspace are also operating within the national airspace system. The particular farmer's drone operations are already significantly constrained by the Aurora State Airport's controlled airspace. The proposal does not change the controls that apply to the farmer's potential drone use at all. With or without the proposal the farmer is required to operate their drones in compliance with federal law which governs the controlled airspace within which they farm.

Assertion 4: Drone vs. Airport Accidents

There are no documented incidents of drones causing accidents at Aurora Airport. The FAA requires commercial drone operators to adhere to strict operational and regulatory requirements, including airspace authorization in controlled airspace such as Aurora's Class D airspace. All commercial drone operations must comply with FAA's **Part 107** regulations, which enforce altitude limits, airspace approvals, and operational constraints to prevent conflicts with manned aircraft.

Furthermore, no known FAA records or NTSB reports substantiate the claim that drones have caused airport-related accidents at Aurora. If the opposition claims otherwise, they should provide verifiable evidence from FAA or NTSB databases.

Assertion 5: Concerns About eVTOL and Air Traffic Safety

There are assertions that the proposed facility will become a terrorist hub with eVTOL's serving as the attack mechanism. There is nothing about the proposal that invites terrorist invasion. First, the writer's concern is based upon the incorrect premise that the eVTOL's that will use the facility will be "ultralights". The proposed eVTOL operations are **commercial only**, which means they will cannot be considered ultralights and are instead regulated under FAA **Part 135** or **Part 91**, or potentially the new Part 142 And 194 regulations governing "powered lift" aircraft, depending on the operational use case. Unlike ultralights regulated under **Part 103**, commercial eVTOLs are required to adhere to stringent airworthiness certification, pilot training, licensing, and operational standards that ensure their safe integration into existing airport airspace traffic.

Aurora Airport currently accommodates a mix of aircraft, including fixed-wing, rotary-wing, and jet operations. The introduction of **eVTOL operations**, which must follow FAA-established approach and departure procedures, does not present an unusual or unmanaged safety risk. The FAA is actively working on integrating **Advanced Air Mobility (AAM)**, including eVTOLs, into the national airspace system, ensuring these aircraft adhere to safety and operational guidelines.

Whether FAA regulated eVTOLs are owned or leased by the operator makes no difference. As now, all pilots of commercial aircraft regardless of whether they own the aircraft they operate, are required to adhere to strict FAA standards.

6. Assertion 5: Misclassification of eVTOLs as Ultralights

Related to the above is the claim that eVTOLs are classified as **ultralights**. This is categorically **incorrect**.

- **Ultralights** fall under **Part 103** and are limited to single-occupant, non-commercial, unregulated operations with weight and fuel restrictions.
- **Commercial eVTOLs**, on the other hand, will be subject to **FAA Type Certification (TC) under Part 21**, operational certification under **Part 135 (for commercial transport)**, and pilot licensing requirements.

Any assertion equating commercial eVTOL operations with ultralights ignores the existing regulatory framework and the extensive FAA oversight that will govern their use.

Assertion 7: Airspace Congestion and Flight Safety Concerns

As explained above, Aurora Airport operates under FAA-regulated **Class D** airspace with controlled access and ATC oversight or **Class E** airspace which is also controlled and has ATC oversight. Any new aircraft operations, including eVTOLs, must comply with established traffic control procedures.

Additionally, FAA's **NextGen** air traffic modernization efforts are an in-progress program designed to improve airspace efficiency for all aircraft, reducing congestion and enhancing situational awareness through technologies such as **ADS-B (Automatic Dependent Surveillance-Broadcast)**. eVTOL aircraft operating in controlled airspace will be required to follow FAA's NextGen rules further mitigating risks associated with increased traffic volume.

Assertion 8: Noise and Environmental Concerns from eVTOLs and Drones

Unlike traditional helicopters, **eVTOLs** are designed to be significantly quieter due to distributed electric propulsion, which reduces noise. The sound footprint of an eVTOL is estimated to be around **55-65 dB at 500 feet altitude**, compared to **85-100 dB for helicopters**.

As for drone operations, Part 107 drones typically produce noise levels that are **non-disruptive beyond 300 feet** and are unlikely to impact surrounding communities. The FAA is developing **environmental noise regulations** for eVTOLS (AAM) vehicles, ensuring that new air mobility solutions meet community noise tolerance levels.

Assertion 9: Drones Operating Without Oversight Near the Airport

FAA regulations **explicitly prohibit** any drone operations in **Class D airspace** (which includes a 4 mile radius of Aurora Airport) **without ATC authorization**. Same for Class E Airspace. The **Low Altitude Authorization and Notification Capability (LAANC)** system provides **automated FAA approvals** for UAS flights, ensuring safe integration with existing air traffic. Oregon Department of Aviation requires an ATC authorization within a 5 mile radius of Aurora Airport (includes drone agricultural operations).

Additionally, under **14 CFR § 107.39**, drones cannot fly over **people, moving vehicles, or critical infrastructure** without specific FAA waivers, reinforcing strict operational oversight.

Assertion 10: Risk of Uncontrolled Drone Growth in the Area

Drone operations are already regulated under **FAA Part 107**, which requires licensing, airspace compliance, and operational limits. Commercial drone flights require **Remote Pilot Certificates**, and enforcement mechanisms exist for unauthorized operations near the airport.

Furthermore, the **FAA Reauthorization Act of 2024** enhances **Remote ID** compliance, allowing authorities to track drone operations in real-time. This technology **prevents unauthorized drone flights near critical airspace like Aurora Airport's** and ensures full accountability.

Conclusion

The objections to the Aurora Airport expansion are based on **misconceptions and misinformation**.

- **FAA regulations provide strict oversight of both drone and eVTOL operations** within controlled airspace. The Airspace within 4 miles of the Aurora Airport is federally controlled airspace.
- **Commercial eVTOLs are not ultralights** and will be subject to full certification and regulatory compliance.
- **Noise, safety, and airspace congestion concerns** are actively managed through existing and developing FAA policies, including **ATC integration, NextGen technologies, and Remote ID for drones**.

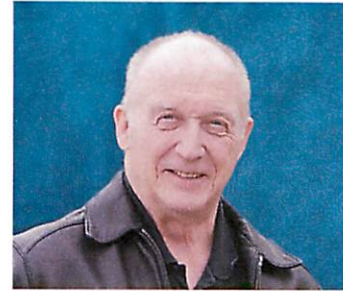
Given these factors, the expansion proposal aligns with **FAA's modernization goals** and the **future of Advanced Air Mobility**, ensuring safe, regulated, and environmentally conscious aviation operations at Aurora Airport.

Curriculum Vitae

Irl "Mike" Davis, PhD

Contact Information:

P.O. Box 188, Tygh Valley, Oregon
503-680-6384
miked@suaspro.com



Professional Summary

Irl "Mike" Davis is a distinguished expert in UAS Technology, Aviation Management, and International Business, with over 40 years of experience spanning education, manufacturing, aviation, and logistics. He has held leadership roles in entrepreneurial startups, consulted for global enterprises, and developed accredited UAS training programs. Mr. Davis is an FAA-certified commercial pilot and remote pilot with extensive expertise in aviation safety, drone operations, and regulatory compliance.

Education

- **PhD in Aeronautical Engineering**, University of Kansas, 2023
- **Master's in Law**, University of Kansas, 1996
- **Law Studies**, University of Shenzhen, China, 1988-1995
- **Bachelor of Engineering in Electrical Technology (BEET)**, Oregon Institute of Technology, 1971

Certifications & Licenses

- FAA Commercial Pilot License (Single-Engine & Multi-Engine, Instrument Rated)
 - FAR Part 135 Charter Experience
 - FAA Part 107 Remote Pilot Certification
 - FAA Safety Representative & FAA Drone Pro
 - NIST/APSA Basic and Advanced Proctor Examiner
 - Certified Level 1 Thermographer
 - Certified National Trainer – Pix4D
 - AUVSI Top Level 2 Remote Pilot Instructor
-

Professional Experience

Professor – UAS Technology

Columbia Gorge Community College, 2014 – Present

- Developed and led the UAS Program, including curriculum development, training, and industry partnerships.
- Conducts FAA safety training and serves as an FAA Safety Representative.
- Established the college's FAA Collegiate Training Initiative Program.

Founder & CEO

sUAS Pro LLC – UAS Agriculture, 2016 – Present

- Leads an innovative agricultural drone solutions company offering sales, training, and repair services.
- Developed comprehensive training programs from basic Remote Pilot certification to advanced agricultural drone operations.
- Specializes in AI-driven precision agriculture, including crop monitoring, spraying, and data analytics.

Consultant

Global One LLC, 2000 – 2016

- Provided strategic consulting in aviation management, international logistics, and foreign business operations.
- Specialized in setting up foreign investment enterprises (WFOE/FICE) in China.

President/CEO

A/D Electronics, Inc., 1983 – 2005

- Founded and led an electronic component manufacturing company, growing it to \$25 million in revenue.
- Established and managed three factories in China, employing over 1,200 people.
- Negotiated and executed a successful foreign merger and acquisition in 2003.

President

Davis Aviation, Inc., 1992 – 1998

- Established a Flight-Based Operation (FBO) including a flight school, FAR Part 135 charter operations, and aircraft maintenance.
- Created FAA-approved training manuals and flight school programs for Commercial, Instrument, Multi-Engine, and ATP certifications.

Additional Management Experience

- Xerox Corporation – Management, 1971 – 1980
 - Terra Technology – Management, 1980 – 1983
-

Expert Witness & Industry Recognition

- **Washington State Trade Representative (2008-2010)** – Assisted in developing international trade policies and diplomatic efforts.
 - **FAA Wright Brothers Master Pilot Award (2020)** – The highest honor for professionalism and expertise in aviation.
 - **Marco Polo Award (2005)** – Recognized for excellence in international business.
 - **USA Representative, ISPAT (2008-2010)** – Reported to the Prime Minister of Turkey on foreign investment strategies.
-

Publications & Patents

Books & Manuals

- *UAS Flight Training Manual*, 2019
- *UAS Management*, 2020
- *The American Entrepreneur in Asia*, 2005
- *FAR Part 107 Study Guide*, 2016
- *sUAS Flight Handbook*, 2019

Patents

- *Portable Laser-Induced Breakdown Spectroscopy System*, 2010
 - *Drone Flight Control & Pilot Stress Training System*, 2023
-

Professional Affiliations & Volunteer Experience

- **AUVSI Cascade Chapter Board Member**, 2023 – Present
- **Wasco County Planning Commissioner**, 2015 – Present
- **South Wasco County Alliance – Founder**
- **Oregon Institute of Technology – Adjunct Professor (2005-2007)**
- **Oregon Institute of Technology Foundation Board (2005-2008)**

Specialties & Expertise

- UAS Aviation Training & Education
- Aviation Safety & Regulatory Compliance
- International Business & Trade Relations
- Entrepreneurial Startups & Business Strategy
- Agricultural Drone Operations & AI-Driven Farming
- Foreign Manufacturing & Logistics

Additional Information

- Managed a 6,000-acre family heritage ranch/farm since 1992.
 - Recipient of the **Oregon Institute of Technology Distinguished Alumni Award (2006)**.
-



March 5, 2025

Hearings Officer
Marion County
555 Court St NE, Suite 5232
Salem, OR 97301

RE: Aviation-related Uses at NMCVH – additional comments
for Case No. CUCP24-038 HO

Dear Hearings Officer:

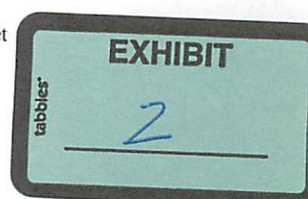
This letter provides additional information concerning the aviation uses in the buildings that are shown in Case No. CUCP24-038 HO.

The proposed facility is designed to serve all aircraft. It will accommodate fixed wing aircraft that will takeoff and land from the Aurora State Airport runway. It will also be designed to accommodate aircraft that can takeoff and land vertically from a specific small space of pavement. Unlike fixed wing aircraft, these aircraft do not need a runway to roll down in order to gain flight. They are generically called “rotary wing” aircraft, because by the use of rotating thinner wing members, they can takeoff and land directly from a site. Historically, these kind of aircraft have been called “helicopters” however there is now emerging into the aviation world a version of aircraft with multiple rotating narrow wings that will operate on electric or hydrogen power, that are called electric vertical takeoff and landing aircraft (eVTOL) or sometimes Powered Lift aircraft. eVTOLs and Powered Lift aircraft launch from places that are often called “vertiports”.

The proposed buildings on the site provide support services for the aircraft using the site. There are no stand-alone offices. Thus, the primary occupancy will be:

- Vertiport Headquarters with offices and maintenance shops;
- Hangars for the Storage of Aircraft in secure areas; and
- Maintenance shops for the Aircraft in secure areas.

As part of the storage and maintenance functions there will be small offices which are used by the same workers using the storage and maintenance areas. These small shangar offices serve the needs for security of aircraft logs (a place to lock them up as required), to store aircraft work orders, and special parts that must be kept and worked on in dust-free environments.



Aviation-related Uses for Case No. CUCP24-038 HO
March 5, 2025
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Concerning the character of the proposal, it will be a private aeronautical operation at a public use airport, just like Wilson Construction, Life Flight, Atlantic Aviation and others that are within the existing Aurora State Airport land use boundary. It will function as a through the fence operation under state statutes.

My qualifications for providing this information is as follows. Airport planning and impact analysis is a professional expertise of mine and I practice it as an Oregon licensed civil engineer and architect. Over the past 41 years my work on heliport and airport master plans, noise reports, hangars, zone changes, conditional use permits, and Airport Layout Plan Updates has included work at the following heliports:

City of Portland Downtown Public Heliport
Helicopter Transport Services Helistop
Kaiser Sunnyside Hospital Helistop
Emanuel Hospital Helistop
Oregon Health Sciences University Hospital Helistop
Salem Hospital Helistop
Providence Portland Medical Center Helistops
Richmond Washington Hospital Helistop
Missoula Montana Hospital Helistop
Oregon Graduate Center Helistop
Westwood Corporation Heliport
Life Flight Astoria Crew Quarters and Helicopter Hangar
Life Flight Pendleton Crew Quarters and Helicopter Hangar
Life Flight The Dalles Crew Quarters and Helicopter Hangar
Life Flight Headquarters and Maintenance Center Aurora Airport
Life Flight Swan Island Helistop

And the following airports:

Aurora	Pendleton	The Dalles
Astoria	Troutdale	Hillsboro
Portland International	Chiloquin	McDermitt
Independence	Florence	Renton
Madras	Hermiston	Boardman
Lexington	Lake County	Mulino
Albany	Condon	Wasco County
North Bend	Christmas Valley	Bend
Prineville	Baker City	Hood River

Aviation-related Uses for Case No. CUCP24-038 HO
March 5, 2025
Page 3

Respectfully submitted,

A handwritten signature in blue ink that reads "Aron Faegre". The signature is written in a cursive, flowing style.

Aron Faegre, AIA, PE

NOTE:
97 TOTAL CAR PARKING SPACES SHOWN

NORTH MARION COUNTY VERTIPIORT/HELIPORT SITE PLAN

NORTH MARION COUNTY VERTIPORT

STRENGTH

INDEPENDENT ROAD - ALPINE, CALIFORNIA

NOTE PLAIN

9-6-2000

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PAGE:

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NMCVH Buildings					Parking Spaces by Marion County Rural Zoning Code 17.118.050 (see Note 1)			Parking Spaces based on Building Footprint & Adjacent Airport Comparable (see Note 2)		
Name	Floor	Uses	Area sf		Occupiable Area	Req'd Area per Parking Space	Req'd Spaces (rounded up)	Footprint Area	Req'd Area per Parking Space	Req'd Spaces (rounded up)
Vertiport HQ	Ground Second	Offices	15,658		15,658	300	52	15,658	1,441	11
	Ground Second	Industrial Shops	15,658		15,658	5000	3			
Subtotal			31,316							
Hangar W	Ground	Hangar	32,000		32,000	5000	7	32,000	1,441	23
	Mezzanine	Storage	10,560		10,560	5000	3			
Hangar W Shops	Ground	Industrial Shops	16,800		16,800	5000	4	16,800	1,441	12
	Second	Industrial Shops	16,800		16,800	5000	4			
Subtotal			76,160							
Hangar X	Ground	Hangar	32,000		32,000	5000	7	32,000	1,441	23
	Mezzanine	Storage	10,560		10,560	5000	3			
Hangar X Shops	Ground	Industrial Shops	7,500		7,500	5000	2	7,500	1,441	6
	Second	Industrial Shops	7,500		7,500	5000	2			
Subtotal			57,560							
Hangar V	Ground	Hangar	29,260		29,260	5000	6	29,260	1,441	21
	Mezzanine	Storage	9,656		9,656	5000	2			
Subtotal			38,916							
				=====			=====			=====
Total Gross Building Area			203,952			Total Spaces Req'd	95		Total Spaces Req'd	96

parking spaces
provided on site plan 97

Notes

1. Parking Analysis based on Marion County Rural Zoning Parking Requirements in 17.118.050 which requires one space per 300 sf primary use plus one space per 5,000 sf of storage, warehouse, or industrial.
2. Study of the adjacent South End Corporate Airport, Van's Aircraft, and Atlantic Aviation as a 34 acre whole and comparing the total square feet of building footprints with the total provided provided existing parking, results in an overall parking of 1 space per 1,441 square feet of building footprint (see Existing SECAP Excel Sheet dated 2024-2-9) . Note that this includes excess parking for Life Flight ambulances that are not in regular use as well as cars parked long term while occupant is away for several days traveling by aircraft.

EXISTING SECAP, VAN'S AND ATLANTIC PARKING SUMMARY (34 ACRE AREA)**9/17/2024**

SECAP	# PARKING SPACES	BUILDING FOOTPRINT	SF/SPACE *
YELLOWGATE LANE (ROAD)	0		
REDGATE (ROAD)	24		
BRAVO	6	6,117	
CHARLIE	0	10,224	
DELTA	0	18,017	
ECHO	2	13,376	
FOXTROT	0	21,438	
GOLF (FUTURE 46,046)	0	46,046	
HOTEL	63	29,826	
INDIA	10	27,381	
JULIET	44	34,408	
KILO	22	49,552	
LIMA N	0	42,912	
LIMA S	0	42,912	
MIKE	3	43,023	
NOVEMBER	4	21,720	
OSCAR	12	9,594	
PAPA	32	22,582	
ROMEO	55	27,417	
TOTAL	277	466,545	1,684
H.D	# PARKING SPACES	BUILDING FOOTPRINT	SF/SPACE *
H.D. AVIATION #1 (VAN'S)	65	56,476	
H.D. #3 (FUTURE 37,060)	33	37,060	
TOTAL	98	93,536	954
LYNX JET CENTER	# PARKING SPACES	BUILDING FOOTPRINT	SF/SPACE *
LYNX JET CENTER	17	4,712	
TOTAL	17	4,712	277

GRAND TOTAL	392	564,793	1,441
--------------------	------------	----------------	--------------

* SF/SPACE = BUILDING FOOTPRINT / # PARKING SPACES



March 5, 2025

Hearings Officer
Marion County
555 Court St NE, Suite 5232
Salem, OR 97301

RE: Potable Water Quality at NMCVH
for Case No. CUCP24-038 HO

Dear Hearings Officer:

This letter provides additional information concerning the available potable water for use in the buildings that are shown in Case No. CUCP24-038 HO for the North Marion County Vertiport-Heliport (NMCVH).

The well water in much of the City of Aurora and Aurora Airport areas has some arsenic in it. As an architect and engineer who provides consulting services to the Aurora Airport Water Control District, in 2014 I was asked to research and prepare a memo concerning the water quality in various wells in the area of the Aurora Airport. This analysis was initiated in part, because the City of Aurora had interest in placing a water tower at the airport, which could provide increased pressure for the City of Aurora water system. The City of Aurora Mayor at that time, suggested that perhaps the Aurora Airport Water Control District water system could be tied into the City of Aurora's water system as part of their project.

The City of Aurora did not pursue the concept of placing a water tower on the Aurora Airport property, so nothing further came of their proposal.

The memo notes that in any case, there are standard filter systems that remove the arsenic from the water and make the water safe for human consumption. The City of Aurora uses filters, and the wells at Aurora Airport uses filters. Such filters are available for municipal water filtering and also private well filtering. The wells on the NMCVH property will also use filters to remove any arsenic detected in the water to safe federal and state drinking water levels and ensure the water from a well or wells on the subject property is safe for human consumption. Therefore, the arsenic does not create any obstacle to the successful development of this project.

Respectfully submitted,

Aron Faegre, AIA, PE

Attachment: Original Memo 1-14-2014

January 14, 2014

Aurora Airport Water Control District
c/o Bruce Bennett
22785 Airport Road NE
Aurora, Oregon 97002

RE: ARSENIC LEVELS IN AIRPORT DRINKING WATER

Businesses at Aurora State Airport are finding significant problems with hazardous arsenic in their potable well water. Some of the wells are having tests significantly over the Environmental Protection Agency's standard of 0.010 mg/l. Other wells are currently somewhat below that standard but may be rising and going above the standard in the future. There are also differences in opinion about what safe levels are, with at least one standard being 0.005 mg/l which would result in more of the wells being out of compliance.

It is recommended that the airport businesses be allowed to connect to the City of Aurora water system, which has arsenic filters and will ensure that safe drinking water is available for all airport businesses in the future. There is not extensive data on arsenic levels in the various airport wells, but an email was sent out to airport businesses with a request for well data on arsenic and the following data was received:

The attached well test data shows that there is a variety of arsenic contamination levels in seven of the wells for which data could be received. It is noted that arsenic levels vary by season or use, and thus this limited data is likely not the worst case for each well.

Water test data is as follows:

1. Aurora Jet Center well, 14357 Keil Road NE, Aurora; May 22, 2013; Test Result 0.0124 mg/l arsenic; EPA limit 0.010 mg/l arsenic; 24% above EPA health hazard limit.
2. Aurora Jet Center well, 14357 Keil Road NE, Aurora; March 30, 2011; Test Result 0.0136 mg/l arsenic; EPA limit 0.010 mg/l arsenic; 36% above EPA health hazard limit.
3. Whiskey Hangar well, 14399 Keil Road NE, Aurora; May 22, 2013; Test Result 0.0082 mg/l arsenic; EPA limit 0.010 mg/l arsenic; 18% below EPA health hazard limit.
4. Van's Aircraft well, 14401 Keil Road NE, Aurora; message from Shiloh Water Systems; Test Result 0.015 mg/l arsenic; EPA limit 0.010 mg/l arsenic; 50% above EPA health hazard limit.
5. Columbia Helicopters well, 14452 Arndt Road NE, Aurora; November 12, 2013; message from Dan Riches at Columbia Helicopters; Test Result 0.008 mg/l arsenic; EPA limit 0.010 mg/l arsenic; 20% below EPA health hazard limit.
6. Wylee Condominium Hangars, 23055 Airport Rd NE, Aurora; November 8, 2013; Test Result 0.0067 mg/l arsenic; EPA limit 0.010 mg/l arsenic; 33% below EPA health hazard limit.
7. Oregon Department of Aviation well, Airport Rd NE, Aurora; November 8, 2013; Test Result 0.002 mg/l arsenic; EPA limit 0.010 mg/l arsenic; 80% below EPA health hazard limit.
8. Aurora Airport Condo Association well, 14338 Stenbock Way, Aurora; September 21, 2012; Test Result 0.0017 mg/l arsenic; EPA limit 0.010 mg/l arsenic; 83% below EPA health hazard limit.

Arsenic in Airport Drinking Water
January 14, 2014
Page 2

This data shows that there is some arsenic in all of these seven airport wells. Some are as much as 50% above the EPA health hazard limit, while others are currently below that limit. This region of Oregon is known for having arsenic in the water, and thus the City of Aurora has invested in a major decontamination system to remove the arsenic from their well water. Given that some of the airport wells are over the limit, it is wise from a health standpoint to initiate plans for safer water for all airport users. Since the City of Aurora water system already has an arsenic decontamination filter system, it will be most efficient to have the airport water in the future come from that system that is already in place.

Testing agencies have stated that the arsenic levels can change between seasons, and these tests are of single days with no significant greater history, so there can be some expectation that these test levels are not worst case tests for each well. The Aurora Jet Center well, for example, was 24% above EPA levels on May 22, 2013 but was 36% above EPA levels two years prior. This demonstrates that there can be significant variability in the arsenic levels in the well water depending on unknown factors - perhaps season or recent amount of use.

Some environmental quality departments support a more restrictive level of arsenic contamination in drinking water than EPA does. For example the State of New Jersey has adopted a health hazard limit at 0.005 mg/l which is 50% of the EPA level (see attached brochure from the New Jersey Department of Environmental Protection). At that safety level five of the seven airport wells would already be considered unacceptable.

A connection of the Aurora Airport Water Control District system to the City of Aurora water system will also allow for increased water capacity for firefighting purposes. The current airport water system has a total tank capacity of 248,000 gallons, which allows for the Oregon Fire Code minimum standard pumping rate of 1500 gallons per minute for 2 hours. The installation of that system was a great improvement over the prior complete lack of any fire protection water at the airport. Hooking up to the City of Aurora system will in the future allow for increasing this fire flow to higher levels such as 3750 gpm for 3 hours which is a more appropriate flow under the standards of the Oregon Fire Code for many of the airport hangars and businesses.

This report has been prepared at the request of the Aurora Airport Water Control District by Aron Faegre, Civil Engineer.

Respectfully submitted,



Aron Faegre, PE

attachments: well test reports, NJDEP arsenic standards

WATERLAB CORP.

ORELAP ID# OR100039

TEST REPORT

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

Shiloh Water Systems
5942 Towne Dr NE
Silverton, OR 97381

SAMPLE INFORMATION

Location: Jet Center

Date Sampled: 05/22/2013

Time Sampled: 1000

Sample Type: Water

Collected by: Mike

CASE NARRATIVE

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

TESTING INFORMATION

Lab #: 20130522-038

Date Received: 05/22/2013

Date Started: 05/22/2013

Date Read: 05/23/2013

Date Reported: 05/28/2013

Time Received: 1352

Time Started: 1615

Time Read: 1645

Received by: MH

Tech: JW

Tech: JW

Reported By: JW

*Chlorine Residual: N/A

Amount of Sample Used: 100 mls

Method Code: SM 20th ED 9223 P/A Colisure ®

TOTAL COLIFORM BACTERIA RESULTS

Analysis shows Total Coliform Bacteria to be:

ABSENT

Absent= Acceptable

Present= Unacceptable

E.COLI COLIFORM BACTERIA RESULTS

Analysis shows E. coli Bacteria to be:

ABSENT

E. coli is a sub-section of Total Coliform and its presence in water indicates that raw sewage is present in the water.

Explanation: When coliform bacteria are present in water, it is considered contaminated and therefore unsafe. Coliform organisms are found normally in discharges from the intestinal tract of man, animals or birds. Their presence in the water, therefore, must be considered as evidence of pollution. The laboratory examination determines the presence or absence of contamination at the time of sampling only. No definite conclusions should be drawn from a single bacterial examination.

* Chlorine Footnote: Chlorine in water will kill coliform bacteria. Presence of chlorine in a water sample should invalidate the test unless the water is from a system that is continuously chlorinated every day the water is in use.

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAC unless otherwise noted. This report shall not be reproduced except in full without written approval of Waterlab Corporation.

Approved by: _____

TEST REPORT

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

TO: Shiloh Water Systems
5942 Towne Dr NE
Silverton, OR 97381

06/14/2013

SHIWAT

PO#:

Collection Information

Date: 05/22/2013
Time: 1000
By: Mike
Lab #: 20130522-039
Location: Jet Center

Lab Receipt Information

05/22/2013
1352
MH

Case Narrative

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Analyte	Method	Acc*	Results	Qual	MRL	Units	EPA Limit	Analysis Date Time	Tech
Healthy Water Package									
pH	EPA 150.1	A	7.42	H		pH units	6.5 - 8.5	05/22/2013 1557	MC
Specific Conductance	SM2510B	A	266.		1.	umhos/cm		05/22/2013	MC
Arsenic	SM3113B	A	0.0124		0.002	mg/l	0.010	05/29/2013	BEM
Chloride	EPA300.0	A	3.54		0.2	mg/l	250	05/23/2013	BEM
Copper	SM3111 B	A	ND		0.1	mg/l	1.0	06/05/2013	BEM
Fluoride	EPA300.0	A	ND		0.2	mg/l	4.0	05/23/2013	BEM
Hardness as CaCO ₃	SM2340C	A	ND		10.	mg/l CaCO ₃	250	06/04/2013	MC

ND- No Detection at @ MRL

SM-"Standard Methods for the Examination of Water & Wastewater", 19th ed

EPA- "Methods for Chemical Analysis for Water and Wastes", USEPA

MRL-"Method Reporting Limit"

* Accreditation

A- Waterlab Corporation, ORELAP 100039

The results relate only to the parameters tested or to the sample as received by the laboratory.

This report shall not be reproduced except in full, without the written approval of Waterlab Corporation.

H = Analysis performed outside of method specified holding time

Approved by: _____

WATERLAB CORP.**TEST REPORT**

2603 - 12th Street, SE
 Salem, OR 97302
 Voice: (503) 363-0473
 FAX: (503) 363-8900

LAB #: 20130522-039

(Cont)

SHIWAT

Page: 2

Analyte	Method	Acc Results	Qual	MRL	Units	EPA Limit	Analysis Date	Tech
Iron	SM3111B	A	ND	0.1	mg/l	0.3	06/03/2013	MC
Lead	SM3113 B	A	ND	0.002	mg/l	0.015	05/24/2013	BEM
Manganese	SM3111B	A	ND	0.01	mg/l	0.05	06/10/2013	MC
Nitrogen, Nitrate	EPA300.0	A	ND	0.2	mg/l N	10	05/23/2013	1825 BEM
Sodium	SM3111B	A	70.6	1.0	mg/l	25	06/11/2013	MC
Sulfate	EPA300.0	A	ND	1.5	mg/l	250	06/11/2013	BEM
Zinc	SM3111 B	A	ND	0.1	mg/l	5.0	06/05/2013	MC

ND- No Detection at @ MRL

SM- "Standard Methods for the Examination of Water & Wastewater", 19th ed

EPA- "Methods for Chemical Analysis for Water and Wastes", USEPA

MRL- "Method Reporting Limit"

* Accreditation

A- Waterlab Corporation. ORELAP 100039

The results relate only to the parameters tested or to the sample as received by the laboratory.

This report shall not be reproduced except in full, without the written approval of Waterlab Corporation.

H = Analysis performed outside of method specified holding time

Approved by: _____

WATERLAB CORP.

Accredited Lab #OR100039

2603 - 12th Street S.E.
Salem, Oregon 97302
(503) 363-0473
FAX (503) 363-8900

Summary of Healthy Water Test Report

In a nutshell, here's what we found and didn't find:

Lab Report #: 20130522-39

Your water's pH indicates:

- ☒ Average water ☐ Alkaline water due to hardness
☐ Acidic water ☐ Alkaline water due to elevated sodium (salt) content

0 ----- 7 ----- 14 pH is a scale from 0 to 14. 7 is considered neutral.
Acidic side Alkaline side EPA Suggested Range for public drinking water is 6.5 to 8.5.

Your water is:

- ☐ Soft water (low in dissolved minerals)
☒ Average well water, dissolved solids due to ____ hardness 5 sodium compounds
☐ High solids well water, ____ hardness ____ sodium compounds
☐ Extremely high solids well water, ____ hardness ____ sodium compounds

	No Detection At Lab Reporting Limit	Measurable Amount Present	Exceeds EPA Drinking Water Standard for Salt-restricted Diets	Exceeds EPA Drinking Water Standards
<u>Arsenic</u>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>
Chloride	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Copper - 1st run	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Copper - after run	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Fluoride	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Hardness	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Iron	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Lead - 1st run	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Lead - after run	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Manganese	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Nitrate-Nitrogen	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<u>Sodium</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sulfate	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Zinc - 1st run	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Zinc - after run	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

See Healthy Water Guide included here for additional information on individual tests.

WATERLAB CORP.

TEST REPORT

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

TO: Shiloh Water Systems
5942 Towne Dr., N. E.
Silverton, OR 97381

04/05/2011

SHIWAT

PO#:

Collection Information

Date: 03/30/2011
Time: 0945
By: David
Lab #: 20110330-041
Location: Jet Center outsidetap

Lab Receipt Information

03/30/2011
1234
RS

Case Narrative

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Analyte	Method	Acc Results	Qual	MRL	Units	EPA Limit	Analysis Date	Tech
Arsenic, Nitrate								
Arsenic	SM3113B	A 0.0136		0.002	mg/l	0.010	04/05/2011	BEM
Nitrogen, Nitrate	EPA300.0	A 0.20		0.2	mg/l N	10	03/31/2011	1252 BEM

ND- No Detection at @ MRL

SM-"Standard Methods for the Examination of Water & Wastewater", 19th ed

EPA- "Methods for Chemical Analysis for Water and Wastes". USEPA

MRL-"Method Reporting Limit"

A- Waterlab Corporation, ORELAP 100039

The results relate only to the parameters tested or to the sample as received by the laboratory

This report shall not be reproduced except in full, without the written approval of Waterlab Corporation.

Approved by: _____

Customer

Page 1 of 1

Shiloh Water Systems, Inc.
Water Quality Analysis

Well #3

Well At UANS
AIRCRAFT

Date Sample Was Taken: _____

Customer Name _____

Address _____

City _____ State _____ Zip _____

Water Source _____

Gallons Per Minute _____

Incoming Pipe Size _____

of People in Family _____

Sample Clarity: _____ Clear

_____ Cloudy

_____ Colored

Odor: _____ Musty

_____ Metallic

_____ Rotten Eggs

Staining: _____ Red

_____ Blue/Green

_____ Black/Brown

Visible Particles: _____ Sand

_____ Silt/Mud

_____ Other

Analysis Results

Hardness 4 gpg

Wastes soap, forms scale, clogs hot water heater and pipes

0-3gpg soft, 3-6gpg moderately hard, 6-9gpg hard water

9+gpg extremely hard (1 gpg = 17.1 ppm)

Iron 1.5 ppm

The E.P.A. recommends under 0.3 ppm. Over 0.3 ppm may cause red staining on plumbing fixtures and clothes.

pH 7

7.0 indicates neutral water, under 7.0 is acid, over 7.0 is alkaline, 6.8 or under is corrosive to fixtures and piping.

Manganese _____ ppm

The E.P.A. recommends under .05 ppm. Over .05 ppm can cause brown/black stains on plumbing fixtures and clothes.

Sulphur _____ ppm

Rotten egg odor, corrodes pipes. Causes blackish stains on plumbing fixtures and clothes.

Total Dissolved Solids 280 ppm

Total of minerals dissolved in water.

Other 10 ppb Arsenic

Recommendations: _____

Shiloh Water Systems, Inc.

5942 Towne Dr. NE -- Silverton, OR 97381

Phone: 503-873-3237 -- Fax: 503-873-3223 -- Toll Free: 1-866-873-1110

Shiloh Water Systems, Inc. Water Quality Analysis

Date Sample Was Taken: _____

Customer Name _____

Address _____

City _____ State _____ Zip _____

well #7
Jet center

Water Source _____
Incoming Pipe Size _____

Gallons Per Minute _____
of People in Family _____

Sample Clarity: _____ Clear
Odor: _____ Musty
Staining: _____ Red
Visible Particles: _____ Sand

_____ Cloudy
_____ Metallic
_____ Blue/Green
_____ Silt/Mud
_____ Colored
_____ Rotten Eggs
_____ Black/Brown
_____ Other

Analysis Results

Hardness 5 gpg

Wastes soap, forms scale, clogs hot water heater and pipes
0-3gpg soft, 3-6gpg moderately hard, 6-9gpg hard water
9+gpg extremely hard (1 gpg = 17.1 ppm)

Iron .5 ppm

The E.P.A recommends under 0.3 ppm. Over 0.3 ppm may cause red staining on plumbing fixtures and clothes.

pH 7

7.0 indicates neutral water, under 7.0 is acid, over 7.0 is alkaline, 6.8 or under is corrosive to fixtures and piping.

Manganese _____ ppm

The E.P.A. recommends under .05 ppm. Over .05 ppm can cause brown/black stains on plumbing fixtures and clothes.

Sulphur _____ ppm

Rotten egg odor, corrodes pipes. Causes blackish stains on plumbing fixtures and clothes.

Total Dissolved Solids 310 ppm

Total of minerals dissolved in water.

Other 10 ppb Arsenic

Recommendations: _____

Shiloh Water Systems, Inc.

5942 Towne Dr. NE -- Silverton, OR 97381

Phone: 503-873-3237 -- Fax: 503-873-3223 -- Toll Free: 1-866-873-1110

Shiloh Water Systems, Inc.

Water Quality Analysis

Well #2

Wiskshy Hangar

Date Sample Was Taken: _____

Customer Name _____

Address _____

City _____ State _____ Zip _____

Water Source _____

Incoming Pipe Size _____

Gallons Per Minute _____

of People in Family _____

Sample Clarity: _____ Clear

_____ Cloudy

_____ Colored

Odor: _____ Musty

_____ Metallic

_____ Rotten Eggs

Staining: _____ Red

_____ Blue/Green

_____ Black/Brown

Visible Particles: _____ Sand

_____ Silt/Mud

_____ Other

Analysis Results

Hardness 5 gpg

Wastes soap, forms scale, clogs hot water heater and pipes

0-3gpg soft, 3-6gpg moderately hard, 6-9gpg hard water

9+gpg extremely hard (1 gpg = 17.1 ppm)

Iron 0.5 ppm

The E.P.A. recommends under 0.3 ppm. Over 0.3 ppm may cause red staining on plumbing fixtures and clothes.

pH 7

7.0 indicates neutral water, under 7.0 is acid, over 7.0 is alkaline, 6.8 or under is corrosive to fixtures and piping.

Manganese _____ ppm

The E.P.A. recommends under .05 ppm. Over .05 ppm can cause brown/black stains on plumbing fixtures and clothes.

Sulphur _____ ppm

Rotten egg odor, corrodes pipes. Causes blackish stains on plumbing fixtures and clothes.

Total Dissolved Solids 310 ppm

Total of minerals dissolved in water.

Other

Arsenic Yes

Recommendations: _____

Shiloh Water Systems, Inc.

5942 Towne Dr. NE -- Silverton, OR 97381

Phone: 503-873-3237 -- Fax: 503-873-3223 -- Toll Free: 1-866-873-1110

Shiloh Water Systems, Inc.

Water Quality Analysis

1341

Date Sample Was Taken: _____

Customer Name Whiskey Hanger Well #2

Address _____

City _____ State _____ Zip _____

Water Source _____

Gallons Per Minute _____

Incoming Pipe Size _____

of People in Family _____

Sample Clarity: _____ Clear

_____ Cloudy

_____ Colored

Odor: _____ Musty

_____ Metallic

_____ Rotten Eggs

Staining: _____ Red

_____ Blue/Green

_____ Black/Brown

Visible Particles: _____ Sand

_____ Silt/Mud

_____ Other

Analysis Results

Hardness _____ gpg Wastes soap, forms scale, clogs hot water heater and pipes

0-3gpg soft, 3-6gpg moderately hard, 6-9gpg hard water

9+gpg extremely hard (1 gpg = 17.1 ppm)

Iron _____ ppm

The E.P.A recommends under 0.3 ppm. Over 0.3 ppm may cause red staining on plumbing fixtures and clothes.

pH _____

7.0 indicates neutral water, under 7.0 is acid, over 7.0 is alkaline, 6.8 or under is corrosive to fixtures and piping.

Manganese _____ ppm

The E.P.A. recommends under .05 ppm. Over .05 ppm can cause brown/black stains on plumbing fixtures and clothes.

Sulphur _____ ppm

Rotten egg odor, corrodes pipes. Causes blackish stains on plumbing fixtures and clothes.

Total Dissolved Solids _____ ppm

Total of minerals dissolved in water.

Other 10 ppb Arsenic

Recommendations: _____

Shiloh Water Systems, Inc.

5942 Towne Dr. NE -- Silverton, OR 97381

Phone: 503-873-3237 – Fax: 503-873-3223 – Toll Free: 1-866-873-1110

Shiloh Water Systems, Inc. Water Quality Analysis

Date Sample Was Taken: _____

Customer Name vans Aircraft Well #3

Address _____

City _____ State _____ Zip _____

Water Source _____

Gallons Per Minute _____

Incoming Pipe Size _____

of People in Family _____

Sample Clarity: _____ Clear

_____ Cloudy _____ Colored

Odor: _____ Musty

_____ Metallic _____ Rotten Eggs

Staining: _____ Red

_____ Blue/Green _____ Black/Brown

Visible Particles: _____ Sand

_____ Silt/Mud _____ Other

Analysis Results

Hardness _____ gpg Wastes soap, forms scale, clogs hot water heater and pipes
0-3gpg soft, 3-6gpg moderately hard, 6-9gpg hard water
9+gpg extremely hard (1 gpg = 17.1 ppm)

Iron _____ ppm The E.P.A recommends under 0.3 ppm. Over 0.3 ppm may cause
red staining on plumbing fixtures and clothes.

pH _____ 7.0 indicates neutral water, under 7.0 is acid, over 7.0 is alkaline,
6.8 or under is corrosive to fixtures and piping.

Manganese _____ ppm The E.P.A. recommends under .05 ppm. Over .05 ppm can cause
brown/black stains on plumbing fixtures and clothes.

Sulphur _____ ppm Rotten egg odor, corrodes pipes. Causes blackish stains on
plumbing fixtures and clothes.

Total Dissolved Solids _____ ppm Total of minerals dissolved in water.

Other 15 ppb Arsenic

Recommendations: _____

Shiloh Water Systems, Inc.

5942 Towne Dr. NE – Silverton, OR 97381

Phone: 503-873-3237 – Fax: 503-873-3223 – Toll Free: 1-866-873-1110

Shiloh Water Systems, Inc. Water Quality Analysis

Date Sample Was Taken: _____

Customer Name Jet Center Well #2

Address _____

City _____ State _____ Zip _____

Water Source _____

Gallons Per Minute _____

Incoming Pipe Size _____

of People in Family _____

Sample Clarity: _____ Clear

_____ Cloudy

_____ Colored

Odor: _____ Musty

_____ Metallic

_____ Rotten Eggs

Staining: _____ Red

_____ Blue/Green

_____ Black/Brown

Visible Particles: _____ Sand

_____ Silt/Mud

_____ Other

Analysis Results

Hardness _____ gpg

Wastes soap, forms scale, clogs hot water heater and pipes
0-3gpg soft, 3-6gpg moderately hard, 6-9gpg hard water
9+gpg extremely hard (1 gpg = 17.1 ppm)

Iron _____ ppm

The E.P.A recommends under 0.3 ppm. Over 0.3 ppm may cause
red staining on plumbing fixtures and clothes.

pH _____

7.0 indicates neutral water, under 7.0 is acid, over 7.0 is alkaline,
6.8 or under is corrosive to fixtures and piping.

Manganese _____ ppm

The E.P.A. recommends under .05 ppm. Over .05 ppm can cause
brown/black stains on plumbing fixtures and clothes.

Sulphur _____ ppm

Rotten egg odor, corrodes pipes. Causes blackish stains on
plumbing fixtures and clothes.

Total Dissolved Solids _____ ppm

Total of minerals dissolved in water.

Other 10ppb Arsenic

Recommendations: _____

Shiloh Water Systems, Inc.

5942 Towne Dr. NE -- Silverton, OR 97381

Phone: 503-873-3237 – Fax: 503-873-3223 – Toll Free: 1-866-873-1110

WATERLAB CORP.

ORELAP ID# OR100039

TEST REPORT

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

Shiloh Water Systems
5942 Towne Dr NE
Silverton, OR 97381

SAMPLE INFORMATION

Location: 14399 Whiskey - Hanger outside tap
Date Sampled: 05/22/2013 Sample Type: Water
Time Sampled: 1100 Collected by: Mike

CASE NARRATIVE

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

TESTING INFORMATION

Lab #: 20130522-040

Date Received:	05/22/2013	Time Received:	1352	Received by:	MH
Date Started:	05/22/2013	Time Started:	1615	Tech:	JW
Date Read:	05/23/2013	Time Read:	1645	Tech:	JW
Date Reported:	05/28/2013			Reported By:	JW

*Chlorine Residual: N/A

Amount of Sample Used: 100 mls
Method Code: SM 20th ED 9223 P/A Colisure ®

TOTAL COLIFORM BACTERIA RESULTS

Analysis shows Total Coliform Bacteria to be: **ABSENT**
Absent= Acceptable Present= Unacceptable

E.COLI COLIFORM BACTERIA RESULTS

Analysis shows E. coli Bacteria to be: **ABSENT**
E. coli is a sub-section of Total Coliform and its presence in water indicates that raw sewage is present in the water.

Explanation: When coliform bacteria are present in water, it is considered contaminated and therefore unsafe. Coliform organisms are found normally in discharges from the intestinal tract of man, animals or birds. Their presence in the water, therefore, must be considered as evidence of pollution. The laboratory examination determines the presence or absence of contamination at the time of sampling only. No definite conclusions should be drawn from a single bacterial examination.

* Chlorine Footnote: Chlorine in water will kill coliform bacteria. Presence of chlorine in a water sample should invalidate the test unless the water is from a system that is continuously chlorinated every day the water is in use.

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAC unless otherwise noted. This report shall not be reproduced except in full without written approval of Waterlab Corporation.

Approved by: _____

WATERLAB CORP.**TEST REPORT**2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900TO: Shiloh Water Systems
5942 Towne Dr NE
Silverton, OR 97381

06/14/2013

SHIWAT

PO#:

Collection InformationDate: 05/22/2013
Time: 1100
By: Mike
Lab #: 20130522-041
Location: 14399 Whiskey - Hanger outside tap**Lab Receipt Information**05/22/2013
1352
MH**Case Narrative**

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Analyte	Method	Acc*	Results	Qual	MRL	Units	EPA Limit	Analysis Date Time	Tech
Healthy Water Package									
pH	EPA 150.1	A	7.50	H		pH units	6.5 - 8.5	05/22/2013	1600 MC
Specific Conductance	SM2510B	A	248		1.	umhos/cm		05/22/2013	MC
Arsenic	SM3113B	A	0.0082		0.002	mg/l	0.010	05/29/2013	BEM
Chloride	EPA300.0	A	1.59		0.2	mg/l	250	05/23/2013	BEM
Copper	SM3111 B	A	ND		0.1	mg/l	1.0	06/05/2013	BEM
Fluoride	EPA300.0	A	ND		0.2	mg/l	4.0	05/23/2013	BEM
Hardness as CaCO3	SM2340C	A	118		10.	mg/l CaCO3	250	06/04/2013	MC

ND- No Detection at @ MRL

SM-"Standard Methods for the Examination of Water & Wastewater", 19th ed

EPA- "Methods for Chemical Analysis for Water and Wastes", USEPA

MRL-"Method Reporting Limit"

* Accreditation

A- Waterlab Corporation, ORELAP 100039

The results relate only to the parameters tested or to the sample as received by the laboratory.

This report shall not be reproduced except in full, without the written approval of Waterlab Corporation.

H = Analysis performed outside of method specified holding time

Approved by: _____

WATERLAB CORP.**TEST REPORT**

2603 - 12th Street, SE
 Salem, OR 97302
 Voice: (503) 363-0473
 FAX: (503) 363-8900

LAB #: 20130522-041

(Cont)

SHIWAT

Page: 2

Analyte	Method	Acc	Results	Qual	MRL	Units	EPA Limit	Analysis Date	Tech
Iron	SM3111B	A	ND		0.1	mg/l	0.3	05/28/2013	MC
Lead	SM3113 B	A	ND		0.002	mg/l	0.015	05/24/2013	BEM
Manganese	SM3111B	A	ND		0.01	mg/l	0.05	05/31/2013	MC
Nitrogen, Nitrate	EPA300.0	A	ND		0.2	mg/l N	10.	05/23/2013	1855 BEM
Sodium	SM3111B	A	8.08		1.0	mg/l	25.	05/31/2013	MC
Sulfate	EPA300.0	A	3.63		1.5	mg/l	250	05/23/2013	BEM
Zinc	SM3111 B	A	ND		0.1	mg/l	5.0	06/05/2013	MC

ND- No Detection at @ MRL

SM-"Standard Methods for the Examination of Water & Wastewater", 19th ed

EPA- "Methods for Chemical Analysis for Water and Wastes", USEPA

MRL-"Method Reporting Limit"

* Accreditation

A- Waterlab Corporation, ORELAP 100039

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 the laboratory.

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 Waterlab Corporation.

H = Analysis performed outside of method specified holding time

Approved by: _____

Page 2 of 2

WATERLAB CORP.

Accredited Lab #OR100039

2603 - 12th Street S.E.
Salem, Oregon 97302
(503) 363-0473
FAX (503) 363-8900**Summary of Healthy Water Test Report****In a nutshell, here's what we found and didn't find:**Lab Report #: 20130522-41**Your water's pH indicates:**

- ☒ Average water ☐ Alkaline water due to hardness
☐ Acidic water ☐ Alkaline water due to elevated sodium (salt) content

0 ----- 7 ----- 14 pH is a scale from 0 to 14. 7 is considered neutral.
 Acidic side Alkaline side EPA Suggested Range for public drinking water is 6.5 to 8.5.

Your water is:

- ☐ Soft water (low in dissolved minerals)
☒ Average well water, dissolved solids due to X hardness _____ sodium compounds
☐ High solids well water, _____ hardness _____ sodium compounds
☐ Extremely high solids well water, _____ hardness _____ sodium compounds

	No Detection At Lab Reporting Limit	Measurable Amount Present	Exceeds EPA Drinking Water Standard for Salt-restricted Diets	Exceeds EPA Drinking Water Standards
<u>Arsenic</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Chloride	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Copper - 1st run	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Copper - after run	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Fluoride	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Hardness	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Iron	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Lead - 1st run	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Lead - after run	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Manganese	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Nitrate-Nitrogen	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Sodium	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sulfate	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Zinc - 1st run	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Zinc - after run	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

See Healthy Water Guide included here for additional information on individual tests.

TEST REPORT

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

TO: Shiloh Water Systems
5942 Towne Dr NE
Silverton, OR 97381

11/20/2013

SHIWAT

PO#:

Collection Information

Date: 11/08/2013
Time: 1500
By: ML
Lab #: 20131108-014
Location: 23055 Airport Rd NE os tap

Lab Receipt Information

11/08/2013
1540
JW

Case Narrative

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Analyte	Method	Acc*	Results	Qual	MRL	Units	EPA Limit	Analysis	
								Date Time	Tech
Arsenic, Nitrate									
Arsenic	SM3113B	A	0.0057		0.002	mg/l	0.010	11/19/2013	BEM
Nitrogen, Nitrate	EPA300.0	A	0.232		0.2	mg/l N	10.	11/08/2013	1942 BEM

ND- No Detection at @ MRL

SM-"Standard Methods for the Examination of Water & Wastewater", 19th ed

EPA- "Methods for Chemical Analysis for Water and Wastes", USEPA

MRL-"Method Reporting Limit"

* Accreditation

A- Waterlab Corporation, ORELAP 100039

The results relate only to the parameters tested or to the sample as received by the laboratory.

This report shall not be reproduced except in full, without the written approval of Waterlab Corporation.

Approved by: _____



Customer

Page 1 of 1

WATERLAB CORP.

ORELAP ID# OR100039

TEST REPORT

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

Shiloh Water Systems
5942 Towne Dr NE
Silverton, OR 97381

SAMPLE INFORMATION

Location: 23055 Airport Rd NE outside tap
Date Sampled: 11/08/2013 Sample Type: Water
Time Sampled: 1500 Collected by: ML

CASE NARRATIVE

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

TESTING INFORMATION

Lab #: 20131108-013

Date Received:	11/08/2013	Time Received:	1540	Received by:	JW
Date Started:	11/08/2013	Time Started:	1620	Tech:	JW
Date Read:	11/09/2013	Time Read:	1730	Tech:	BEM
Date Reported:	11/13/2013			Reported By:	MH

*Chlorine Residual: N/A

Amount of Sample Used: 100 ml

Method Code: SM 20th ED 9223 P/A Colisure ®

TOTAL COLIFORM BACTERIA RESULTS

Analysis shows Total Coliform Bacteria to be:	ABSENT
Absent= Acceptable	Present= Unacceptable

E. COLI COLIFORM BACTERIA RESULTS

Analysis shows E. coli Bacteria to be:	ABSENT
E. coli is a sub-section of Total Coliform and its presence in water indicates that raw sewage is present in the water.	

Explanation: When coliform bacteria are present in water, it is considered contaminated and therefore unsafe. Coliform organisms are found normally in discharges from the intestinal tract of man, animals or birds. Their presence in the water, therefore, must be considered as evidence of pollution. The laboratory examination determines the presence or absence of contamination at the time of sampling only. No definite conclusions should be drawn from a single bacterial examination.

* Chlorine Footnote: Chlorine in water will kill coliform bacteria. Presence of chlorine in a water sample should invalidate the test unless the water is from a system that is continuously chlorinated every day the water is in use.

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAC unless otherwise noted. This report shall not be reproduced except in full without written approval of Waterlab Corporation.

Approved by: _____

Customer

WATERLAB CORP.

TEST REPORT

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

PWS ID#: 4190191 Source ID: EP-A Source Name: EP for WELL

Oregon Department of Aviation
3040 25th St. SE
Salem, OR 97310

Sample Identification

Sampled at: 1A Sampled by: John
Date Collected: 11/08/2013 Time Collected: 0957
Date Received: 11/08/2013 Time Received: 1525

Sample Composition:

Lab Sample ID#: 20131108-010

Case Narrative

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Analyte	Code	MCL mg/l	Analysis mg/l	MRL	Method	Analyst	Date Analyzed	ORELAP ID#
Inorganics-Arsenic,Nitrate								
Arsenic	A	0.010	0.0020	0.002	SM3113B	BEM	11/21/13	OR100039
Nitrogen, Nitrate	A	10.	ND	0.2	EPA300.0	BEM	11/08/13 1740	OR100039

ND-No Detection @ MRL

MCL-Maximum Contaminant Level

SM-"Standard Methods for the Examination of Water and Wastewater", 19th ed

EPA-"Methods for Chemical Analysis for Water and Wastes", USEPA

MRL-"Method Reporting Limit"

A - Waterlab Corporation, ORELAP 100039

The results relate only to the parameters tested or to the sample as received by the laboratory. This report shall not be reproduced except in full, without the written approval of Waterlab Corporation.

DATE REPORTED: 11/25/2013

Approved by: 

Customer

Page 1 of 1

WATERLAB CORP.

TEST REPORT

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

PWS ID#: 4190191 Source ID: EP-A Source Name: EP for WELL

Oregon Department of Aviation
3040 25th St. SE
Salem, OR 97310

Sample Identification

Sampled at: 2 B Sampled by: John
Date Collected: 11/08/2013 Time Collected: 0952
Date Received: 11/08/2013 Time Received: 1525

Sample Composition:

Lab Sample ID#: 20131108-011

Case Narrative

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Analyte	Code	MCL mg/l	Analysis mg/l	MRL	Method	Analyst	Date Analyzed	ORELAP ID#
Inorganics-Arsenic,Nitrate								OR100039
Arsenic	A	0.010	ND	0.002	SM3113B	BEM	11/21/13	OR100039
Nitrogen, Nitrate	A	10.	ND	0.2	EPA300.0	BEM	11/08/13 1811	OR100039

ND-No Detection @ MRL

MCL-Maximum Contaminant Level

SM-"Standard Methods for the Examination of Water and Wastewater", 19th ed

EPA-"Methods for Chemical Analysis for Water and Wastes", USEPA

MRL-"Method Reporting Limit"

A - Waterlab Corporation, ORELAP 100039

The results relate only to the parameters tested or to the sample as received by the laboratory. This report shall not be reproduced except in full, without the written approval of Waterlab Corporation.

DATE REPORTED: 11/25/2013

Approved by: 

Customer

Page 1 of 1

WATERLAB CORP.

TEST REPORT

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

PWS ID#: 4190191 Source ID: EP-A Source Name: EP for WELL

Oregon Department of Aviation
3040 25th St. SE
Salem, OR 97310

Copy Sent to:
DHS - 3040 25th St. SE
Salem, OR 97310

Sample Identification

Sampled at: 3 B Sampled by: John
Date Collected: 11/08/2013 Time Collected: 0949
Date Received: 11/08/2013 Time Received: 1525

Sample Composition:

Lab Sample ID#: 20131108-012

Case Narrative

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Analyte	Code	MCL mg/l	Analysis mg/l	MRL	Method	Analyst	Date Analyzed	ORELAP ID#
Inorganics-Arsenic,Nitrate								OR100039
Arsenic	A	0.010	0.0021	0.002	SM3113B	BEM	11/25/13	OR100039
Nitrogen, Nitrate	A	10.	ND	0.2	EPA300.0	BEM	11/08/13 1911	OR100039

ND-No Detection @ MRL

MCL-Maximum Contaminant Level

SM-"Standard Methods for the Examination of Water and Wastewater", 19th ed

EPA-"Methods for Chemical Analysis for Water and Wastes", USEPA

MRL-"Method Reporting Limit"

A - Waterlab Corporation, ORELAP 100039

The results relate only to the parameters tested or to the sample as received by the laboratory. This report shall not be reproduced except in full, without the written approval of Waterlab Corporation.

DATE REPORTED: 11/25/2013

Approved by: 

Customer



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859
Tax I.D. 62-0814289
Est. 1970

REPORT OF ANALYSIS

September 29, 2012

Tom Newman
AddyLab, LLC
2517 East Evergreen Blvd.
Vancouver, WA 98661

ESC Sample # : L596672-01

Date Received : September 21, 2012
Description : Aurora Airport Condo

Site ID :

Sample ID : AURORA AIRPORT CONDO ASSCC

Project : 12AL1378

Collected By :
Collection Date : 09/19/12 13:30

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
Arsenic	0.0017	0.0010	mg/l	0.010	200.8	09/28/12 1731	LAT	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/29/12 22:21 Printed: 09/29/12 22:21

Addy Lab		COLIFORM BACTERIA ANALYSIS	
Addy Lab, LLC, 2517 E. Evergreen Blvd., Vancouver, WA 98686-7500-0035			
Date Sample Collected: <u>9/19/2012</u> Time Sample Collected: <u>1:30 PM</u> County: <u>WALLA WASH</u>		Type of Water System (check only one box) <input type="checkbox"/> Group A <input type="checkbox"/> Group B <input checked="" type="checkbox"/> Other	
Group A and Group B Systems - Provide from Water Facilities Inventory (WFI): ID# _____ System Name: _____		1. Routine Distribution Sample Chlorinated: Yes _____ No _____ Chlorine Residual: Total _____ Free _____	
3. Raw Water Source Sample <input type="checkbox"/> E. coli - GWR source sample <input type="checkbox"/> Fecal - Surface, GW, some springs <input type="checkbox"/> Other _____ Note: please use product label number for WFI		2. Repeat Sample (after unsat. routine) <input type="checkbox"/> Distribution System <input type="checkbox"/> Source Groundwater Rule (GWR) (Population of 1,000 or less) Unsatisfactory/routine lab number: _____ Unsatisfactory/routine collect date: _____ Chlorinated: Yes _____ No _____ Chlorine Residual: Total _____ Free _____	
4. Sample Collected for Information Only Investigative: _____ Construction/Repairs: _____ Other: _____ LAB USE ONLY: DRINKING WATER RESULTS LAB USE ONLY			
Contact Person: <u>Wm A CORN</u> Cell Phone: <u>5097707199</u> Fax: () _____ E-mail: <u>206955094</u>		<input type="checkbox"/> Unsatisfactory: Total Coliform Present and <input type="checkbox"/> E. coli present <input type="checkbox"/> E. coli absent <input type="checkbox"/> Fecal coliform present <input type="checkbox"/> Fecal coliform absent Replacement Sample Required: <input type="checkbox"/> Sample too old (>30 hours) <input type="checkbox"/> TNTC <input type="checkbox"/> _____ <input type="checkbox"/> Improper Container <input type="checkbox"/> Turbid culture	
SAMPLE INFORMATION Sample collected by (name): _____ Specific location where sample collected (address or site): <u>ALPENA AIR PARK</u> Special instructions or comments: <u>cords</u>		Bacterial Density Result: Plate Count _____ jml. E. coli _____ j100ml. Total Coliform _____ j100ml. Fecal Coliform _____ j100ml. Method Code: _____ MICR: _____ Date Analyzed: <u>9/19/12</u> Date Reported: <u>9/20/12</u> Sample Number (DOH number plus lab code): <u>14406753</u> Lab Use Only: j40 j40 j40 <u>LABORATORY RECEIVED 12-AL1378</u>	

Send results to: (Print full name, address and zip code or Email Address)

DOH form 253-200 (revised 5-12)

2517 E. Evergreen Blvd.
Vancouver, WA. 98661

AddyLab

Phone: 360-750-0055
Fax: 360-750-0057
Email: info@addylab.com

CHAIN OF CUSTODY REPORT

REF# 12AL1378

CLIENT / SYSTEM NAME: <u>Aurora Airport Condo Assoc</u>		INVOICE TO:	
REPORT TO: ADDRESS OR EMAIL <u>William G. ...</u> <u>8211 SE Luster Pt. Dr., Vancouver, WA 98664</u>		COUNTY: <u>Mason</u> PO NUMBER:	
PHONE: <u>360-895-5014</u> FAX:		REQUESTED ANALYSES	
PROJECT NAME: <u>Aurora Airport Condo</u>			
PROJECT NUMBER: <u>12AL1378</u>			
SAMPLED BY:			
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	Asmic	Bud
1. <u>Aurora Airport</u>	<u>9/19/12 1330</u>	X	X
2. <u>Condo Assoc</u>			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Compliance: WA OR System / PWS ID #: DOH Source / Source ID #: Group (WA Only): A B			
Source Type: Surface Well / Ground Water Well Field Spring Purchased			
Sample Taken: Before Treatment After Treatment No Treatment			
RELINQUISHED BY	COMPANY	DATE	TIME
<u>William G. ...</u>			
<u>Committee Member</u>	<u>AL</u>		
RECEIVED BY	COMPANY	DATE	TIME
<u>William G. ...</u>		<u>9/19/12</u>	<u>1430</u>
			TEMP: <u>AL</u>
			PAGE 1 OF 1
			<u>60627</u> COC REV 12/11

TURNAROUND REQUEST in Business Days*

Organic & Inorganic Analyzes

10. 7. 5. 4. 3. 2. 1. <1

STD.

Petroleum Hydrocarbon Analyzes

5. 4. 3. 2. 1. <1

STD.

Please Specify

OTHER

*Turnaround Request less than standard may incur Rush Charges.

MATRIX (W.S.O) # OF CONT. SAMPLE LOCATION / COMMENTS

DW Aurora Airport
Condo Assoc

AddyLab, LLC
2517 E. Evergreen Blvd.
Vancouver, WA. 98661



Phone: 360-750-0055
Fax: 360-750-0057
Email: reports@addylab.com

October 2, 2012

William Corn
8211 S.E. Lieser Pt. Dr.
Vancouver, WA 98664

Dear Mr. Corn:

Enclosed is the laboratory report for the Aurora Airport Condo Assoc. water sample analyzed for arsenic. Arsenic was detected at 0.0017 mg/L which is the same as 1.7 parts per billion (ppb). As such, the result is less than the EPA limit for arsenic of 10 ppb in drinking water. All results are intended to be considered in their entirety and AddyLab, LLC is not responsible for use of less than the complete report. Results apply only to the samples submitted to the laboratory for analysis.

If you have any questions, please call me. The reference number for this analysis is 12AL1378. Quality control data is available upon request. Thank you for your business.

Sincerely,



Thomas Newman
Quality Manager



Office of Science

Office of Science Home



A Homeowner's Guide to Arsenic in Drinking Water



Prepared by the Division of Science, Research and Technology and the
Bureau of Safe Drinking Water

- [What is Arsenic?](#)
- [How Does Arsenic Get into Ground Water?](#)
- [What are the health risks associated with ingesting arsenic in drinking water?](#)
- [What is the drinking water standard for arsenic?](#)
- [Who should test?](#)
- [How can I find out if arsenic is in my drinking water?](#)
- [Should I continue to use my water if arsenic is found?](#)
 - For drinking
 - For bathing and other uses
- [How can I reduce arsenic levels in my water?](#)
- [Where can I go for more information?](#)

What is Arsenic?

Arsenic (As) is a naturally-occurring element in the earth's crust, and traces of arsenic can be found throughout the environment. Arsenic in soil may originate naturally, and past human activities may have added to these levels in some areas. Historically, the heaviest use of arsenic in this country has been as a pesticide. The current predominant use of arsenic is as a wood preservative. In ground water, arsenic occurs primarily in two forms, As+3 (arsenite) and As+5 (arsenate). Organic arsenicals are not known to occur at significant levels in ground water. Arsenic may change chemical form in the environment, but it does not degrade.

How Does Arsenic Get into Ground Water?

Inorganic arsenic exists naturally at various levels in all geologic formations in the state. In some of these formations, arsenic is relatively immobile despite being present at high concentrations. In other formations, the chemical and physical properties of the geologic material may enable the arsenic to become mobile. Such conditions exist in rocks formed from organic-rich, ancient lake beds in a group of geologic formations in the Piedmont Physiographic Province of the state, shown as the shaded area on the map. Results from testing conducted by the New Jersey Geological Survey indicate that elevated levels of arsenic exist in some aquifers of the Piedmont Province where arsenic has been detected at levels above 5 parts per billion (ppb), or µg/L (micrograms per liter). Levels as high as 60-80 ppb have been detected in drinking water in this area.

Further, private well testing conducted by the South Branch Watershed Association with the Raritan and Readington Township Environmental Commissions and NJDEP in Hunterdon County show arsenic levels above 5 ppb in 49 out of 238 wells, or 20%, with the highest concentration being 35 ppb. Beginning in September 2002, all private wells were required to test for arsenic if they were located in the 10 counties located in the Piedmont Region of the state. Of the 1,928 wells

sampled for arsenic between September 2002 and March 2003, 72 wells (3.7%) exceeded the federal drinking water standard of 10 ppb with the highest level reported at 216 ppb (data on levels above 5 ppb, the NJ arsenic MCL, have not been publicly reported). Arsenic may reach ground water from human activities. The primary use of arsenic, historically, has been as an ingredient in pesticides. Before synthetic organic pesticides were available, arsenic-based pesticides were widely used throughout the state to combat insects on a variety of crops. Lead and calcium arsenates were the forms used most commonly, although there were additional types of arsenical pesticides, including organic arsenicals. Although arsenic is not considered to be highly mobile, certain factors, such as the use of fertilizers, can mobilize it and enable it to reach ground water. Thus, arsenic present in an aquifer may be due to natural formations, past use of arsenical pesticides or both.

What are the health risks associated with ingesting arsenic in drinking water?

Arsenic is one of a relatively small number of chemicals that has been classified by USEPA as a known human carcinogen, based on human epidemiological data. The carcinogenicity (or cancer-causing characteristics) of arsenic is difficult to study because it does not consistently induce cancer in laboratory animals, yet it is a known human carcinogen. Unlike most other carcinogens of environmental concern, arsenic does not induce cancer in the animal models in which it has been tested, perhaps due to differences in metabolism between the test animals and humans. Quantitative estimates of risks of arsenic in drinking water come from human epidemiological studies, rather than studies in laboratory animals. The exposures to arsenic in these individuals are not controlled, as in laboratory studies, but must be estimated from information on drinking water arsenic levels and water consumption data in the populations of interest.

Ingestion of large amounts of inorganic arsenic is associated with increased risk of several types of cancer in humans including skin, lung, liver, kidney and urinary bladder. The evidence for cancers comes from studies in Taiwan, Bangladesh, Chile and Argentina where human populations were exposed to very high levels of naturally-occurring inorganic arsenic in drinking water.

The National Academy of Sciences (2001) has estimated, based on lung and bladder cancer data, that the additional lifetime cancer risk associated with drinking water that contains 5 µg/L of arsenic is about 2 in 1000. This means that if 1000 people were to consume two liters of this water per day for 70 years, we would expect to see no more than 2 additional cancers in the 1000 people exposed over a lifetime.

Other potential effects of ingestion of elevated arsenic include gastrointestinal ailments, such as diarrhea and cramping, thickening and/or discoloration of the skin, increased risk of diabetes and cardiovascular impacts. Only a small amount of arsenic is found in breast milk even when mothers have ingested elevated levels of arsenic in their diet.

What is the drinking water standard for arsenic?

The Department of Environmental Protection (NJDEP adopted a new maximum contaminant level (MCL) of 5 µg/L which becomes effective on January 23, 2006 that applies to all New Jersey drinking water supplies (private and public water supplies). New Jersey now has the most protective arsenic drinking water standard in the nation.

New Jersey requires monitoring for arsenic at more than 600 public community water systems and 900 non-transient, non-community systems, which combined serve around 85 percent of the state's population. Based on past data, NJDEP predicts approximately 34 community and 101 non-community systems may have arsenic levels exceeding the new 5 µg/L standard. In addition, the new standard also would apply to private well owners regulated under New Jersey's Private Well Testing Act, requiring notification of consumers about arsenic concentrations during a real estate transaction and when renting property.

Who should test?

If your drinking water comes from a public community water supply (i.e., you get a water bill), your water supplier is required by law to test it to ensure that it meets the MCL for arsenic. In this case, you do not need to test your water. You can get the most recent test results for your water system by contacting your water supplier or the NJDEP's Bureau of Safe Drinking Water at .

There are no federal or state requirements for private well owners to test their well water for arsenic, although the state does require testing for various contaminants, which may or may not include arsenic, during real estate transfers under the Private Well Testing Act (www.state.nj.us/dep/pwta). Given the elevated levels of arsenic that have been found in ground water in certain parts of the state and the lower MCL for arsenic in NJ, the NJDEP recommends that private well owners who live in the Piedmont Physiographic Province test their well water for arsenic. See the map on the first page of this guide to find out if your home is in this area. Arsenic has been found in the water from some wells in other parts of the state, but not at the frequency or concentrations found in the Piedmont. Additional study is needed in those other areas of the state. Anyone who is concerned about possible arsenic contamination of their well water should test.

How can I find out if arsenic is in my drinking water?

Arsenic in drinking water is odorless, tasteless and colorless. The only way to tell if arsenic is present is to test for it. If you decide to test your well, the DEP recommends that you use a laboratory that is DEP-certified to conduct low level arsenic analyses. There are a number of commercial labs in NJ and other states that can measure arsenic as low as 1-2 µg/L in drinking water samples. Additional laboratories in the state are NJDEP-certified to conduct arsenic tests using other

analytical techniques that measure arsenic from above 2 µg/L. You can call NJDEP's Office of Quality Assurance at for more information on laboratories certified to test for arsenic in drinking water. Arsenic testing in drinking water generally costs less than \$50 per sample. The laboratory will instruct you as to how to collect the water sample, or they will collect it themselves.

It is recommended that you conduct two tests to confirm the concentrations. Even if the initial test is low, it is useful to conduct the second test to confirm the results.

Should I continue to use my water if arsenic is found?

For drinking?

If arsenic is detected above the new MCL of 5 µg/L, do not use it for drinking, cooking, mixing baby formula, or in other consumptive ways. It is recommended that methods of arsenic removal be explored in these instances.

At this time, NJDEP recommends arsenic removal for residences whose well water contains arsenic above 5 µg/L. Any corrective action on water with arsenic levels at or below 5 µg/L is considered a personal decision at this time.

Do not boil your water as a method of treatment. This will result in increased arsenic concentrations in your water. Water evaporates but arsenic does not, so boiling results in a higher concentration of arsenic in your water.

For bathing and other uses?

Arsenic does not evaporate readily from drinking water. Therefore, even at relatively high levels, arsenic does not pose an inhalation risk from drinking water. At the arsenic levels found in NJ ground water, exposure through skin absorption and inhalation are not considered to be significant. Showering, bathing and other uses, therefore, do not need to stop if arsenic levels are elevated.

How can I reduce arsenic levels in my water?

If you choose to reduce the arsenic concentration in your drinking water, there are several short-term and long-term solutions. Purchasing bottled water for drinking and cooking is a viable short-term solution until a more permanent one is established.

If your arsenic levels are above 5 µg/L, connection to a public water system may be your best option, if possible. However, in many areas of the state, it is not possible or cost-effective. Well replacement may be an option, but, unless the local geology and sources of arsenic are fully understood, deepening your existing well or drilling a new one may not necessarily provide better quality water. In cases where connection to a community water system or installation of a new well are not possible, water treatment systems can be installed. There are two types that can be used for arsenic removal:

- 1) point-of-entry treatment (POET) systems treat the water for the entire household; and
- 2) point-of-use (POU) systems treat the water at the kitchen tap.

A granular ferric adsorption system is the preferred treatment technology. This system effectively removes arsenic from water, it is easy to operate and maintain, and the arsenic is not returned to the environment via regeneration.

For a family of three, with typical water use, a granular ferric POET system can operate with minimal maintenance for two to three years, depending on the arsenic concentration. Based on a NJDEP cost survey, the average cost of installing this type of system is approximately \$3,000 and the annual cost of maintaining it is estimated at to be about \$350.

Another option is a granular ferric POU cartridge system that removes arsenic from a single tap in the home, usually at the kitchen sink. The cartridges contain the same media as the whole-house system. These systems typically produce two quarts per minute and are used to provide treated water for drinking and cooking only. Cartridges are typically changed once per year. Based on a NJDEP cost survey, the average cost of installing this system is \$400 and the annual cost of maintaining it is estimated at \$120.

Other technologies to remove arsenic from water include anion exchange and reverse osmosis. Homeowners should work with their local health officers to determine which system is best for removing arsenic, given the geology, water chemistry and use of the water.

For further information on removal units, contact your local health officer and/or a water treatment company specializing in residential water treatment to determine which type works best in your area. Also, you should find out if a local health department permit is required. If you install a system, be sure to conduct another arsenic test after the water has been treated to verify that the system is working effectively to reduce arsenic to an acceptable level.

Where can I go for more information?

If you have any questions or wish to discuss the results of your water test with a knowledgeable professional, please

contact your local or county health department or the DEP Bureau of Safe Drinking Water at (609) 292-3659. Consult the blue pages of your phone book for the numbers of your local or county health department. You can also contact the NJ Department of Health and Senior Services, Consumer and Environmental Health Services at . For information about the Private Well Testing Program, see www.state.nj.us/dep/pwta or call .

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Last Updated: November 1, 2010



MARCH 5, 2025

Ted Millar, TLM Holdings
Wendie Kellington, Kellington Law Group, PC

SUBJECT: RESPONSE TO TRANSPORTATION-RELATED PUBLIC COMMENTS: CU/CP 24-038

INTRODUCTION

This letter addresses the transportation and traffic-related comments submitted in opposition to the application for a conditional use permit to expand an existing airport to allow a vertical takeoff and landing facility for aircraft and a comprehensive plan amendment to amend the County Comprehensive Plan to adjust the Aurora State Airport Boundary to include the subject 16.54-acre parcel, zoned EFU (Exclusive Farm Use) and located at 22515 Airport Rd NE, Aurora (CU/CP 24-038).

RESPONSES TO COMMENTS

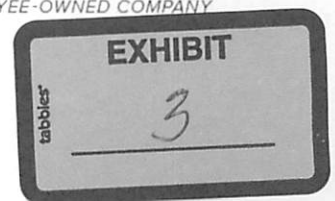
The following items are organized by the party who submitted the comments. Any references to the "2024 TIS" refer to the Transportation Impact Study completed by DKS Associates, dated February 21, 2024, that was submitted as part of the land use application.

FRIENDS OF FRENCH PRAIRIE LETTER

Comment #1: Page 3, Paragraph 3: "Without widening Airport Road to install a left turn lane onto Keil Road and improvement of the stormwater ditches, transport of farm equipment will become more complicated and unsafe."

- *Response: As shown in Figure 4, Page 17 of the 2024 TIS, the development is not expected to generate any left-turning traffic onto Keil Road. The intersection has a crash rate below the critical crash rate (Table 4, page 13) and meets County mobility targets (Table 9, Page 25). There is no requirement or justification for the development to mitigate this intersection.*

Comment #2: Page 4, Paragraph 2: "Transportation Planning Rule OAR 660-012-0060 is not satisfied because the traffic study only counts trips for 15,658sf of office, when applicant's site plan shows that up to 83,916 sf of office space is possible if the floor areas identified as Shops/Offices were all offices. Therefore, this study is not the reasonable worst case scenario."



- *Response: We are advised that it is legally unclear whether the provisions of the Transportation Planning Rule (TPR) apply to this application, apart from those expressly specified as applicable per OAR 660-012-0070. Because of this uncertainty, the 2024 TIS describes the potential finding of OAR 660-012-0060 as a precaution only, without conceding that it applies.*

The proposed application is for a conditional use permit that retains the existing Exclusive Farm Use (EFU) zoning designation and is limited to airport-related uses. The proposed development, as analyzed in the 2024 TIS, is the 'reasonable worst-case' scenario that could be developed on the property without a change in zoning. In order to function, the proposed facility must include maintenance shops, and storage space for parts and equipment, and hangar space – it cannot all be office space and serve the requested purposes. A different type of development with 83,916 square feet of office space would be inconsistent with any of the permitted conditional uses and would not be allowed without a change in zoning. The TPR Findings described on Page 34 of the 2024 TIS clearly explain why the estimated increase in traffic associated with the proposed development (which is the reasonable worst-case scenario) does not meet the threshold of a "significant effect" and, as such, TPR 660-012-0060 is satisfied.

Comment #3: Page 5, Paragraph 6: "Additionally, the recently released Marion County Rural Transportation Plan Tech Memo #4 (see attached excerpted pages) illustrated current significant problems with the major intersections at or near Airport Road..."

- *Response: Friends of French Prairie obtained a Draft Tech Memo #4 from the County's in-progress update to their Transportation System Plan. It is not "recently released", it is a draft that has not been released to the public but rather to persons on the Transportation Advisory Committee (TAC) and persons who have requested notice of the TAC proceedings to remain abreast of them. To date, this Draft Tech Memo #4 has been shared only in draft format and is not publicly available because it is subject to change. Furthermore, the copy that was shared by DKS Associates with the project's TAC and interested parties list had a "Draft" watermark that has apparently been removed, improperly, and is not visible in the version submitted as an attachment to the Friends of French Prairie letter. A copy of the original pages, with the draft watermark, is attached. The removal of the DRAFT watermark is improper and the suggestion that this draft is a "recently released" document that governs county decisions is false. Regardless, the information presented in the Draft Tech Memo #4 does not contradict the findings of the 2024 TIS.*

The 2024 TIS states that the intersections of OR 551/Ehlen Road and Airport Road/Arndt Road will fail to meet mobility targets in 2030 in the PM peak hour, with or without the proposed development. Adding traffic to facilities that are already expected to exceed mobility targets does not in itself constitute a negative impact. Mitigation is only required when the additional traffic further degrades the operations of that facility based on agency performance metrics.

- *At OR551/Ehlen Road, the proposed development will add 8 trips in the PM peak hour and will result in no change to the intersection's volume-to-capacity (v/c) ratio.*

which is ODOT's metric for intersection operations. Because there is no change to the v/c ratio, there is no mitigation required.

- o At Airport Road/Arndt Road, the proposed development will add 22 trips in the PM peak hour and will result in no change to the intersection's level of service (LOS), which is the County's metric for intersection operations. Because there is no change in LOS or the v/c ratio, there is no mitigation required.*
- o It should be noted that the developer has agreed to pay a proportionate share of the cost of a planned project to improve the Airport Road/Ehlen Road intersection, even though the additional site-generated traffic does not degrade operations.*

Comment #4: Page 8, Paragraphs 1- 3 (letter from Aurora Farms): "...Both proposals somehow failed to acknowledge the serious traffic safety problems for slow-moving farm equipment occurring regularly on Airport Road...", "Excessive speed for sure, and narrow shoulders with deep ditches to carry the airport's stormwater to the Pudding River are a big problem...", "We are very worried that our operations could fall innocent victim to a high-speed accident at one of the farm driveways... For example, the northern farm driveway is located about 90 feet north of where the project's traffic added to Stenbock Road intersects with Airport Road. The sight distance in this area is restricted by the curve in Airport Road that is located about 100 feet north of Stenbock. The application does not address the limited sight distance hazard, which is a risk to all vehicles, especially slow-moving farm equipment."

- Response: The sight distance in the "area" is irrelevant. Relevant is sight distance at driveways to be used by the proposal, Page 29 of the 2024 TIS states that sight distance at the proposed driveway locations shown on the site plan is adequate. However, it also states that prior to occupancy, sight distance at any new or existing access points will need to be verified, documented, and stamped by a registered professional engineer, which is a standard requirement prior to the County issuing an access permit. There is no requirement for a proposed development to address existing sight distance deficiencies at access points to other properties.*

Of the 134 study area crashes that were reviewed in the 2024 TIS, 94% involved passenger cars only, and zero were recorded as involving farm equipment. However, it is true that large differences in travel speed (also called "speed differentials") between vehicles of any type can increase the risk of a crash to occurring and can also result in more severe outcomes if a crash does occur. As Mr. Iverson noted, this condition exists today on Airport Road, and it exists on nearly every rural roadway. There is no evidence that the amount of traffic generated by the proposed development will result in any changes to the existing speed differentials or the safety of farm vehicles along Airport Road.

Additionally, the drainage ditches and shoulders along Airport Road will be improved as part of the developer's agreement to construct half-street improvements along the property frontage, which will improve safety for vehicles and farm equipment.

FRIENDS OF MARION COUNTY LETTER

Comment #1: Page 6, Paragraphs 3-4: "Although the site plan and TIA show 97 parking spaces, and it is possible that only 316 average weekday trips and 18 peak hour trips will be generated, these numbers must be understood to likely be skewed low because of the selected hangar/office ratios... The submitted TIA fails to take account the adverse safety impacts not just of the traffic increase, but the interaction with farm equipment."

- *Response: The 2024 TIS accurately reflects the applicant's intended use of the property, as outlined in the site plan and associated parking calculations, as described on Pages 15 and 16. The ratio of office space to hangar space (and all other land use assumptions) was not arbitrarily selected. See response to Friends of French Prairie, Comment #4, related to farm vehicle safety.*

SCHAEFER LETTER

Comment #1: Page 3, Paragraph 5 and Page 4, Paragraph 1: "The ITE Manual shows office design capacity is 3.3 employees per 1000 sf of gross floor area. For the potential 83,916 sf of office, this is 277 employees even before counting warehouse and hangar employees."

- *Response: The exact text within the ITE Trip Generation Manual description of Land Use Code 710: General Office Building reads: "For study sites with reported gross floor area and employees, an average employee density of 3.3 employees per 1,000 square feet (or roughly 300 square feet per employee) has been consistent through the 1980s, 1990s, and 2000s." The number of employees is reported for the user to better understand the variability and trends within the dataset and apply the data appropriately. The ITE Trip Generation Manual is not intended to be used and should not be used to back-calculate an estimated number of employees for a given land use and building size. Further, trip generation estimates for ITE Land Use 710 are based on data from urban/suburban areas, dense multi-use urban sites, and city center cores, all of which would have a much higher employee and trip density than the proposed use. The amount of square footage for the proposed use that will be used as an "office" is 15,658 sq. ft. The rest of the proposed use falls into ITE's "warehouse" category. The ITE Land Use Code 150: Warehouse includes industrial shops with small offices for warehouse personnel. The number of employees expected at the proposed facility is approximately 50-70.*

It is important to note that Mr. Schaefer (as well as Friends of French Prairie and Friends of Marion County) incorrectly assume that the "office" space listed in each of the hangars would operate similar to a general office building. As stated on Page 15 of the 2024 TIS, in the hangars "The supporting offices will be a place for pilots and maintenance staff to fill out paperwork and store required documents when not flying or working in the shop. This is different from a traditional office space where employees would perform their primary work duties at a desk for the duration of a full day, consistently day-to-day." The only space on the site plan that will function like a typical office will be the portion of the Vertiport Headquarters building dedicated to business operations and associated offices, which represents the 15,658 square feet analyzed using ITE Land Use Code 710.

SUMMARY

In summary, DKS Associates has reviewed all submitted comments and has responded to the key questions and concerns raised by the Friends of French Prairie, the Friends of Marion County, and Mr. Schaefer. The analysis and findings of the 2024 TIS are valid, they follow Marion County TIS guidelines, and the Transportation Planning Rule requirement is satisfied (should it be determined that it is applicable to this application).

Best regards,

Lacy Brown, PhD, PE, RSP₂

**SENIOR TRANSPORTATION ENGINEER
DKS ASSOCIATES**

ATTACHMENTS:

Actual excerpt (Table 2) from the Draft Tech Memo #4 Prepared by DKS for the Marion County TSP Update

FUTURE VEHICULAR INTERSECTION OPERATIONS

This section provides documentation of the Future 2045 vehicular intersection operations analysis at the study intersections assuming no improvements are made to the transportation system.

FUTURE INTERSECTION OPERATIONS

Future traffic operations at the study intersections, for the weekday AM and PM peak hours, are based on the Highway Capacity Manual (HCM) 6th Edition methodology for unsignalized and HCM 2000 for signalized intersections.³

The study intersections shown Table 2 were study intersections that were analyzed and found to exceed the jurisdictional operating standard.

TABLE 2: INTERSECTIONS THAT DID NOT MEET OPERATING STANDARDS (2045)

ID	INTERSECTION	JURISDICTION	OPERATING STANDARD	OPERATING RESULT	FAILING IN 2023?
6	Howell Prairie Road/ Silverton Road	Marion County	$v/c \leq 0.85$, LOS D	$v/c = 1.20$, LOS F (EB approach)	Yes
14	OR 213/ Mt Angel Scotts Mill Road	ODOT	$v/c \leq 0.75$	$v/c = 0.86$, LOS F (EB approach)	No
18	OR 551/ Ehlen Road	ODOT	$v/c \leq 0.70$	$v/c = 1.16$, LOS F	Yes
22	OR 99E/ Quinaby Rd	ODOT	$v/c \leq 0.70$	$v/c = 0.79$, LOS F (EB approach)	No
25	OR 99E/ Waconda Rd	ODOT	$v/c \leq 0.70$	$v/c = 1.25$, LOS F (WB approach)	No
27	OR 99E/ Howell Prairie Rd NE	ODOT	$v/c \leq 0.70$	$v/c = 0.94$, LOS F (NBL lane)	No
28	OR 99E/ Mt Angel-Gervais Rd	ODOT	$v/c \leq 0.70$	$v/c = 0.75$, LOS C	No

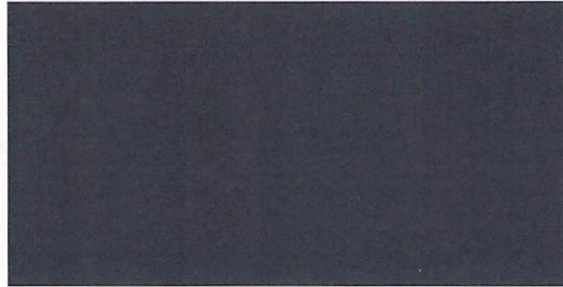
³ Highway Capacity Manual, 6th Edition, Transportation Research Board, 2016.
Highway Capacity Manual, Transportation Research Board, 2000.

ID	INTERSECTION	JURISDICTION	OPERATING STANDARD	OPERATING RESULT	FAILING IN 2023?
30	OR 99E/ Carl Rd	ODOT	$v/c \leq 0.70$	$v/c = 0.81$, LOS F (WB approach)	No
32	River Rd/ Quinaby Rd	Marion County	LOS D, $v/c \leq 0.85$	$v/c = 1.16$, LOS F (SB approach)	No
33	OR 219 (River Rd NE)/ McKay Road	ODOT	$v/c \leq 0.70$	$v/c > 1.05$, LOS F (SB approach)	Yes
35	OR 551/ Arndt Rd	ODOT	$v/c \leq 0.70$	$v/c = 1.01$, LOS D	Yes
36	Arndt Rd/ Airport Rd	Marion County	LOS E	$v/c = 1.11$, LOS F	No
37	French Prairie Road/ McKay Road	Marion County	LOS E	$v/c = >2.0$, LOS F	Yes
38	Golf Club Rd/ Mill Creek Rd	Marion County	LOS E	LOS F (EB approach)	Yes
39	Silverton Road/ Lardon Road	Marion County	LOS E	$v/c = 1.18$, LOS F (WB approach)	No
44*	I-5 Northbound Ramps/ Brooklake Road	ODOT	$v/c \leq 0.70$	$v/c > 2.00$; LOS F (off ramp)	Yes
45*	I-5 Southbound Ramps/ Brooklake Road	ODOT	$v/c \leq 0.70$	$v/c = 0.86$; LOS F	No
51	55 th Avenue/ Hazelgreen Road	Marion County	$v/c \leq 0.85$, LOS D	$v/c = 1.57$; LOS F	Yes
62	Golf Club Road/ Sublimity Road	ODOT	$v/c \leq 0.70$	$v/c = 0.98$; LOS F	No

* The Brooks IAMP was adopted in 2022. The plan identifies a tight diamond interchange as the preferred improvement to improve safety and traffic flow in the study area. There is currently no funding identified for this project.

As shown above, it is estimated that 19 of the 66 study intersections will fail to meet the mobility standards by the future 2045 horizon year. Of those 19, 9 were identified as failing in 2023.

PASSENGER



TECHNOLOGY

Orlando International details eVTOL vertiport development plans



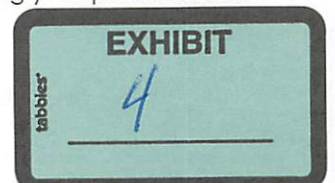
By ELIZABETH BAKER — March 5, 2025 ⌚ 2 Mins Read



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ACCEPT



Orlando International Airport (MCO) has begun planning for the development of a vertiport by 2028 for future electric vertical take-off and landing (eVTOL) aircraft.

The right location



The aviation authority has identified an undeveloped parcel of land in the East Airfield region, on the northeast side of the airport, as a potential location for the initial AAM facilities. Consideration is also given to an area of land on the south side of the airport near the train station.

As part of the process, MCO will ensure the vertiport is designed for all AAM aircraft being certified for commercial operations by the [Federal Aviation Administration \(FAA\)](#). For example, in November 2024, Orlando International Airport hosted a [two-day tabletop exercise](#) sponsored by the FAA, which focused on various topics such as operating rules, aircraft certification and more.

Seeking partners

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ACCEPT



In the past, GOAA has collaborated with local, state and federal partners on advanced air mobility (AAM) to include integrating eVTOL aircraft into operations at MCO.

The plans for a vertiport were featured as a procurement item on the agenda last month at the Greater Orlando Aviation Authority (GOAA) board meeting, which stated the intention to publish an invitation to negotiate (ITN), to identify potential partners capable of developing and operating a vertiport at MCO. The aviation authority will undertake a two-phased procurement of a vertiport developer and operator for potential sites at MCO. The ITN is expected to be published this month.

"Developing a vertiport at Orlando International Airport is a key step in advancing our mission to be the global leader in the evolution of mobility," said Kevin J Thibault, CEO of GOAA. "This project directly supports our vision to drive innovation and position Central Florida and the state at the forefront of advanced air mobility."

Excerpted from the Greater Orlando Aviation Authority (GOAA) board meeting agenda, March 6, 2025.

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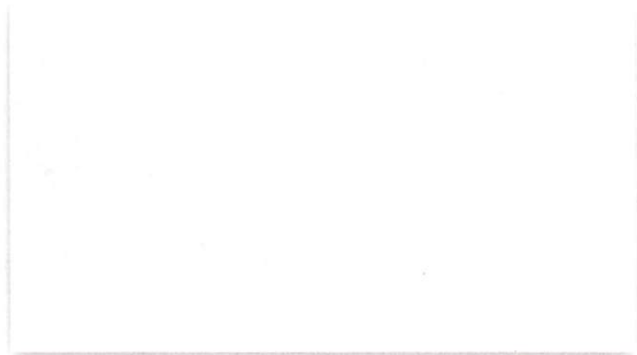
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March 5th 2025

To Marion County,

This letter is in support of Aurora Airport activity and development of TLM holdings old church property that is surrounded by the Aurora Airport.

I am Jason Montecucco, part owner of Montecucco Farms LLC. Montecucco Farms grows fresh market vegetables on approximately 150 acres of land (out of a total of 1,000) on the east side of Airport road. The field we farm starts at the corner of Arndt road and Airport road and goes for around 2,600 feet south on the east side of Airport road across from Columbia Helicopters and the Aurora Airport.

Our farm hired a professional drone operator this year to make applications to the fields that are adjacent to the Aurora Airport. Our drone operator requested clearance to operate their drone at a specified time by sending an application to the FAA. By my understanding it was a simple application and was **quickly** approved. Drone operator explained to me that the application is a routine procedure for safety reasons to operate a drone in close proximity to an airport.

We have farmed along Airport road since 2018. We have access to our field on Airport road for our harvesting equipment, trucks, tractors and implements and have never had any issues with traffic on Airport road. In my opinion Airport road does not seem to have much traffic compared to other roads we farm adjacent to in Oregon. No activity at the airport has ever hindered our ability to farm.

The land TLM holdings would like to develop into a Vertiport, in my opinion, has very little to nearly zero value as production agriculture land. It is a small parcel, somewhat poorly drained soil, surrounded by airport infrastructure, with no irrigation. The parcel is so small the investment to drill an irrigation well would be too large for very minimal return making it completely uneconomical to pursue farming it. The parcel is also surrounded by an airport, so there is zero opportunity to make the field larger by adding it to neighboring land to farm.

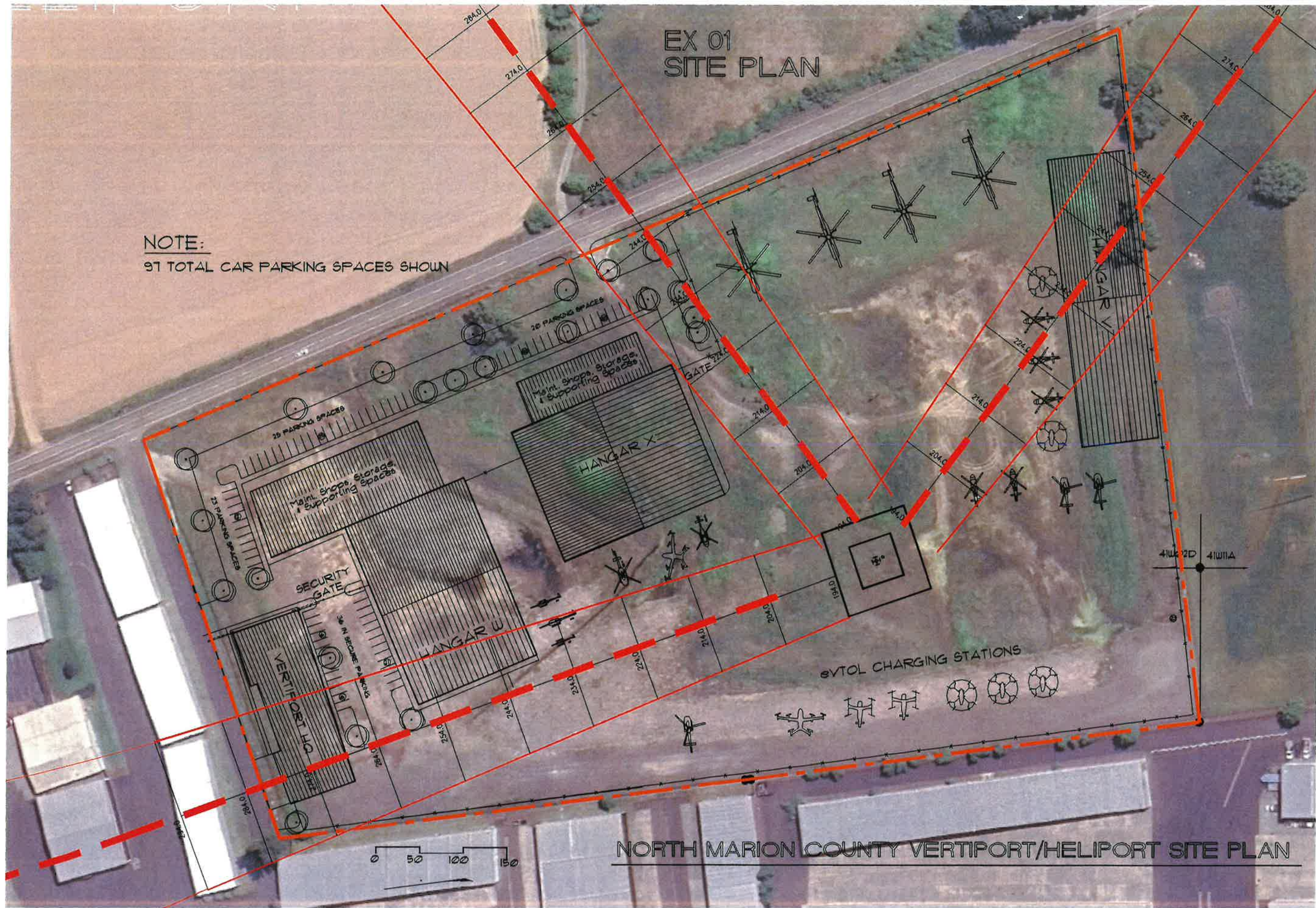
I trust common sense will prevail, hopefully soon, and the property can be developed into what the landowner envisions will add value to the local economy, rather than have an empty patch of dirt doing nothing for anybody, while time marches forward and opportunities for progress are squandered.

Sincerely,



Jason Montecucco
503-263-6066





NOTE:
97 TOTAL CAR PARKING SPACES SHOWN

ARON
FAEGRE
ARCHITECT
13200 FIELDING RD.
LAKE OSWEGO
OREGON
97034
503-860-1488

NORTH MARION COUNTY VERTIPORT
SITE
PLAN
AIRPORT ROAD - ALFORD, OREGON

SITE PLAN

DATE 9-9-2024

DESIGN BY
AF

REVISIONS	
1	3/5/25 DELETE WORDS OFFICE

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AIRPORT EXPANSION CUP - MASTER PLAN

ARON
FAEGRE
ARCHITECT

18200 FIELDING RD.
LAKE OSWEGO
OREGON
97034
503-860-1480

AIRPORT EXPANSION CUP

MASTER
PLAN

AIRPORT ROAD - AURORA, OREGON

MASTER
SITE PLAN

DATE 3-6-2025

REVISION BY
AF

REVISIONS

PAGE:

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NMCVH Buildings				Parking Spaces by Marion County Rural Zoning Code 17.118.050 (see Note 1)			Parking Spaces based on Building Footprint & Adjacent Airport Comparable (see Note 2)		
Name	Floor	Uses	Area sf	Occupiable Area	Req'd Area per Parking Space	Req'd Spaces (rounded up)	Footprint Area	Req'd Area per Parking Space	Req'd Spaces (rounded up)
Vertiport HQ	Ground Second	Offices	15,658	15,658	300	52	15,658	1,441	11
	Ground Second	Industrial Shops	15,658	15,658	5000	3			
Subtotal			31,316						
Hangar W	Ground	Hangar	32,000	32,000	5000	7	32,000	1,441	23
	Mezzanine	Storage	10,560	10,560	5000	3			
Hangar W Shops	Ground	Industrial Shops	16,800	16,800	5000	4	16,800	1,441	12
	Second	Industrial Shops	16,800	16,800	5000	4			
Subtotal			76,160						
Hangar X	Ground	Hangar	32,000	32,000	5000	7	32,000	1,441	23
	Mezzanine	Storage	10,560	10,560	5000	3			
Hangar X Shops	Ground	Industrial Shops	7,500	7,500	5000	2	7,500	1,441	6
	Second	Industrial Shops	7,500	7,500	5000	2			
Subtotal			57,560						
Hangar V	Ground	Hangar	29,260	29,260	5000	6	29,260	1,441	21
	Mezzanine	Storage	9,656	9,656	5000	2			
Subtotal			38,916						
			=====			=====			=====
Total Gross Building Area			203,952		Total Spaces Req'd	95		Total Spaces Req'd	96

parking spaces
provided on site plan

97

Notes

1. Parking Analysis based on Marion County Rural Zoning Parking Requirements in 17.118.050 which requires one space per 300 sf primary use plus one space per 5,000 sf of storage, warehouse, or industrial.

2. Study of the adjacent South End Corporate Airport, Van's Aircraft, and Atlantic Aviation as a 34 acre whole and comparing the total square feet of building footprints with the total provided provided existing parking, results in an overall parking of 1 space per 1,441 square feet of building footprint (see Existing SECAP Excel Sheet dated 2024-2-9). Note that this includes excess parking for Life Flight ambulances that are not in regular use as well as cars parked long term while occupant is away for several days traveling by aircraft.

EXHIBIT

tabbles

A

EXISTING SECAP, VAN'S AND ATLANTIC PARKING SUMMARY (34 ACRE AREA)
9/17/2024

SECAP	# PARKING SPACES	BUILDING FOOTPRINT	SF/SPACE *
YELLOWGATE LANE (ROAD)	0		
REDGATE (ROAD)	24		
BRAVO	6	6,117	
CHARLIE	0	10,224	
DELTA	0	18,017	
ECHO	2	13,376	
FOXTROT	0	21,438	
GOLF (FUTURE 46,046)	0	46,046	
HOTEL	63	29,826	
INDIA	10	27,381	
JULIET	44	34,408	
KILO	22	49,552	
LIMA N	0	42,912	
LIMA S	0	42,912	
MIKE	3	43,023	
NOVEMBER	4	21,720	
OSCAR	12	9,594	
PAPA	32	22,582	
ROMEO	55	27,417	
TOTAL	277	466,545	1,684
H.D	# PARKING SPACES	BUILDING FOOTPRINT	SF/SPACE *
H.D. AVIATION #1 (VAN'S)	65	56,476	
H.D. #3 (FUTURE 37,060)	33	37,060	
TOTAL	98	93,536	954
LYNX JET CENTER	# PARKING SPACES	BUILDING FOOTPRINT	SF/SPACE *
LYNX JET CENTER	17	4,712	
TOTAL	17	4,712	277
GRAND TOTAL	392	564,793	1,441

* SF/SPACE = BUILDING FOOTPRINT / # PARKING SPACES

WILSONVILLE
AREA CHAMBER OF COMMERCE

March 5, 2025

Marion County Hearings Officer
Senator Hearing Room 1st Floor, Courthouse Square Building
555 Court St. NE, Salem OR 97301

Dear Mr. Speckman,

On behalf of the Wilsonville Area Chamber of Commerce (WACC), I am writing to express our strong support for Conditional Use / Comprehensive Plan Change 24-038, which proposes the development of the North Marion County Vertiport and Heliport at the Aurora State Airport.

The WACC's vision is to "foster economic prosperity for businesses and citizens throughout the south metro region." The Aurora State Airport already serves as a vital economic driver in our community. According to the State's official *Oregon Aviation Plan v6.0*, the airport contributes an estimated \$533.8 million in annual economic output and supports nearly 2,906 full-time equivalent jobs. Notably, it ranks as the fourth-largest airport in the state in terms of economic impact, underscoring its essential role in facilitating local business activity, regional connectivity, and multi-state commerce. Preserving and enhancing this asset is crucial to maintaining economic vitality, fostering job creation, attracting investment, and expanding market access.

Additionally, our region faces significant roadway congestion. The introduction of advanced air mobility solutions—such as the proposed vertiport—offers an innovative means to alleviate traffic, reduce travel times, and enhance connectivity between key economic hubs. This improved accessibility will directly benefit local businesses and our broader community.

Industry analyses from BloombergNEF, Deloitte, and other reputable sources project that investments in eVTOL infrastructure, including vertiports, could create tens of thousands of new jobs over the next decade. These positions will span construction, technical maintenance, operations, air traffic management, and various ancillary services. By capitalizing on this emerging industry, our region can not only address current transportation challenges but also drive long-term economic development and prosperity.

Furthermore, the project is expected to generate approximately \$341,840 in annual tax revenue (in 2025 dollars), providing critical funding for local services such as public safety, education, and community programs. This additional revenue underscores the long-term value of this project.

We respectfully urge your support for this plan change as a strategic investment in our region's economic growth and transportation future. Thank you for your time and consideration.

Sincerely,



Kevin Ferrasci O'Malley, CEO

**MERCEDES W. RHODEN-FEELY
21533 LIBERTY STREET NE
AURORA, OREGON 97002**

March 5, 2025

Marion County Planning
Re: CU/CP-24-038

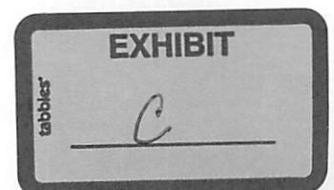
Dear Marion County:

Thank you for arranging for public comments on these land use applications. The applications and the staff report fail to comply with the pertinent land use laws for many reasons. Please add this letter to the record and send me the notice of the hearings officer recommendation and notice of the final decision. Please note my agreement with the comments presented by the City of Aurora and the City of Wilsonville, and incorporate them as my own by this reference.

The application and the staff report violate numerous county and state regulations implementing and relating to Goal 11 regarding adequate public facilities. The application and staff report simply declare that no public facilities are required for water or sewer. However, Oregon law requires that Goal 11 works in combination with Goal 14 "to channel intensive uses and development to existing urban and urbanizable land first before allowing the conversion of or intense non-resource uses on the rural land that comprises the areas outside UGBs." *Gisler v. Deschutes County*, 149 Or App 528, 535, 945 P2d 1051 (1997). The staff report and application therefore violate Goal 11 and OAR 660-013-0040(7) because the lack of public facilities and services for water, sewer, and transportation to serve this urban use in a rural area is not consistent with applicable state and local planning requirements, including the county's Rural Transportation System Plan which fails to identify any need for the airport expansion or the heliport.

The application proposes an extension of rural sewer service to the subject property. As page 14 of the staff report notes, "The applicant proposes expert testimony to affirm that DEQ approved wastewater treatment is feasible onsite." That testimony is Exhibit 37 to the application. It cites several previous studies of the subject property and notes that "All of these studies have determined that the site does not have soils appropriate for a traditional onsite septic tank and drainfield." In other words, septic wastewater cannot be managed onsite. The site plan does not show any location for septic wastewater disposal. The exhibit then describes—contrary to the staff report—several options for offsite wastewater management.

The first offsite option is "holding tanks to be pumped and hauled offsite." The use of holding tanks and pumper trucks to transport untreated sewage to an urban treatment and disposal facility is the extension of a sewer system within the meaning of OAR 660-011-0060(1)(b) and therefore requires a Goal 11 exception pursuant to OAR 660-011-0060(2) and



(9). The second offsite option includes “effluent piped to a drainfield on another property.” This is also the extension of a sewer system within the meaning of OAR 660-011-0060(1)(b) and therefore requires a Goal 11 exception pursuant to OAR 660-011-0060(2) and (9). The third offsite option is connection to “existing systems at HDSE and/or Columbia Helicopters.” Use of either of those systems is the extension of a sewer system within the meaning of OAR 660-011-0060(1)(b) and therefore requires a Goal 11 exception pursuant to OAR 660-011-0060(2) and (9).

Both the HDSE and Columbia systems discharge their septic effluent on property owned by the Oregon Department of Aviation. There is no evidence in the record that the subject property has an easement, lease or other legal right to discharge its wastewater onto the HDSE property or the Columbia Helicopters property, or to discharge septic effluent on the state-owned property. Indeed, the opposite is true, as shown on the attached documents which confirm that ODAV has informed the public that the existing HDSE and Columbia septic drainfields must be removed from the ODAV property. Therefore, the purported expert testimony about these offsite options is unsupported by substantial evidence that the options are legally permissible. Neither the applicant nor the county has the legal authority to approve offsite disposal options without the consent of each affected property owner. To analogize, imagine a retail store where the site plan shows there are no parking spaces, and the applicant’s architect testifies that, not to worry, the parking can happen on other properties, but does not provide any evidence of the other property owners’ consents. Evidence of a parking easement or lease would be required. Here, there is no evidence of easements or leases for septic wastewater treatment or disposal which benefit the subject property, and ODAV has already informed the public and the applicant that the existing septic drainfields must be removed from the ODAV property. The applicant’s technical evidence and expression of belief of technical feasibility, as a matter of engineering, is insufficient. *See Phillips v. Lane County*, 62 Or LUBA 92, 114 (2010).

The HDSE, Columbia, and ODAV properties are all subject to existing goal exceptions. The use of the HDSE and Columbia properties for wastewater treatment will increase the intensity of the wastewater treatment uses on those properties. Use of the drainfields on the ODAV property will increase the intensity of the wastewater disposal uses on the ODAV property. The subject property is not included in the Goal 11 exception for the HDSE properties approved in 2004. Therefore, OAR 660-004-0018(2)(a) is violated because the plan amendment will increase the intensity of uses on the existing Columbia Helicopters, HDSE and ODAV properties and the amendment fails to limit the uses, densities and services to the same as the existing land uses on the original committed exception for the Columbia Helicopters, HDSE and ODAV properties taken in the 1980s. *See Ooten v. Clackamas County*, 70 Or LUBA 338, 345, 346 (2014), *aff’d* 270 Or App 214 (2015); *Doty v. Coos County*, 42 Or LUBA 103, 114 (2002); *Leonard v. Union County*, 15 Or LUBA 135, 138 (1986).

OAR 660-004-0018(2)(b)(A) is violated because the increased intensity of uses on existing Columbia Helicopters, HDSE and ODAV properties allowed by the plan amendment will not maintain those exception lands as rural land because of the urban intensity of the

existing airport uses in combination with the increased intensity of those uses. *See Murray v. Marion County*, 23 Or LUBA 268, 283 (1992); *Doty v. Coos County*, 42 Or LUBA 103, 115 (2002). OAR 660-004-0018(4)(b) is violated because the plan amendment increases the intensity of the sewer and aviation uses on the Columbia Helicopters, HDSE and ODAV properties reasons exception lands without taking a new reasons exception for those properties, which is required by law, even if the existing exception areas can accommodate the increased intensities as a matter of engineering. *See Storm v. Yamhill County*, 66 Or LUBA 415, 422 (2012).

All goal exceptions must be addressed in this application. *See Norvell v. Portland Metropolitan Area Boundary Commission*, 43 Or App 849, 854, 604 P2d 896 (1979). The goal exceptions for extension of sewer service must be decided in this application.

In addition, under the county code, the land use application form is not signed by the owners of all properties where the sewer systems will be located, including the Columbia Helicopters, HDSE and ODAV properties where the septic system will be located, as required by MCC 17.119.020 and .025 and by the Comprehensive Plan – Plan Amendments Policy 2, which requires “Quasi-judicial amendments may be initiated by the subject property owners with an application form supplied by the Marion County Planning Division. The plan amendment will be reviewed by the zone change procedure established in the Marion County Zoning Ordinance.” The zone change procedure also requires a signature from the owners of all property where the proposed development will occur. MCC 17.123.020.C. Therefore, the county may not approve this application in reliance on any septic system use on the Columbia Helicopters, HDSE or ODAV properties without their authorized signatures on the application form. If the county does so, LUBA will reverse. *See Baker v. Washington County*, 46 Or LUBA 591, 601 (2004).

The proposed airport boundary and conditional uses for office, commercial, and industrial uses are neither a public use airport nor an expansion of the Aurora State Airport boundary, so OAR 660-012-0065(3)(n) does not apply. ODAV owns the Aurora State Airport and is not expanding it. The applicant is a private party and lacks authority to unilaterally expand the Aurora State Airport for its own private use. Page 4 of the staff report notes the need to satisfy FAA rules for private use airports. Staff is correct on this point because the application clearly proposes a private use airport within the meaning of Oregon law, 49 USC 106(g), 40103, 40113, 44502 and 14 CFR Part 157. And the necessary information is not provided by ODAV, as required by OAR 660-013-0040(9). *See Schaefer v. Marion County*, 318 Or App 617, 625 (2022).

The application proposes a wide variety of commercial, industrial and aviation uses. Each of those uses must be analyzed separately for compliance with the land use laws. *See Columbia Riverkeeper v. Columbia County*, 70 Or LUBA 171, 182, *aff'd without opinion*, 267 Or App 637, 342 P3d 181 (2014). The proposed private offices, private shops and private warehouses are not expansion of a public use airport. Therefore, the application is not expansion

of a public use airport and OAR 660-012-0065(3)(n) does not apply. There is no exemption from Goal 11.

As applied to this application, the staff report's interpretation of OAR 660-012-0065(3)(n) conflicts with ORS 215.283(3)(a) which expressly requires goal exceptions for expansion of the Aurora State Airport or creation of a new airport. It also violates ORS 215.283(3)(b), and Section 3 of chapter 529, Oregon Laws 1993 which only allows transportation facilities "on rural lands consistent with Goals 3, 11, and 14 without an exception." OAR 660-012-0065(1). The proposed private heliport is not a transportation facility consistent with those goals because it includes improvements which do not move or assist in the movement of people or goods and cannot be approved on rural land. Every prior expansion of the Aurora State Airport and surrounding aviation uses since 1992 has required goal exceptions. The parallel conditional use application includes Goal 3, 11, and 14 exceptions which demonstrates the proposed private heliport, the private commercial and industrial uses, and the private airport boundary expansion are not consistent with those goals.

As applied in the staff report, OAR 660-012-0065(3)(n) violates ORS 215.283(3)(a) and (b), Section 3 of chapter 529 Oregon Laws 1993 (and OAR 660-012-0065(1)) by interpreting the phrase "consistent with Goals 3, 11, and 14" to mean the application is exempt from those goals, and can violate them without consequence. OAR 660-012-0065(3)(n) as interpreted and applied in the staff report allows more land uses than these statutes, which violates the statutes. See *Schaefer v. Oregon Aviation Board*, 312 Or App 316, 338 (2021); *Lane County v. LCDC*, 325 Or 569, 583, 942 P2d 278 (1997).

That it is economically advantageous to a developer to rely on public services extended from the urban growth boundary rather than develop such services on site is an insufficient "reason" why the state policy embodied in Goal 11 should not apply. See *Todd v. City of Florence*, 52 Or LUBA 445, 463 (2006). OAR 660-004-0020(2)(b)(B)(iv) requires a local government to determine whether the "proposed use" can be "reasonably accommodated without the provision of a proposed public facility or service." The staff report fails to make that determination. A private heliport alone might possibly be served by an onsite septic system. But this application proposes hundreds of thousands of square feet of offices and shops which cannot be reasonably accommodated without the proposed sewer extensions. Goal 11 clearly applies.

The application is not signed by the owners of all properties where the sewer systems will be located, including the Columbia Helicopters, HDSE and ODAV properties where the septic system will be located, as required by MCC 17.119.020 and .025 and by the Comprehensive Plan – Plan Amendments Policy 2, which requires "Quasi-judicial amendments may be initiated by the subject property owners with an application form supplied by the Marion County Planning Division. The plan amendment will be reviewed by the zone change procedure established in the Marion County Zoning Ordinance." The zone change procedure also requires a signature from the owners of all property where the proposed development will occur. MCC 17.123.020.C.

The application is not for a public use airport and Goal 11 applies. The proposed use of offsite properties for sewage treatment and disposal requires a Goal 11 exception in this proceeding, and requires the written consent of all affected property owners. Because these items are not provided, the application must be denied.

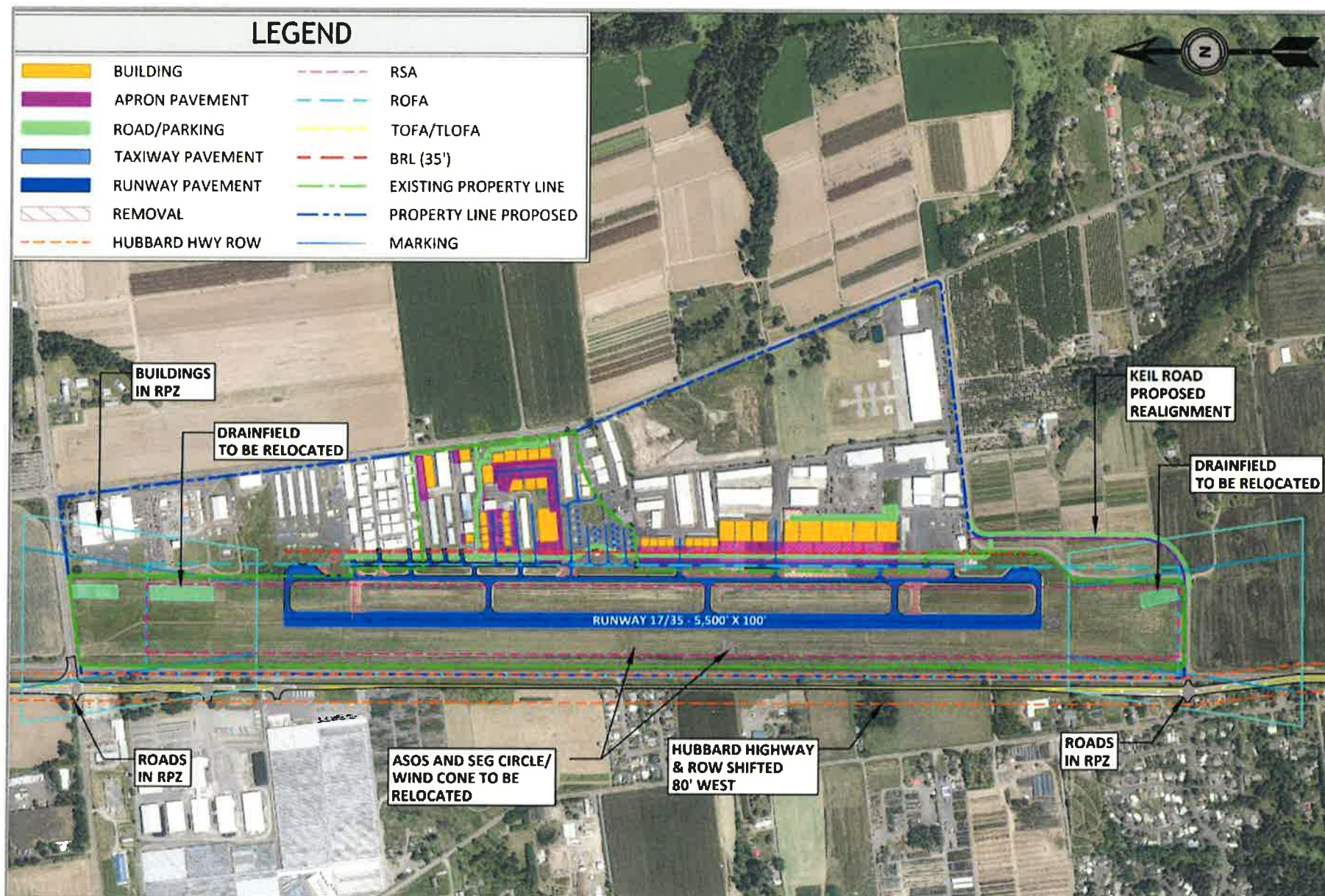
Thanks for your consideration.

Very truly yours,



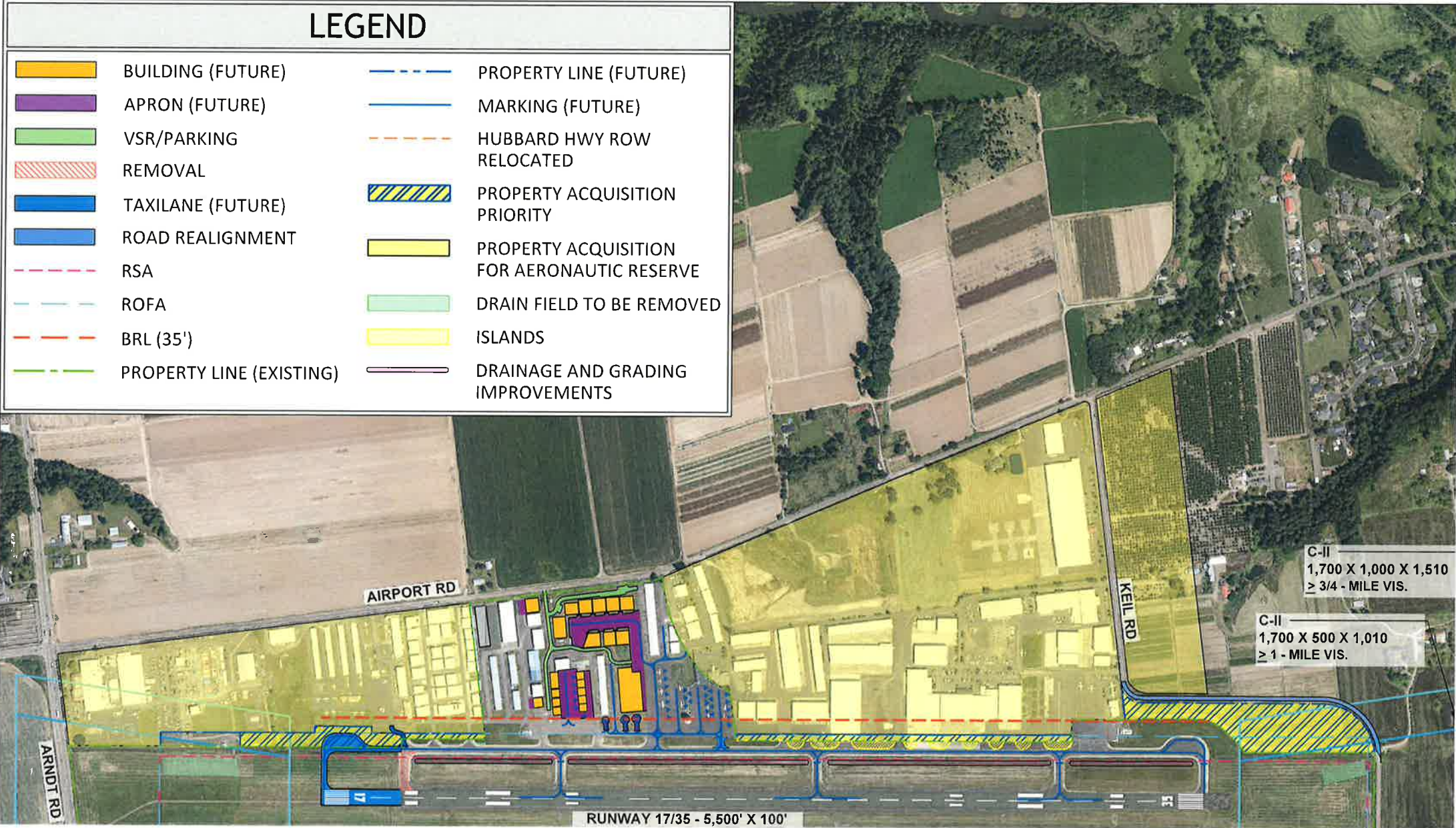
Mercedes Rhoden-Feely

REFINED ALTERNATIVE 1A - Shift Hubbard Highway West and Extend Runway North to 5,500 feet Overview



REFINED PREFERRED ALTERNATIVE

Figure 1: Overview



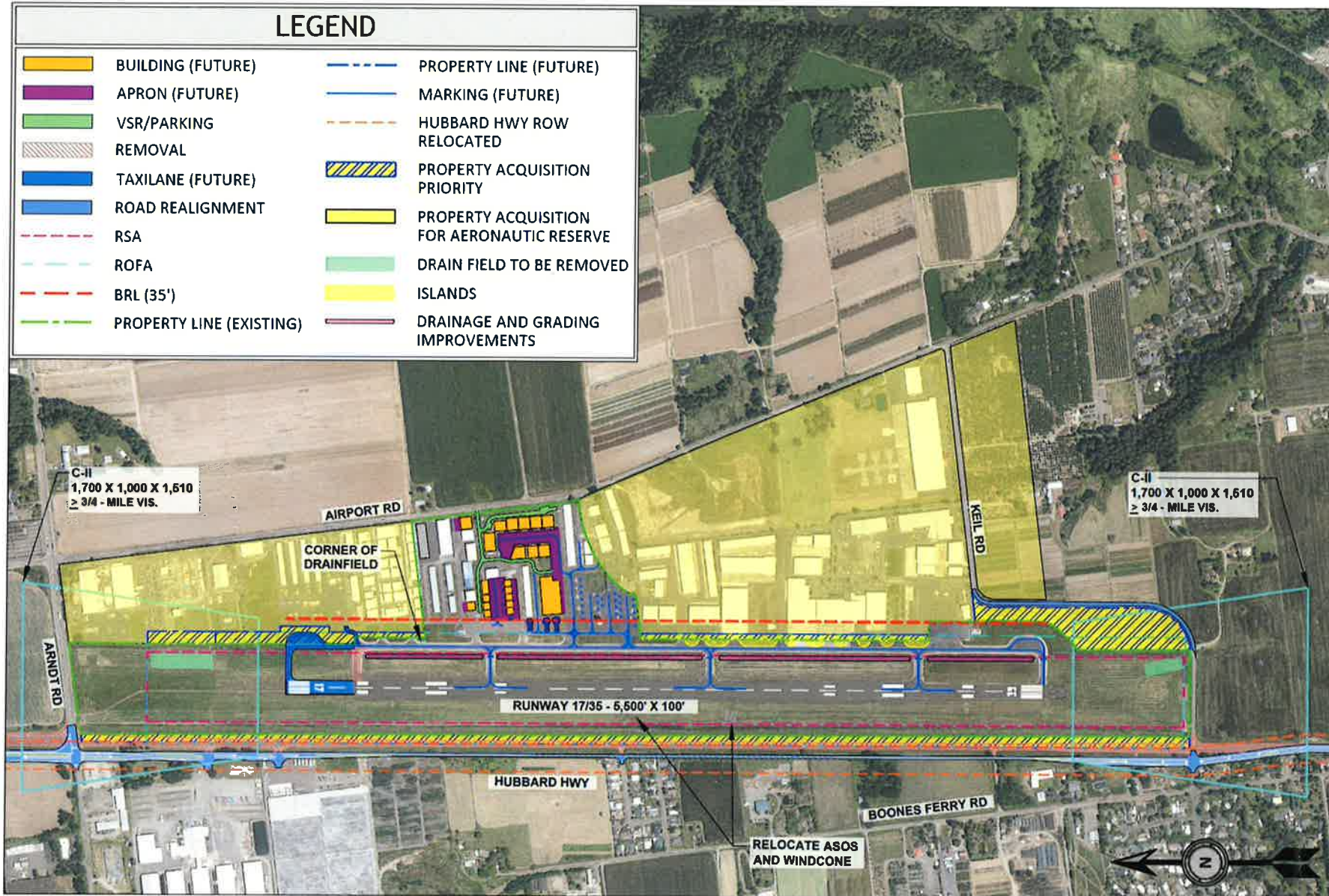


Refined Preferred Alternative

There was no change in recommendations to the other proposed improvements, including:

- Proposed runway extension to the North
- Removal/relocation of drain fields outside of the RSA/TSA
- Relocation/shift of Hubbard Highway and Keil Road outside of the ROFA
- Relocation of the ASOS and windcone outside of the ROFA
- Reconfigured apron tiedowns to meet standards
- Future depicted hangar sites on state-owned property
- Improve the drainage ditch in the RSA to meet standards

Refined Preferred Alternative - Overview



Introduction

Hello, my name is Nancy Snyder, and I own property with a house and farm across the street from the site under consideration in today's hearing regarding conditional use / comprehensive plan change 24-038.

Personal Connection to Aurora

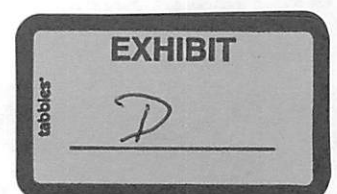
As a descendant of the Aurora Colony, my family was among the original 54 families that established the town of Aurora. The colony thrived on principles of mutual support and communal well-being, creating a unique utopia. Unfortunately, Aurora has changed over time, straying from these wholesome origins.

Current Challenges

I have significant concerns about the proposal for vertical takeoff and landing operations at 22515 Airport Road NE in Aurora. Current helicopter companies in the vicinity have demonstrated a lack of accountability, negatively impacting neighboring properties. For instance, Helicopter Transportation Services (HTS) frequently flies at low altitudes over my home, sometimes barely above the trees in the back yard, it causes the house to shake and induces stress and anxiety. Winco is extremely guilty of flying low—going back and forth over the house like it was a target.

These low-altitude flights also disrupt agricultural activities. Mike Iverson of Aurora Farms tells me the field workers cease operations due to safety concerns when HTS passes overhead. This directly affects their productivity.

Let's not forget the noise levels, because they are alarming. Using an Extech 407730 decibel reader, I've recorded HTS exercises reaching up to 105 decibels near my home, with sessions lasting on and off for hours. This poses health risks, especially to my young nieces and nephew who like play in the backyard.



Impact on Farming Operations

Modern farming increasingly relies on technology, including drones, to monitor irrigation and manage crops efficiently. The introduction of another helicopter company could interfere with these technological advancements, hindering the farm's operational growth and development.

Community Impact

The current helicopter operations have diminished our quality of life, reduced property values, and infringed upon our right to peaceful enjoyment of our home. I urge you to consider the well-being of residents and the integrity of our community by denying conditional use/comprehensive plan change 24-038.



HTS flying over my house. This is a screenshot from a video.



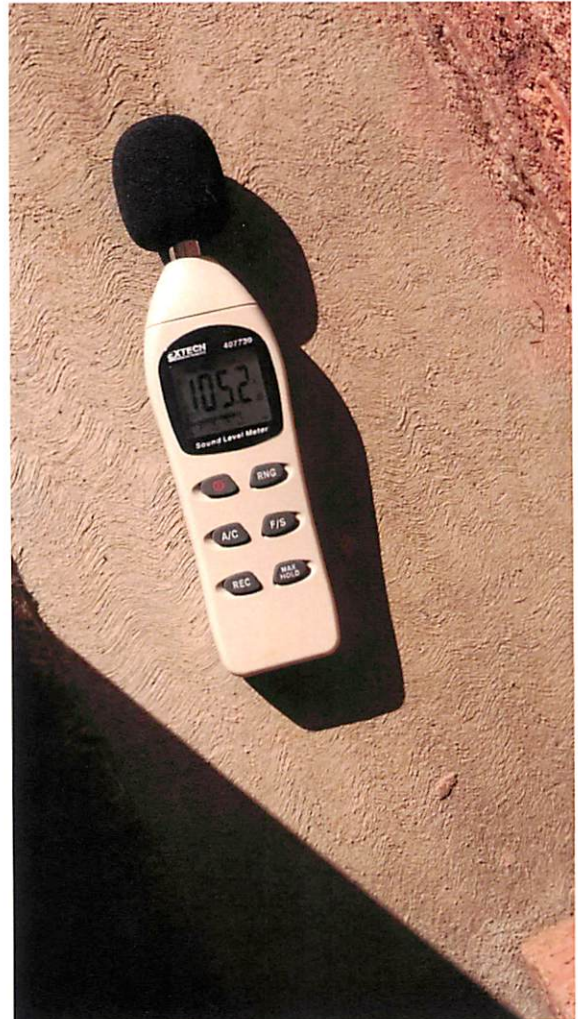
HTS flying over the adjacent field to the house farmed by Aurora Farms. This is a screenshot from a video. The field can be seen at the beginning and end of the video.



Outdoor debris and some garbage is seen here being tossed into the air. It got kicked up during HTS exercises and thrown into the yard and nearby field. This is a screenshot from a video.



My young niece, age four, covering her ears after stepping outside to join her siblings in my backyard to play. HTS was running loud maneuvering exercises in front of my house at the time. This is a screenshot from a video.



I was standing inside the house narrating for the video, but you cannot hear me and you cannot hear the car driving by - I couldn't hear either when shooting the video because the noise decible reached 105. These are screenshots from the same video.