

From: [Mark Morton](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 8:17:54 AM

External Email

As a Tri Citian that has watched this project move through the process, it does my heart some good to see that by supporting Option 4 the council has the opportunity to address a number of local concerns.

Also, please consider the possibility of removing a few additional turbines to address the real danger the towers present to aerial firefighting in the area.

Thank You,
Mark Morton
West Richland

From: [Karen Strecker](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 8:48:14 AM

External Email

Dear EFSEC,

I want to thank you for considering our concerns for the HHH windmill project. While I do not support putting windmills on our beautiful Horse Heaven Hills, I feel that option 4 is the only acceptable alternative and it is crucial to adequately address aerial firefighting and additional visual, wildlife and fugitive dust issues.

Thank you, Karen Strecker

From: [Wendy](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 8:58:42 AM

External Email

Hello,

I understand there are now 4 options to attempt to address a multitude of valid concerns regarding this project. Of the options presented, it appears that Option 4 is currently the best option. That said, it still does not address aerial fire fighting which absolutely must be resolved and should be a significant factor in this project.

I appreciate the options presented and the efforts to address concerns. However, these options are merely a compromise for greed and perceived government mandates. Only 2 entities gain long-term benefits from the project - the land owner and the Canadian based corporation leading the effort.

Eastern WA has highly efficient and effective hydro power and will soon have more nuclear power. Wind power is expensive and inefficient. It is already costing us increased power bills due to subsidizing the expense, (reference public notice regarding rate increase from Benton PUD). It is impractical and unneeded in our area. Therefore, the best option is for the Canadian corporation to pay the landowner a type of resolution/holding fee and abandoned the project altogether. The corporation saves money by avoiding continued litigation and can move on to other more viable projects, and the landowner gets paid for holding their property while this debacle played out.

Thank you for considering these points. I hope the landowner can settle for compensation and the Tri-Cities can continue thriving without this project.

Wendy Robbins
Taxpaying citizen of WA State

Sent from my iPhone

From: j.mercure@frontier.com
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 9:02:51 AM

External Email

I live in the beautiful area of Kennewick overlooking Badger Canyon. While I love my view of the gorgeous sunrises, the small farm acreages below me and the beautiful hills to the south of me, I live next to the desert with it tumbleweeds and winds. Fire is a constant concern in the late summer/early fall months. The wind itself is a real threat. A year ago a windstorm took off nearly half of my home's roof. If a wildfire were to come my way I would only have the aerial firefighters for protection from the flames and the wind. Please do not overlook my neighborhood's exposure to wildfire danger when considering your vote. Choose Option 4 with additional reduction of the final number of windmills.

Thank you.

From: [Jeanne Peterson](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 9:03:03 AM

External Email

If you cannot deny the HHH permit, then I would support Option 4 after aerial fire fighting concerns are considered. Maps and options should have been made public as soon as they were available. Transparency please.

Jeanne Peterson
57311 N 435 PR NE
Benton City Wa 99320
509-430-3741

Sent from my iPhone

From: [RONALD G GEIGER](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 9:14:14 AM

External Email

OPTION 4 IS THE ONLY ALTERNATIVE TO GO WITH. AERIAL FIREFIGHTING IS ESSENTIAL.

THANK YOU
EILEEN

From: [Andrew Huber](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 9:21:27 AM

External Email

Out of the 4 different options, I am only supporting **Option 4 with additional turbines removed** to permit aerial firefighting and to address additional visual, wildlife and fugitive dust issues.

The maps indicate that about 80 turbines and the west solar arrays will be permitted in the southwest portion of the Project, totally out of sight from TC homes and communities.

Option 4 is the only acceptable alternative and you must adequately address aerial firefighting.

Andrew Huber

From: ironbutt1@charter.net
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 9:34:41 AM

External Email

Take these Windmills and put them in Jay DIMSlees back yard ! And keep them out of the Columbia Basin ! They are USELESS !!
Build more Nuclear Power Plants !! THOSE will produce the needed Power.

I am Totally AGAINST these gigantic eyesores. You don't address Aerial Firefighting in any of these "Options".....How about option #5
Take these ugly unless windmills that you can't recycle ANY part of, and put them right next to DIMSlees house!! And keep them AWAY from MY HOUSE !!

Kurtis Hughes
66 yr. Benton County Resident

From: [Kayla Sidwell](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 10:52:02 AM

External Email

Option 4 is the only acceptable alternative and must adequately address aerial firefighting.

From: [Ryan Whitten](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation options
Date: Sunday, January 21, 2024 11:23:41 AM

External Email

Council,

I write to express my endorsement of the most restrictive option for the HHH wind project. I understand that this option does not take into consideration the requirements necessary to facilitate aerial firefighting, which is an indispensable tool to combating wildfires.

The safety of wildlife should not be understated or undervalued. We owe it to the animals we share this planet with to not put our needs above or in opposition to theirs, especially for a power production project whose energy will be expensive and spotty. Our pursuit of a less carbon intensive, or even carbon free, grid should not come at the expense of the wildlife we should protect.

Any and all mitigation options should be pursued to minimize the impact on wildlife safety and movement corridors.

Thank you,
Ryan Whitten

From: [Karen Richardson](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 11:41:23 AM

External Email

I would like to submit that I would PREFER NOT TO HAVE A WIND FARM IN THE HORSE HEAVEN HILLS but Option 4 is the only way if necessary including all options for Aerial Firefighting. It's a tinder box up here on the summer and an ice rink in the winter!!
Karen R.

From: [JJSMAS](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 12:03:33 PM

External Email

I do not support the approval of the Horse Heaven Wind and Solar project for the following reasons:

- Wind energy generation in the Horse Heavens as proposed by this project is not cost effective and the project can only be implemented with substantial tax payer subsidies
- The project as proposed creates a significant adverse impact to the skyline as viewed from many locations in the Tri-City area
- The project as proposed creates significant adverse impact to firefighting capabilities in the vicinity of the project
- The project as proposed presents significant impact to wildlife, especially birds, in the vicinity of the project.

Respectfully submitted,
John J Sisk
Richland WA

From: [Julie Wilson](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 12:26:29 PM

External Email

Greetings,

As a nearly life-long resident of the Tri-cities, I can tell you that I am not happy at all about the proposed wind farm for many reasons that have already been stated.

However, I believe that of the four mitigation options presented, option 4 is the only acceptable option since it seems to eliminate more than 50 percent of the turbines and infrastructure.

Aerial firefighting still needs to be addressed.

Thank you and have a great day,

Julie Wilson, Landscape Designer, BLA
Wild Root Landscapes, LLC
WILDRRL791P7
www.wildrootlandscapes.com
Instagram: [@julie_designs_life](#)
Facebook: [@wildrootlandscapes](#)
509.430.3293

From: [Tim Richardson](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 1:45:17 PM

External Email

I don't like any of the options but option 4 is the only option I support, but only if you address the aerial firefighting issue, which is a must have for our area.

Tim Richardson
Kennewick Wa.

From: [Rob Flodin](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 1:45:40 PM
Attachments: [image001.png](#)

External Email

Dear EFSEC Committee,

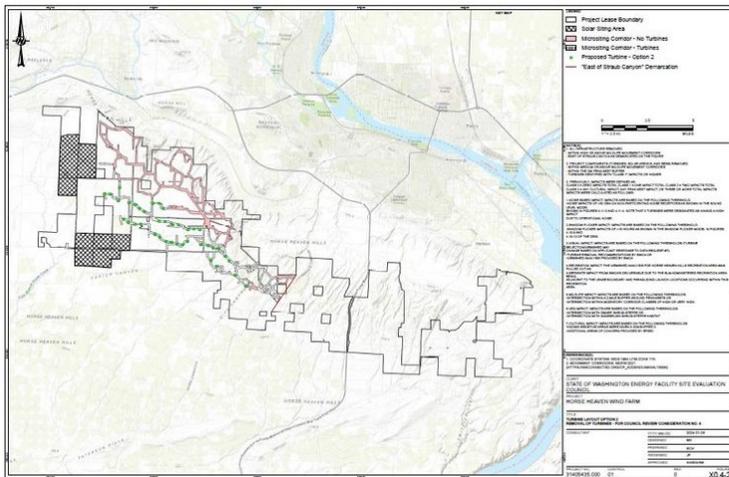
Please accept my opinion option 4 is the only acceptable mitigation alternative and in addition I ask the committee to adequately address aerial firefighting.

Rob & Cia Flodin

34908 S Valley Vista PR SE

Kennewick WA 99338

509 987-7202



From: [Mary Anne Sisk](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 2:45:37 PM

External Email

I do not support the approval of the Horse Heaven Wind and Solar project for the following reasons:

Wind energy generation in the Horse Heavens as proposed by this project is not cost effective and the money should be used to support more reliable green energy production such as hydroelectric or nuclear energy. This production would guarantee the tax payers adequate electricity, with support services already available.

The project as proposed creates a significant adverse impact to the skyline as viewed from many locations in the Tri-City area.

The project as proposed creates significant adverse impact to the firefighting capabilities in the vicinity of the project.

The project as proposed presents significant impact to wildlife, especially birds, in the vicinity of the project.

Respectfully submitted,
Mary Anne Sisk
Richland, WA

From: [David McDonald](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 3:10:22 PM

External Email

January 21, 2024

Washington Energy Facility Site Evaluation Council
621 Woodland Square Loop SE
PO Box 43172
Olympia, WA 98503-3172

Re: Horse Heaven Wind Farm Proposal Opt. 4

Dear Council Members:

After seeing the recent news about the problems of the Alberta electric grid this past week it leaves me concerned about Washington State relying more and more on wind and solar power. A University of Alberta professor told the CBC News that they could have all the wind and solar farms in the world located in Alberta last week and “it still wouldn’t have come anywhere close to closing the gap” in their shortfall of power. Wind and solar were both unable to contribute to the power needs in the province due to the lack of wind and dark cold nights. To avert a catastrophic collapse of the Alberta grid people were among other things asked not to charge their EV’s

While I am concerned about what solar and wind farms are doing to our electric grid, I think the Option 4 proposal being considered by the Council is a major improvement over the original Horse Heaven Wind and Solar proposal. However, Option 4 still needs to address the significant problem the wind turbines create for aerial firefighting that is so necessary to protect life, property and vital infrastructure in Eastern Washington. Wildfires are a major threat to communities in Eastern Washington every summer. And we are told they are becoming a more frequent threat due to climate change. Therefore, it is important that we do not add to this increasing threat by making it more difficult to protect people and communities by making it more difficult to fight wildfires. The core purpose of the government is to protect the health, safety and welfare of citizens. We can’t protect the health and safety of our communities if the government creates conditions (aerial obstructions in fire prone areas) that jeopardize our ability to quickly fight wildfires. The Council needs to consider reducing the concentration and location of wind turbines in Option 4 to ensure the option for aerial firefighting is preserved.

Another health, safety and welfare issue that is not addressed properly in this proposal is that of blowing dust, commonly referred to as fugitive dust. This is a big issue in the Tri-Cities and not controlling it creates major health problems for local residents. The proponents of these wind turbines are asking the residents of the Tri-Cities to accept the burden of increased dust pollution and resulting health hazards without any benefits. If the firefighting concerns listed above are addressed by lessening the concentration of turbines fewer dirt roads will be needed. Lessening fugitive dust falls within the core purpose of government in protecting the health, safety and welfare of citizens.

The Council should also review the need to better protect wildlife in the area of the proposed wind and solar farm. In many parts of Eastern Washington, we have fragmented remnants of the shrub steppe habitat left. Further fragmentation and covering our remaining habitat with solar panels and turbines will make it more difficult for our wildlife to survive. The cumulative impacts of wind turbines, solar panels, dirt access roads, fencing and new transmission lines doesn't support government initiatives to preserve habitats and wildlife.

I am also hoping Option 4 limits the visual impact of industrial structures being located beside a major urban center and within a habitat area.

Thank You for your time

David McDonald

David McDonald
10312 W. Argent Rd
Pasco, Washington

From: [TOM HARPER](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 4:13:56 PM

External Email

Please consider Option 4 and address aerial firefighting needs.
I sincerely appreciate your consideration of my input.
Thomas Harper
2598 Tilden Court
Richland WA 99354
Sent from my iPhone

From: [Ob Server](#)
To: [EFSEC mi Comments](#)
Cc: [Tri-Cities CARES](#); [Judy](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 4:22:36 PM

External Email

Dear EFSEC: 1/21/24

The following are my comments on the HHH project & I ask that EFSEC consider them in their recommendations to the WA State Governor:

I ask that you choose Option 4 under the following conditions.

Option 4, if it keeps the wind turbines, solar panels, & battery facility out of line of site of ALL of the Tri-cities residents & protects the HHH wild life, is the ONLY acceptable alternative IF sufficient fire protection measures can be put in place that allows aerial fire suppression that is safe for fire suppression pilots and water sources are available to the site that do not curtail surrounding farms & residents availability of water.

In addition, please provide, or point WA citizens to the documentation that demonstrates WA State has done its fiduciary duty to WA State citizen taxpayers & performed a cost benefit analysis and a electrical power need analysis for WA State putting in the HHH wind turbines, solar panels, & battery facility(s) that includes keeping 1) electrical rate costs down at current rates as well as 2) assuring stable electric power delivery to WA State citizens (i.e., no rolling blackouts).

Finally, I ask for a detailed reason(s) that EFSEC cannot provide a recommendation denying approval of the HHH project to the Governor.

Thank you for your attention to this matter.

J. Polehn
jpolehn1@yahoo.com
POB 482
Richland, WA 99352

From: [sergio alvarez](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 5:00:54 PM

External Email

Hi, myself and my family are very distraught regarding the wind turbines in the horse heaven hills. I have a home and business that would be greatly impacted by such wind turbines. Not only will the value of my properties go down but so would my business since it's very close to the project. Worst part is the Hispanic community hasn't not been made aware of the project. We have been neglected again even tho we pay taxes and live in the area. I've consulted with an attorney to possibly sue to put a stop to this project do to the lack of information provided to the Hispanic community.

I would invisibly prefer that the project was vaulted and now allowed but I did some research personally and have seen that option 4 might be the least impactful bit it still don't justify the lack of communication and impact it will have on the Latino community and also on my personal home and business. That also doesn't even address all the fire and animal habitat dangers. Why would you want to build something so close to Tri cities when you can build these things miles and miles away. Who would allow such a project except a crooked paid of judge or politician.

Sent from my iPhone

From: [Paul Krupin](#)
To: [EFSEC mi Comments](#); [Drew, Kathleen \(EFSEC\)](#); [Bumpus, Sonia \(EFSEC\)](#); [Moon, Amy \(EFSEC\)](#)
Subject: Visual and Aerial Firefighting comments on directions for staff Jan 24 Council Meeting
Date: Sunday, January 21, 2024 5:46:01 PM
Attachments: [Visual Impacts of the HHH Wind Turbines on Tri-Cities 012124 comments set.pdf](#)
[20240109_Horse_Heaven_FEIS_Council_Exclusion_Considerations_1_through_4_\(002\).pdf](#)
[HB 2117 SB 6188 Wildfire Safety Legislative Proposal Aerial Firefighting Needs.pdf](#)
[TCC New Visual Map Comments 012124 2 page.pdf](#)
[TCC New Aerial Firefighting Maps Comments 012124 3 page.pdf](#)

External Email

The comments file is 19 pages.

There are five pdf file attachments to this comments submission.

1. The Option maps from EFSEC
2. The Google Earth Simulation Graphics
3. The proposed aerial firefighting legislation HB 2117 / SB 6188
4. The Visual Impact Graphics 2 page
5. The Aerial Firefighting Impacts 3 page

Appreciatively,

Paul J. Krupin, BA, MS, JD
Board Member on behalf of TRI-CITIES C.A.R.E.S
Visit: <http://www.TriCitiesCARES.org>
509-531-8390 cell 509-582-5174 landline Paul@Presari.com

Significant Unavoidable Adverse Impacts Visual Aspect (Operations)

The Final EIS states: “Post-mitigation and Applicant commitments, the turbines would still dominate views from many key observation points and the landscape would appear strongly altered.”

The Present vs. the Future

The turbines will be visible from all over Benton and Franklin County. The following photographs and computer simulations shows the change the project will have on the view from a dozen key observation points in key residential communities and high interest tourism and traffic locations in the Tri-Cities.

Key Observation Points For Google Earth Pro Computer Simulations

Horse Heaven Wind Project

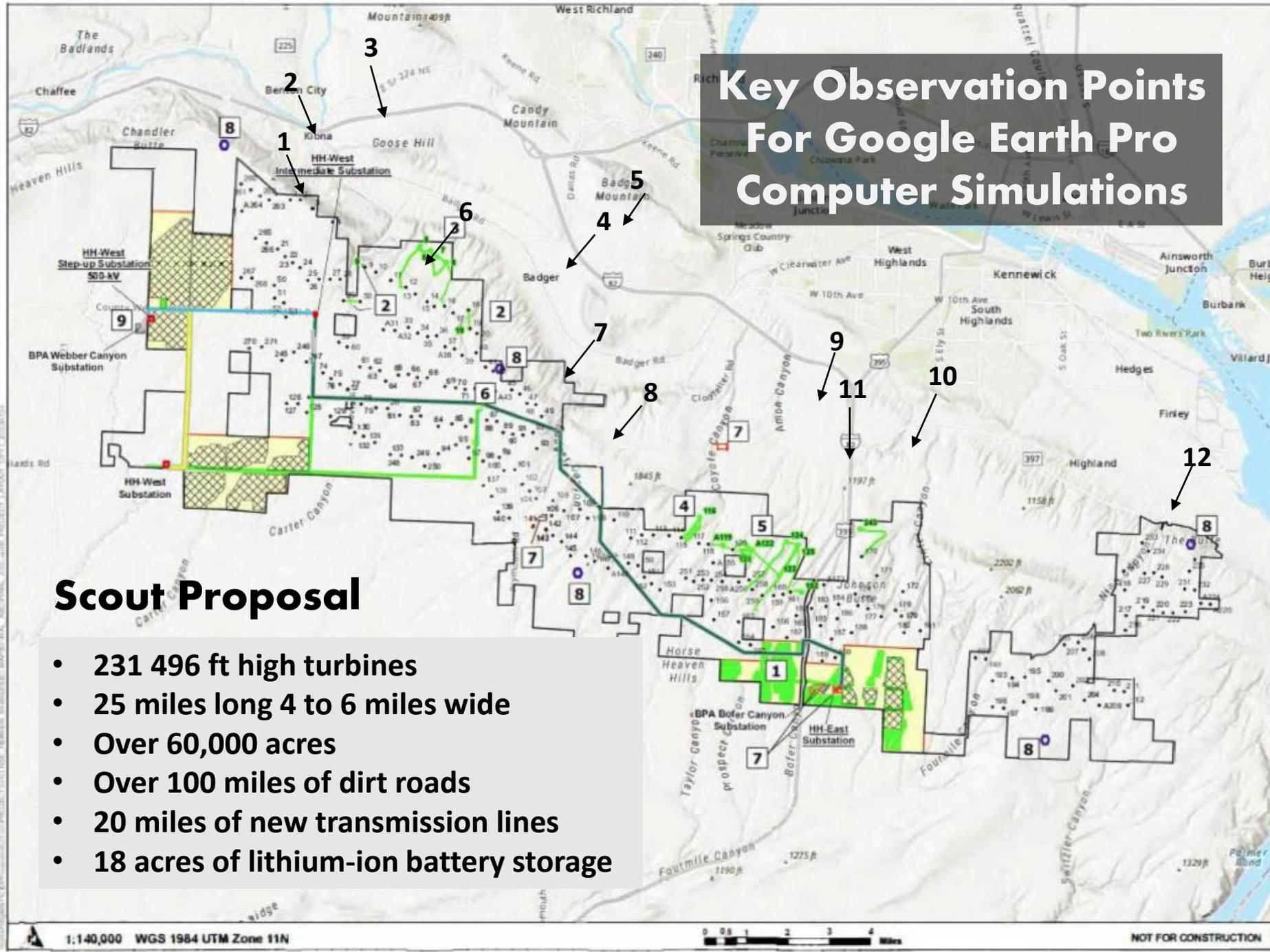


Overview Map
Turbine Layout Option 1
BENTON COUNTY, WA

- Project Lease Boundary
- Option 1 Turbine Layout
- 230-kV Interfe Transmission Line
- County Well Road 500-kV Transmission Line
- Solar Interfe 500-kV Transmission Line
- County Well Road 500-kV Transmission
- Project Substation
- BPA Substation
- Solar Array
- Solar Siting Area
- Laydown Yard
- Radar Tower
- Features Removed from Current Design



Reference Map



Scout Proposal

- 231 496 ft high turbines
- 25 miles long 4 to 6 miles wide
- Over 60,000 acres
- Over 100 miles of dirt roads
- 20 miles of new transmission lines
- 18 acres of lithium-ion battery storage

1:140,000 WGS 1984 UTM Zone 11N



NOT FOR CONSTRUCTION

1 - Anelare Winery - BLM Kiosk – McBee Grade Road

May 25, 2023



Google Earth Pro
Computer Simulation



2 - Benton City - RV9

May 5, 2023



TCC Google Earth Pro
Computer Simulation



3 - Fidelitas Winery – Sunset Road - Red Mountain

September 6, 2023



TCC Google Earth Pro
Computer Simulation



4 - Badger Mountain South – Dallas Road – I-82

May 24, 2023



Google Earth Pro Computer Simulation



5 - Top of Badger Mountain - RV 5

April 22, 2023



TCC Google Earth Pro
Computer Simulation



6 - Badger Canyon Road - RV 10

May 24, 2023



TCC Google Earth Pro
Computer Simulation



7 - Summitview Residences South Kennewick

September 5, 2023 8 AM



Google Earth Pro
Computer Simulation



8 - Tripple Vista – Clodfelter & Locust Grove Kennewick

September 7, 2023



TCC Google Earth Pro
Computer Simulation



9 - Thompson Hill Residences Kennewick Bob Olson Parkway

September 6, 2023



TCC Google Earth Pro
Computer Simulation



10 - Canyon Lakes Community Kennewick

September 6, 2023



TCC Google Earth Pro
Computer Simulation



11- Interstate 82 – Highway 395 Intersection, South of Kennewick

September 6, 2023



TCC Google Earth Pro
Computer Simulation



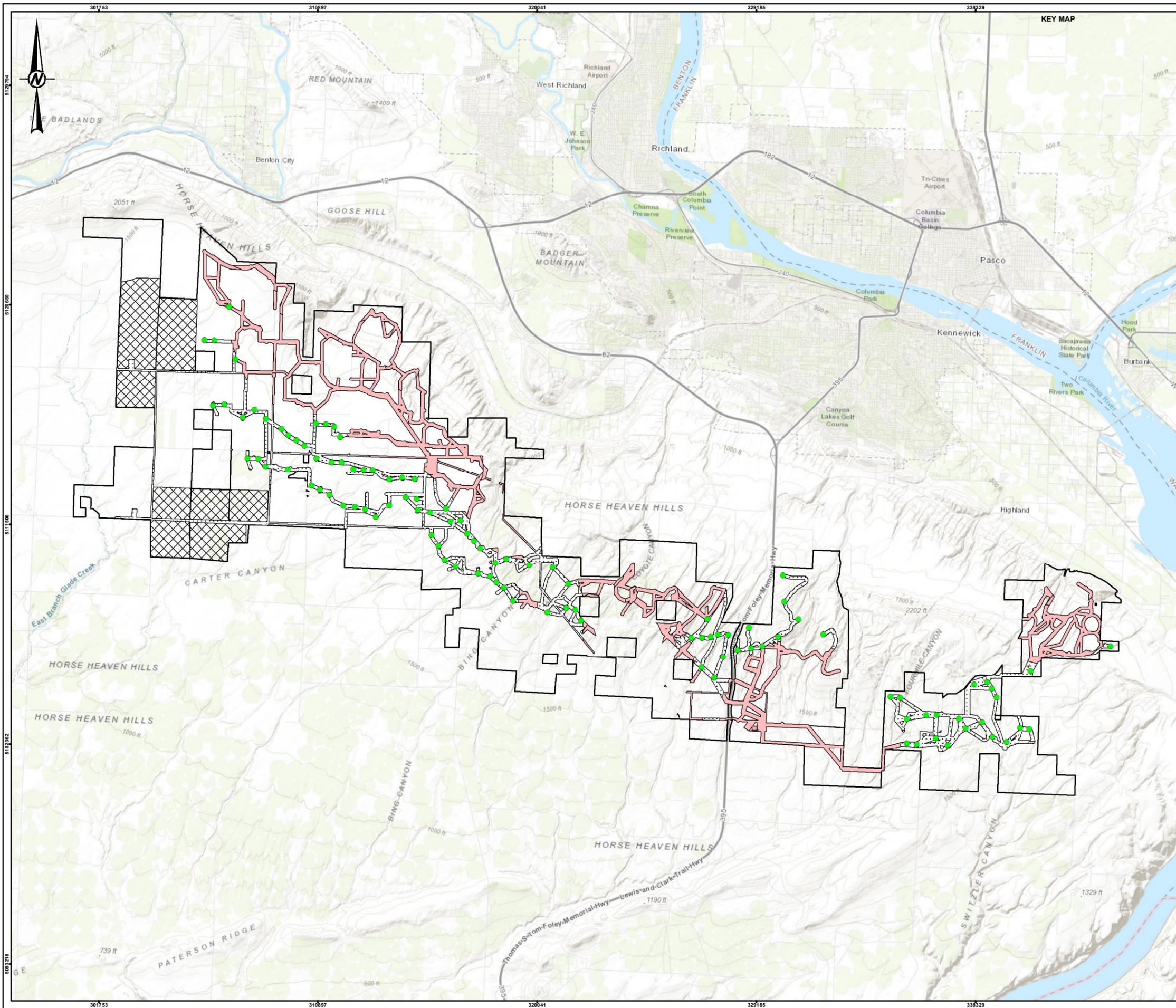
12 - Finley Elementary School in Finley

May 25, 2023



TCC Google Earth Pro
Computer Simulation





LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 1

NOTE(S)

1. ALL INFRASTRUCTURE REMOVED:
 - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS
2. PROJECT COMPONENTS (TURBINES, SOLAR ARRAYS, AND BESS) REMOVED:
 - WITHIN MEDIUM OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - WITHIN THE 2MI FEHA NEST BUFFER

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/](https://wacconnected.org/cp_addendumanalyses/))

CLIENT
 STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

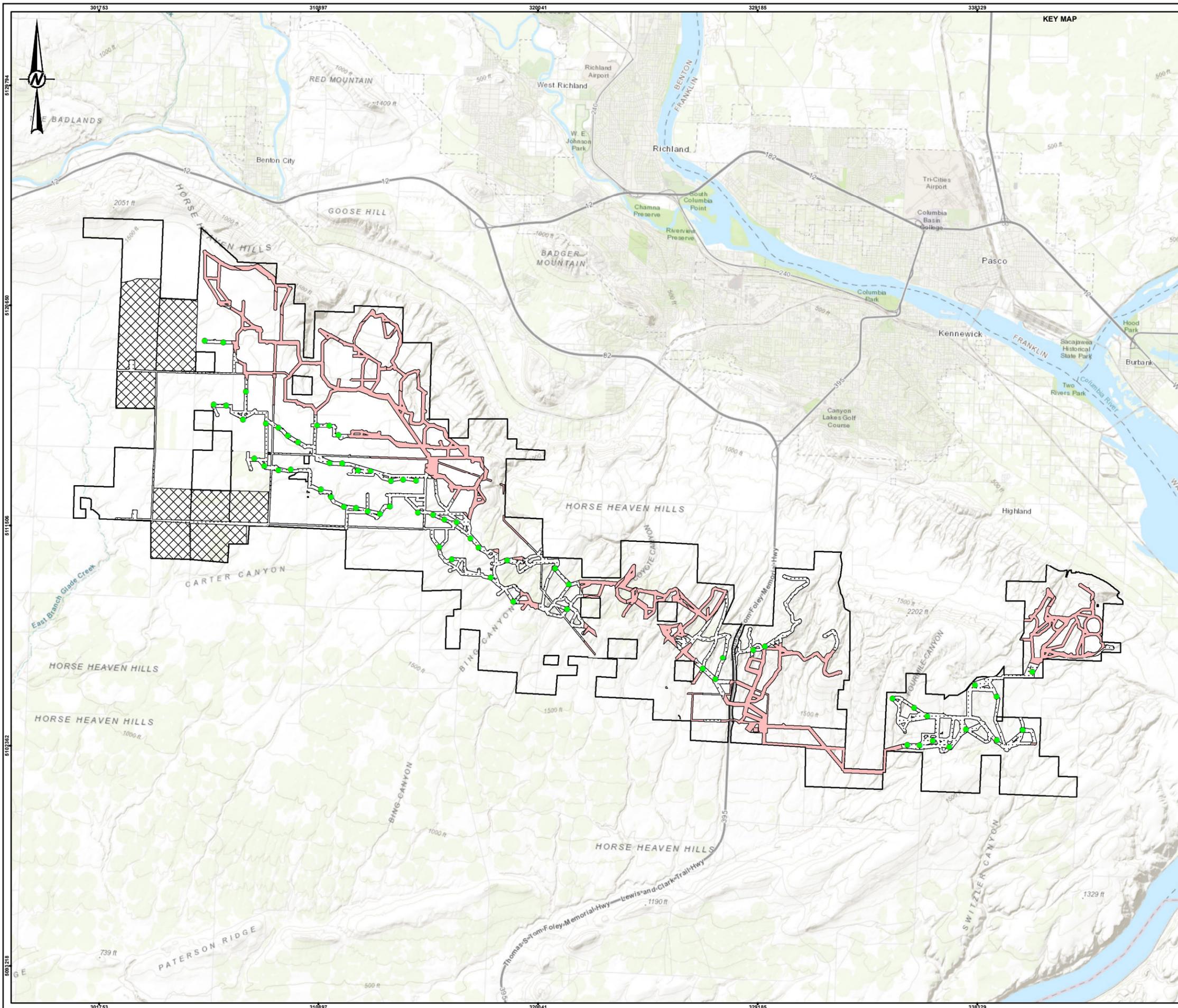
PROJECT
 HORSE HEAVEN WIND FARM

TITLE
 TURBINE LAYOUT OPTION 1
 REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 1

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED		MK
PREPARED		SCH
REVIEWED		JP
APPROVED		AH/SG/AM

PROJECT NO.	CONTROL	REV.	FIGURE
31405435.000	01	0	X0.1-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSIS 11m



LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 2

NOTE(S)

1. ALL INFRASTRUCTURE REMOVED:
 - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS
2. PROJECT COMPONENTS (TURBINES, SOLAR ARRAYS, AND BESS) REMOVED:
 - WITHIN MEDIUM OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - WITHIN THE 2MI FEHA NEST BUFFER

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/](https://wacconnected.org/cp_addendumanalyses/))

CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

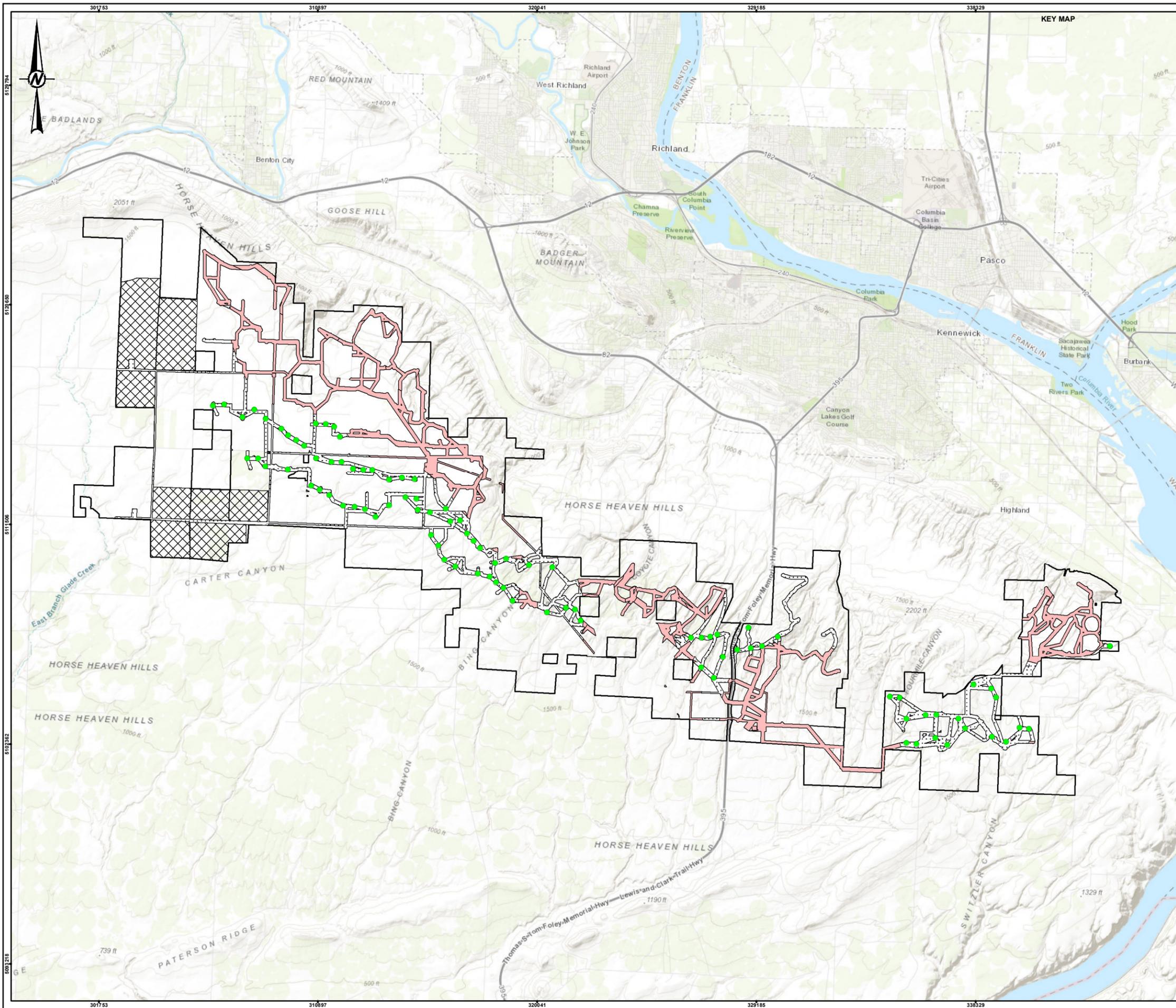
PROJECT
HORSE HEAVEN WIND FARM

TITLE
**TURBINE LAYOUT OPTION 2
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 1**

CONSULTANT	YYYY-MM-DD	2024-01-08
	DESIGNED	MK
	PREPARED	SCH
	REVIEWED	JP
	APPROVED	AH/SG/AM

PROJECT NO.	CONTROL	REV.	FIGURE
31405435.000	01	0	X0.1-2

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSIS 11m



LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 1

NOTE(S)

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 - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS
2. PROJECT COMPONENTS (TURBINES, SOLAR ARRAYS, AND BESS) REMOVED:
 - WITHIN MEDIUM OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - WITHIN THE 2MI FEHA NEST BUFFER
 - TURBINES IDENTIFIED WITH "CLASS 1" IMPACTS OR HIGHER
3. PREVIOUSLY, IMPACTS WERE DEFINED AS:
 - CLASS 0 = ZERO IMPACTS TOTAL CLASS 1 = ONE IMPACT TOTAL CLASS 2 = TWO IMPACTS TOTAL CLASS 3 = ANY CULTURAL IMPACT, ANY FEHA NEST IMPACT, OR THREE OR MORE TOTAL IMPACTS IMPACTS WERE CALCULATED AS FOLLOWS:
1. NOISE BASED IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD:
 - NOISE IMPACTS OF >50 DBA ON NON-PARTICIPATING NOISE RECEPTORS AS SHOWN IN THE SOUND LEVEL MODEL
 - SHOWN IN FIGURES 4.11-3 AND 4.11-4. NOTE THAT 0 TURBINES WERE DESIGNATED AS HAVING A HIGH IMPACT DUE TO OPERATIONAL NOISE.
2. SHADOW FLICKER IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD:
 - SHADOW FLICKER IMPACTS OF >15 HOURS AS SHOWN IN THE SHADOW FLICKER MODEL IN FIGURES 4.10-9 AND 4.10-10 OF THE DEIS.
3. VISUAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS (TURBINE SELECTION/VIEWSHED MAY CHANGE BASED ON APPLICANT RESPONSE TO DATA REQUEST #7):
 - TURBINE REMOVAL RECOMMENDATIONS BY SWCA OR
 - VIEWSHED ANALYSIS PROVIDED BY SWCA
4. RECREATION IMPACT: THE VIEWSHED ANALYSIS FOR HORSE HEAVEN HILLS RECREATION AREA WAS PULLED OUT AS A SEPARATE IMPACT FROM SWCA'S DELIVERABLE DUE TO THE BLM-ADMINISTERED RECREATION AREA BEING ADJACENT TO THE LEASE BOUNDARY AND PARAGLIDING LAUNCH LOCATIONS OCCURRING WITHIN THIS AREA.
5. WILDLIFE IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - INTERSECTION WITHIN A 2-MILE BUFFER AROUND FEHA NESTS OR
 - INTERSECTION WITHIN MIGRATORY CORRIDOR CLASSES OF HIGH OR VERY HIGH.
6. VEG IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - INTERSECTION WITH DWARF SHRUB-STEPPE OR
 - INTERSECTION WITH SAGEBRUSH SHRUB-STEPPE HABITAT
7. CULTURAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - KNOWN SENSITIVE AREAS WERE GIVEN A 30M BUFFER O
 - ADDITIONAL AREAS OF CONCERN PROVIDED BY EFSEC

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/](https://wacconnected.org/cp_addendumanalyses/))

CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

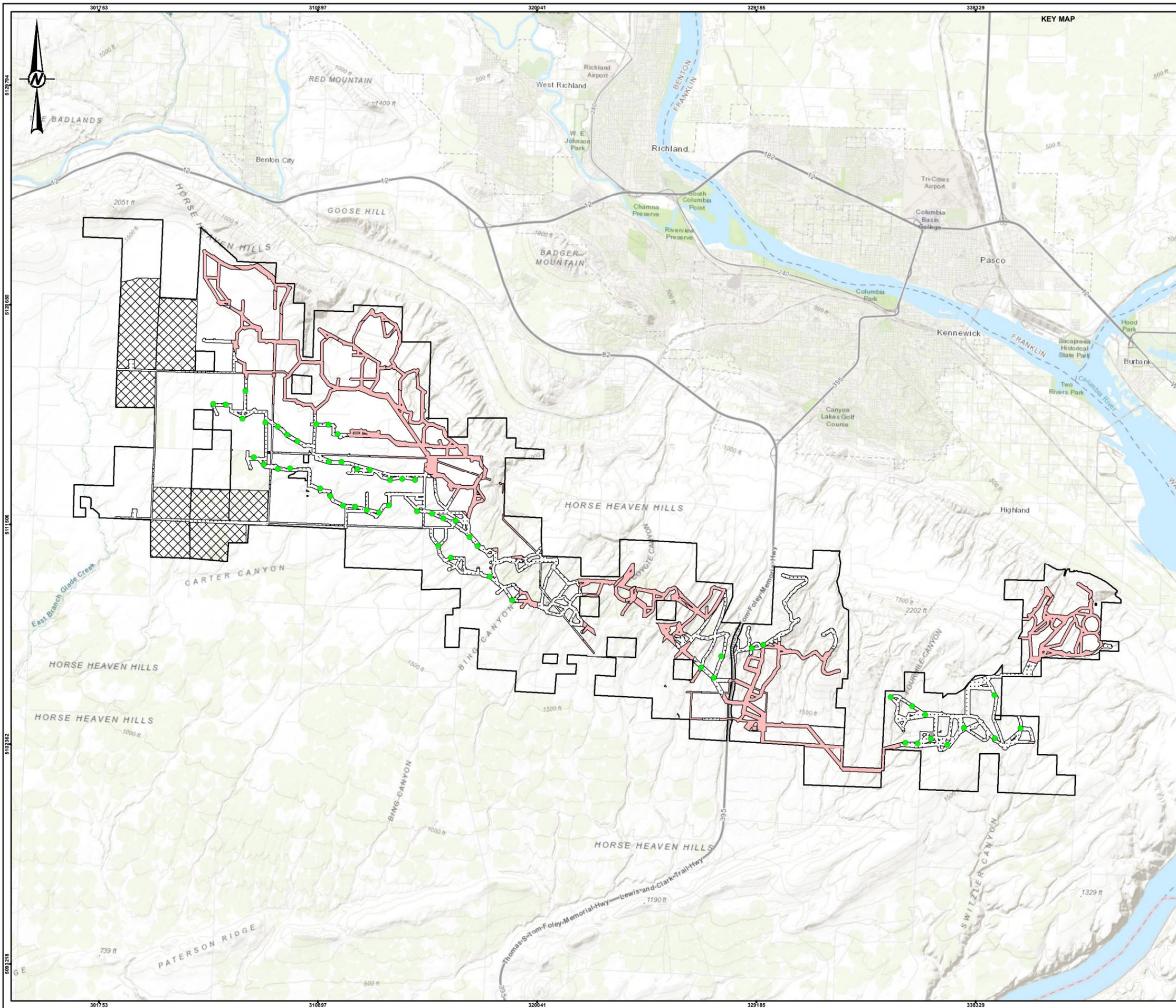
PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 1
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 2

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED		MK
PREPARED		SCH
REVIEWED		JP
APPROVED		AH/SG/AM

PROJECT NO. CONTROL REV. FIGURE
31405435.000 01 0 X0.2-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B



KEY MAP

LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 2

NOTE(S)

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 - WITHIN MEDIUM OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - WITHIN THE 2MI FEHA NEST BUFFER
 - TURBINES IDENTIFIED WITH "CLASS 1" IMPACTS OR HIGHER
3. PREVIOUSLY, IMPACTS WERE DEFINED AS:
 - CLASS 0 = ZERO IMPACTS TOTAL CLASS 1 = ONE IMPACT TOTAL CLASS 2 = TWO IMPACTS TOTAL CLASS 3 = ANY CULTURAL IMPACT, ANY FEHA NEST IMPACT, OR THREE OR MORE TOTAL IMPACTS IMPACTS WERE CALCULATED AS FOLLOWS:

1. NOISE BASED IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD:
 - NOISE IMPACTS OF >50 DBA ON NON-PARTICIPATING NOISE RECEPTORS AS SHOWN IN THE SOUND LEVEL MODEL
 - SHOWN IN FIGURES 4.11-3 AND 4.11-4. NOTE THAT 0 TURBINES WERE DESIGNATED AS HAVING A HIGH IMPACT DUE TO OPERATIONAL NOISE.
2. SHADOW FLICKER IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD:
 - SHADOW FLICKER IMPACTS OF >15 HOURS AS SHOWN IN THE SHADOW FLICKER MODEL IN FIGURES 4.10-9 AND 4.10-10 OF THE DEIS.
3. VISUAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS (TURBINE SELECTION/VIEWSHED MAY CHANGE BASED ON APPLICANT RESPONSE TO DATA REQUEST #7):
 - TURBINE REMOVAL RECOMMENDATIONS BY SWCA OR
 - VIEWSHED ANALYSIS PROVIDED BY SWCA
4. RECREATION IMPACT: THE VIEWSHED ANALYSIS FOR HORSE HEAVEN HILLS RECREATION AREA WAS PULLED OUT AS A SEPARATE IMPACT FROM SWCA'S DELIVERABLE DUE TO THE BLM-ADMINISTERED RECREATION AREA BEING ADJACENT TO THE LEASE BOUNDARY AND PARAGLIDING LAUNCH LOCATIONS OCCURRING WITHIN THIS AREA.
5. WILDLIFE IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - INTERSECTION WITHIN A 2-MILE BUFFER AROUND FEHA NESTS OR
 - INTERSECTION WITHIN MIGRATORY CORRIDOR CLASSES OF HIGH OR VERY HIGH.
6. VEG IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - INTERSECTION WITH DWARF SHRUB-STEPPE OR
 - INTERSECTION WITH SAGEBRUSH SHRUB-STEPPE HABITAT
7. CULTURAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - KNOWN SENSITIVE AREAS WERE GIVEN A 30M BUFFER O
 - ADDITIONAL AREAS OF CONCERN PROVIDED BY EFSEC

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/](https://wacconnected.org/cp_addendumanalyses/))

CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

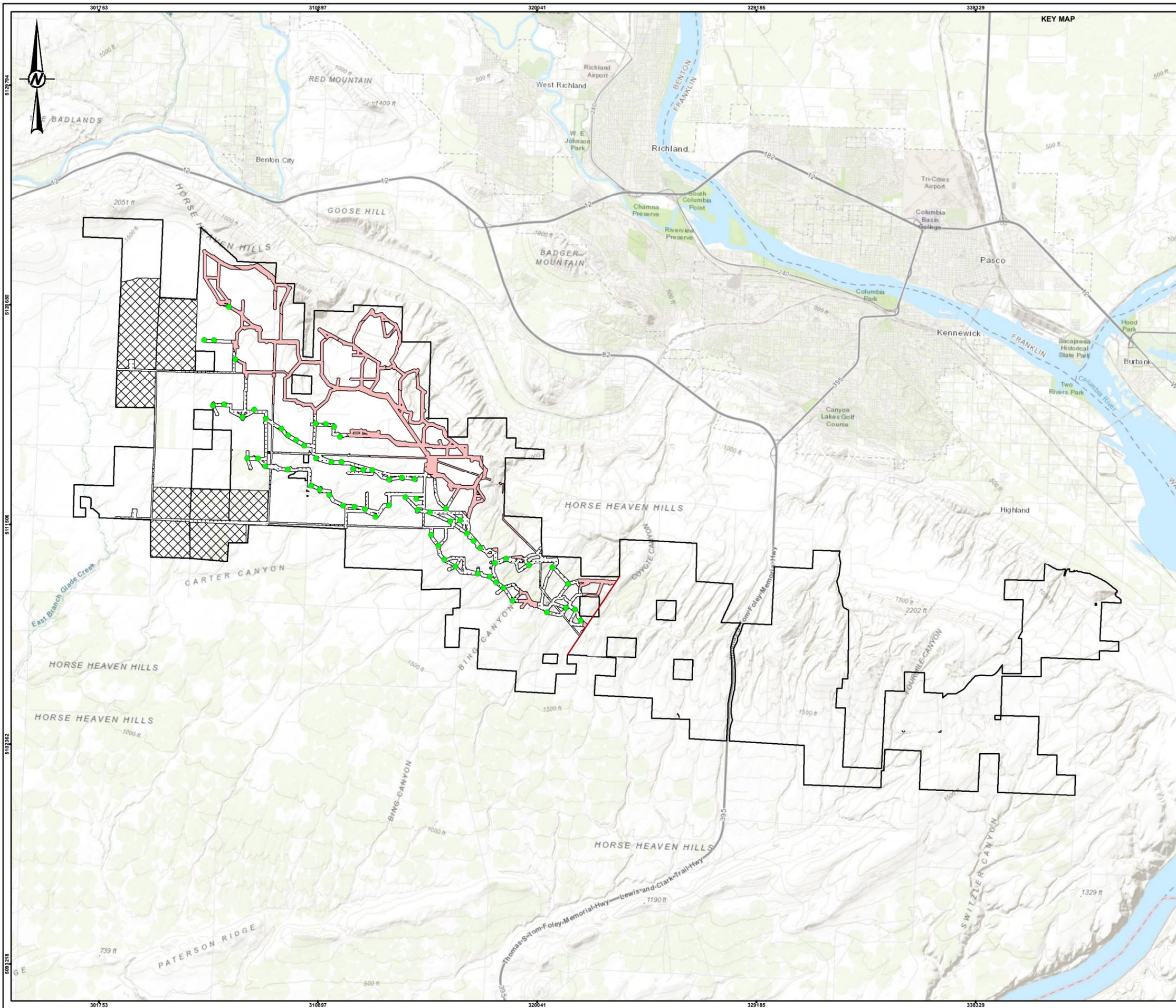
PROJECT
HORSE HEAVEN WIND FARM

TITLE
**TURBINE LAYOUT OPTION 2
 REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 2**

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AH/SG/AM	

PROJECT NO.	CONTROL	REV.	FIGURE
31405435.000	01	0	X0.2-2

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANS I 11in



LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 1
- "East of Straub Canyon" Demarcation

NOTE(S)

1. ALL INFRASTRUCTURE REMOVED:
 - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - EAST OF STRAUB CANYON AS DEMARCATED ON THE FIGURE
2. PROJECT COMPONENTS (TURBINES, SOLAR ARRAYS, AND BESS) REMOVED:
 - WITHIN MEDIUM OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - WITHIN THE 2MI FEHANESE BUFFER

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/](https://wacconnected.org/cp_addendumanalyses/))

CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

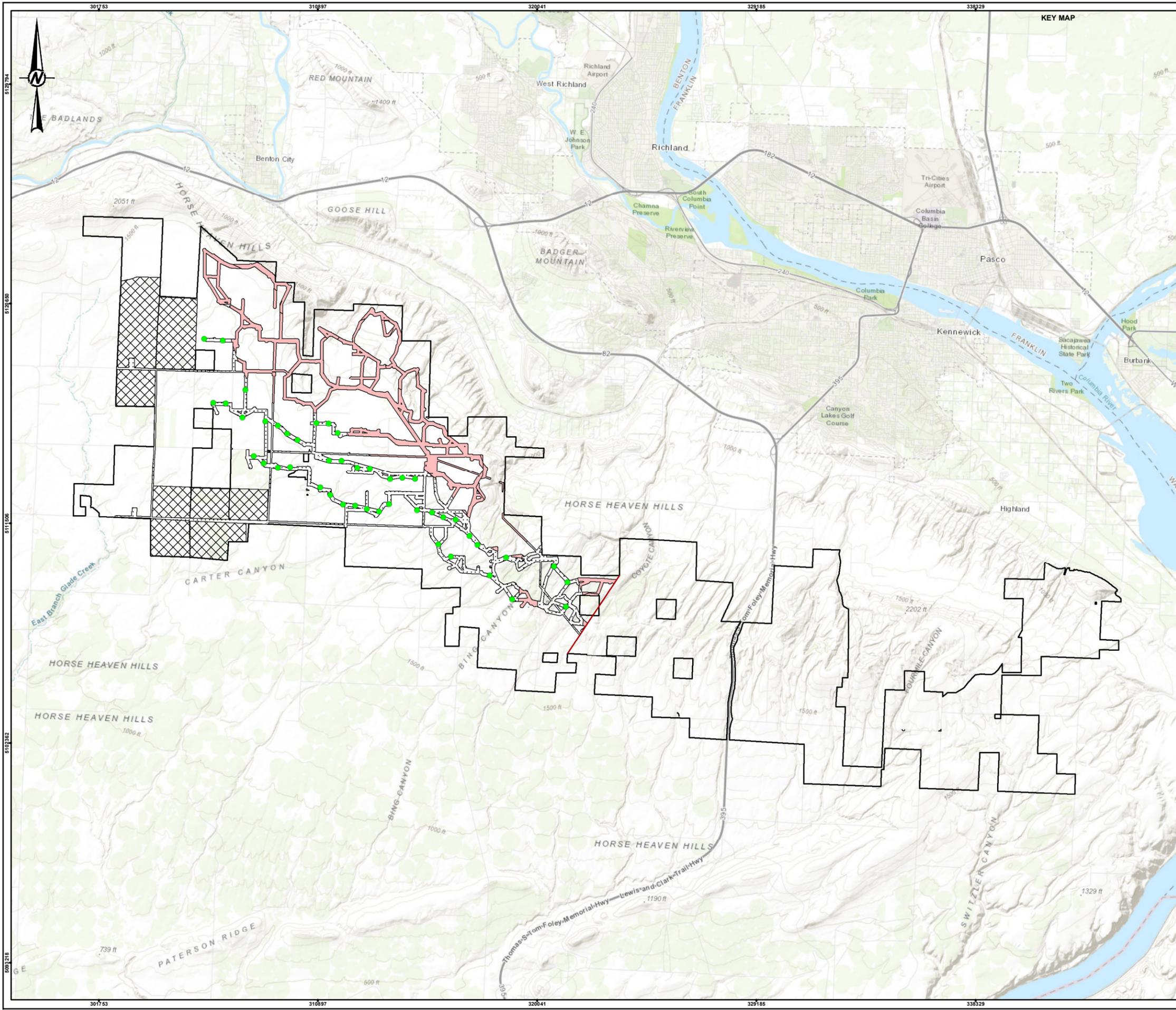
PROJECT
HORSE HEAVEN WIND FARM

TITLE
**TURBINE LAYOUT OPTION 1
 REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 3**

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AH/SG/AM	

PROJECT NO. 31405435.000 CONTROL 01 REV. 0 FIGURE X0.3-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSIS 11m



LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 2
- "East of Straub Canyon" Demarcation

0 2.5 5
1" = 2.5 mi MILES

NOTE(S)

1. ALL INFRASTRUCTURE REMOVED:
 - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - EAST OF STRAUB CANYON AS DEMARCATED ON THE FIGURE
2. PROJECT COMPONENTS (TURBINES, SOLAR ARRAYS, AND BESS) REMOVED:
 - WITHIN MEDIUM OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - WITHIN THE 2MI FEHANESE BUFFER

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/](https://wacconnected.org/cp_addendumanalyses/))

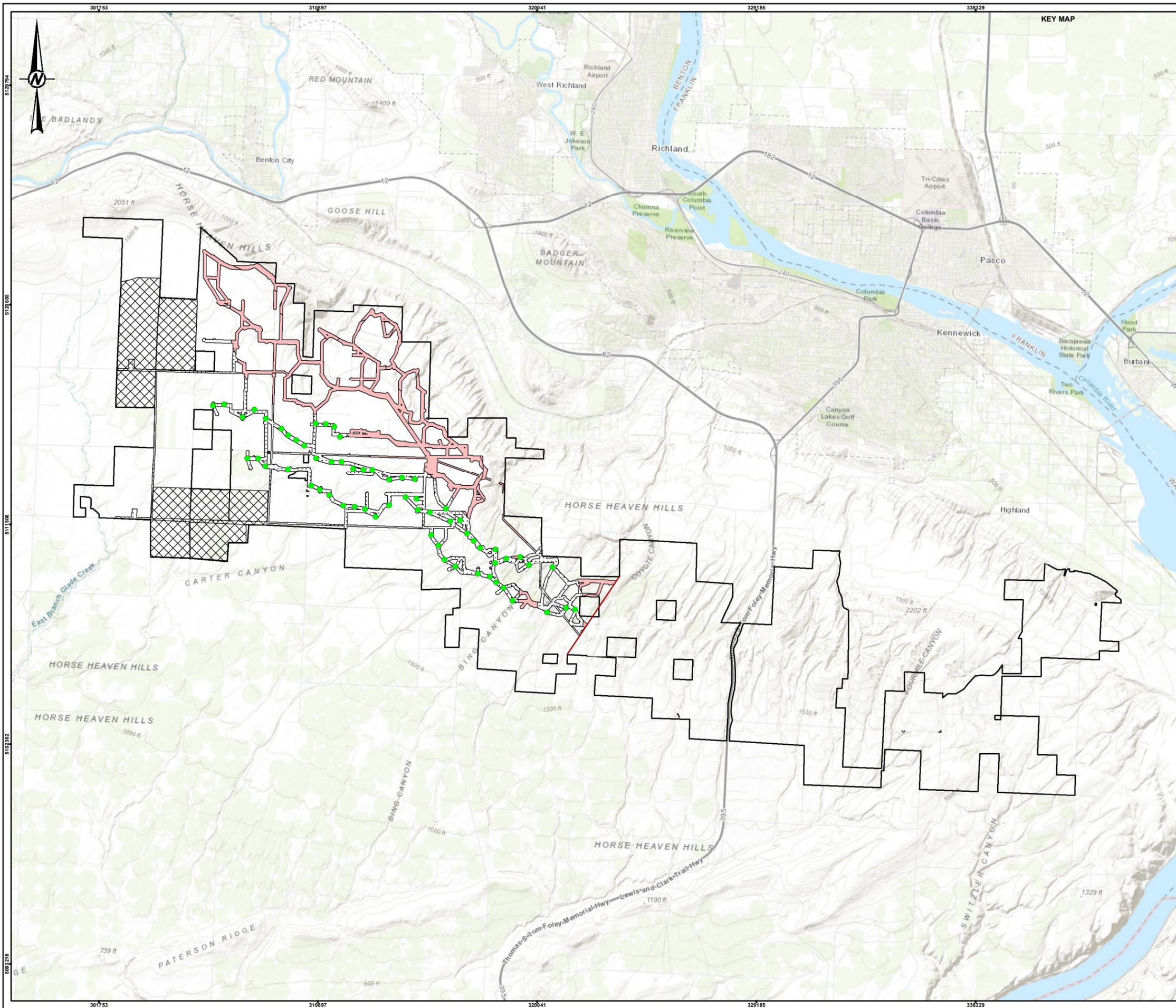
CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 2
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 3

CONSULTANT	DATE	REVISION
	YYYY-MM-DD	
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AH/SG/AM	

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSIS 11m



LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 1
- "East of Straub Canyon" Demarcation

NOTE(S)

1. ALL INFRASTRUCTURE REMOVED:
 - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - EAST OF STRAUB CANYON AS DEMARCATED ON THE FIGURE
2. PROJECT COMPONENTS (TURBINES, SOLAR ARRAYS, AND BESS) REMOVED:
 - WITHIN MEDIUM OR ABOVE WILDLIFE MOVEMENT CORRIDORS
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 - SHADOW FLICKER IMPACTS OF >15 HOURS AS SHOWN IN THE SHADOW FLICKER MODEL IN FIGURES 4.10-9 AND 4.10-10 OF THE DEIS.
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 - TURBINE REMOVAL RECOMMENDATIONS BY SWCA OR
 - VIEWSHED ANALYSIS PROVIDED BY SWCA
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 - INTERSECTION WITH SAGEBRUSH SHRUB-STEPPE HABITAT
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CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

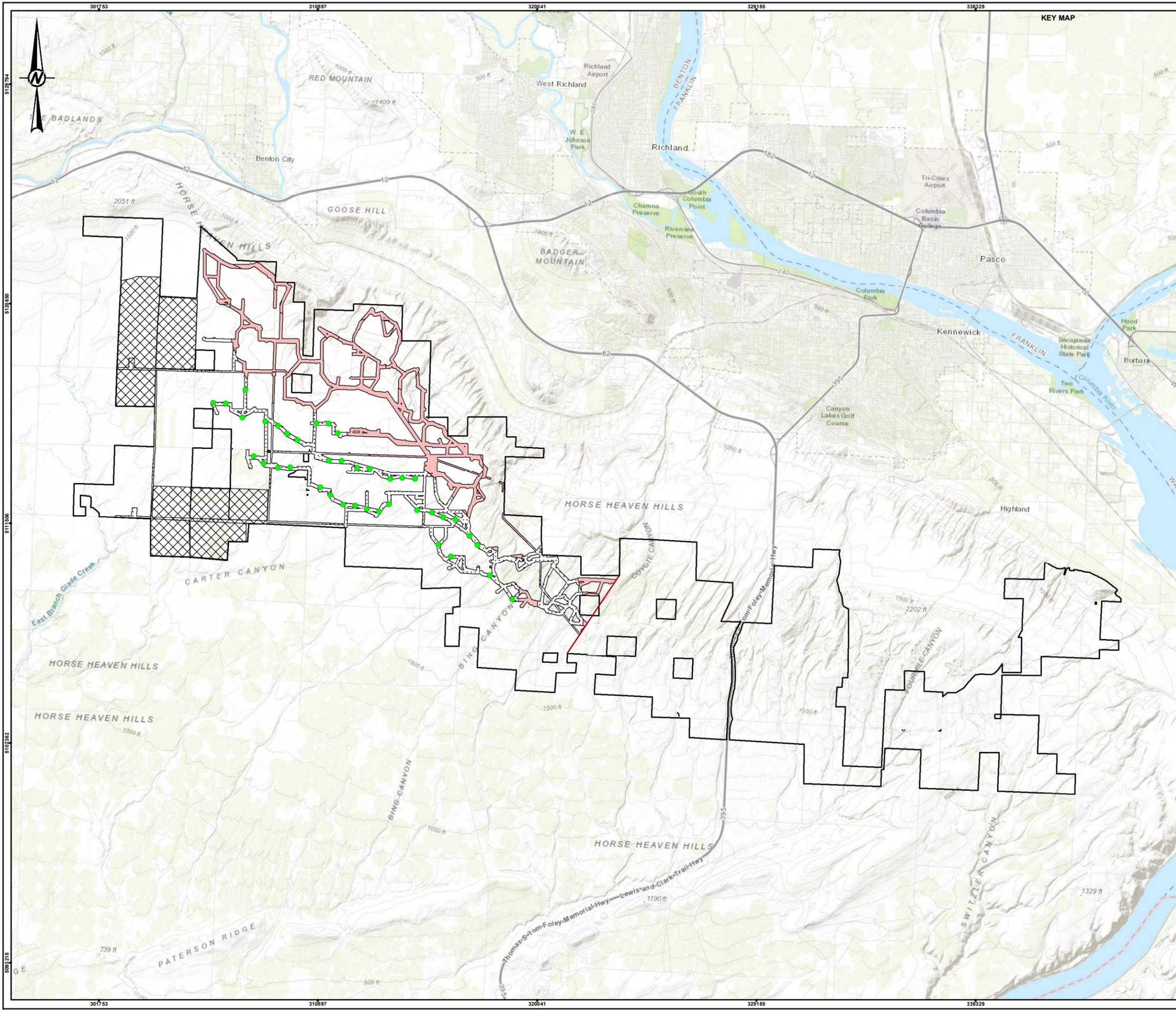
PROJECT
HORSE HEAVEN WIND FARM

TITLE
**TURBINE LAYOUT OPTION 1
 REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4**

CONSULTANT	YYYY-MM-DD	2024-01-08
	DESIGNED	MK
	PREPARED	SCH
	REVIEWED	JP
	APPROVED	AH/SG/AM

PROJECT NO.	CONTROL	REV.	FIGURE
31405435.000	01	0	X0.4-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



KEY MAP

- LEGEND**
- Project Lease Boundary
 - Solar Siting Area
 - Micrositing Corridor - No Turbines
 - Micrositing Corridor - Turbines
 - Proposed Turbine - Option 2
 - "East of Straub Canyon" Demarcation



- NOTE(S)**
1. ALL INFRASTRUCTURE REMOVED:
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- REFERENCE(S)**
1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
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CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

TITLE
**TURBINE LAYOUT OPTION 2
 REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4**

CONSULTANT	YYYY-MM-DD	2024-01-08
	DESIGNED	MK
	PREPARED	SCH
	REVIEWED	JP
	APPROVED	AH/SG/AM

PROJECT NO. CONTROL REV. FIGURE
 31405435.000 01 0 X0.4-2

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSIS

BILL REQUEST - CODE REVISER'S OFFICE

BILL REQ. #: HB-2117 and SB 6188

ATTY/TYPIST: MFW:jlb

BRIEF DESCRIPTION: Authorizing authorities to address aerial firefighting aspects as part of permitting processes for communities at risk of wildfires.

AN ACT Relating to authorizing authorities to address aerial firefighting aspects as part of permitting processes for communities at risk of wildfires; adding a new section to chapter 35.63 RCW; adding a new section to chapter 35A.63 RCW; adding a new section to chapter 36.70 RCW; adding a new section to chapter 80.50 RCW; and creating new sections.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

NEW SECTION. **Sec. 1.** The legislature finds that areas of Washington are at increasing risk in the frequency and severity of wildfires due to climate change. The legislature further finds that fighting wildfires with aerial firefighting can save lives, property, wildlife, habitat, and important cultural resources. Communities that have fought wildfires from sweeping through and destroying their lives and homes want better government policies that consider and address this threat. Therefore, the legislature is amending procedures for the siting of utility-scale wind turbines to improve the safety of the public in areas most at risk for wildfires.

NEW SECTION. **Sec. 2.** A new section is added to chapter 35.63 RCW to read as follows:

A permit required under this chapter for a utility-scale wind energy facility, as defined in RCW 70A.550.010, may address aerial firefighting and wildfire suppression concerns in a similar manner to the requirements authorized in section 4 of this act. This includes, but is not limited to, location adjustments or reduction in the height of the wind turbine or associated structures so that it does not interfere or endanger aerial firefighting and wildfire suppression efforts.

NEW SECTION. **Sec. 3.** A new section is added to chapter 35A.63 RCW to read as follows:

A permit required under this chapter for a utility-scale wind energy facility, as defined in RCW 70A.550.010, may be processed in a manner to address aerial firefighting and wildfire suppression concerns in a similar manner to the requirements authorized in section 4 of this act. This includes, but is not limited to, location adjustments or reduction in the height of the wind turbine or associated structures so that it does not interfere or endanger aerial firefighting and wildfire suppression efforts.

NEW SECTION. **Sec. 4.** A new section is added to chapter 36.70 RCW to read as follows:

(1) The county must consider, as part of the permitting process for a utility-scale wind energy facility as defined in RCW 70A.550.010, whether installation of such a facility or facilities will be an obstruction to aerial firefighting and wildfire suppression efforts in a manner that jeopardizes property, human lives, habitat, and cultural resources in areas that are designated as high risk for wildfires by the department of natural resources, are designated as high risk of wildfire in the most recent Washington state wildland fire protection strategic plan, or have had wildfires near the communities that have received aerial firefighting suppression in the last decade.

(2) If the county determines that the location and height of any structure associated with a utility-scale wind energy facility will obstruct or substantially endanger the ability of aerial fire suppression aircraft to be able to effectively suppress fires within and surrounding a town, city, urban area, or populated county area, the county may require location adjustments or reduction in the height of the wind turbine or associated structures so that it does not interfere or endanger aerial firefighting and wildfire suppression efforts. The county must consider the location, terrain, fire history, and proximity of people and developed properties to the proposed project, and the cumulative effect posed by the

structures associated with the utility-scale wind energy facility in combination with any existing structures in the area.

(3) The county may seek out and consider information provided by wildfire suppression experts at the department of natural resources, the state fire marshal, local fire agencies, and pilots, and companies that provide aerial fire suppression services regarding how a particular turbine configuration and location may impede or endanger aerial fire suppression activities in an area.

(4) The county must add to its applications for permitting of a utility-scale wind energy facility a requirement for the applicant to demonstrate how the height, location, and configuration of the turbines are not an unreasonable impediment and endangerment of aerial fire suppression activities.

NEW SECTION. **Sec. 5.** A new section is added to chapter 80.50 RCW to read as follows:

(1) The council must consider, as part of the permitting process for a utility-scale wind energy facility as defined in RCW 70A.550.010, whether installation of such a facility or facilities will be an obstruction to aerial firefighting and wildfire suppression efforts in a manner that jeopardizes property, human lives, habitat, and cultural resources in areas that are designated as high risk for wildfires by the department of natural resources, are designated as high risk of wildfire in the most recent Washington state wildland fire protection strategic plan, or have had wildfires near the communities that have received aerial firefighting suppression in the last decade.

(2) If the council determines that the location and height of any structure associated with a utility-scale wind energy facility will obstruct or substantially endanger the ability of aerial fire suppression aircraft to be able to effectively suppress fires in and surrounding a town, city, urban area, or populated county area, the council may require location adjustments or reduction in the height of the wind turbine or associated structures so that it does not

interfere or endanger aerial firefighting and wildfire suppression efforts. The council must consider the location, terrain, fire history, and proximity of people and developed properties to the proposed project, and the cumulative effect posed by the structures associated with the utility-scale wind energy facility in combination with any existing structures in the area.

(3) The council may seek out and consider information provided by wildfire suppression experts at the department of natural resources, the state fire marshal, local fire agencies, and pilots, and companies that provide aerial fire suppression services regarding how a particular turbine configuration and location may impede or endanger aerial fire suppression activities in an area.

(4) The council must add to its applications for permitting of a utility-scale wind energy facility a requirement for the applicant to demonstrate how the height, location, and configuration of the turbines are not an unreasonable impediment and endangerment of aerial fire suppression activities.

NEW SECTION. **Sec. 6.** The state and county must ensure that utility-scale wind energy facilities that have not been constructed by the effective date of this section are in compliance with the provisions of this act.

NEW SECTION. **Sec. 7.** If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.

--- END ---

Additional Mitigation Needed Due to Visual Impacts

Summitview KOP Viewshed

Impact Area Enlarged with Turbine Numbers Visible for Identification

Turbine Layout Option 1 January 19, 2024 Map

- LEGEND**
- Project Lease Boundary
 - Solar Siting Area
 - Micrositing Corridor - No Turbines
 - Micrositing Corridor - Turbines
 - Proposed Turbine - Option 1
 - "East of Straub Canyon" Demarcation



- NOTE(S)**
1. ALL INFRASTRUCTURE REMOVED:
 - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - EAST OF STRAUB CANYON AS DEMARCATED ON THE FIGURE
 2. PROJECT COMPONENTS (TURBINES, SOLAR ARRAYS, AND BESS) REMOVED:
 - WITHIN WEDGE OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - WITHIN THE 2MI FEHA NEST BUFFER
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 3. PREVIOUSLY, IMPACTS WERE DEFINED AS:
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- REFERENCE(S)**
1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
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CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 1
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MM	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AH/SJ/AM	

IF THIS REQUIREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM 11X17

Additional Mitigation Needed Due to Visual Impacts

Summitview KOP Viewshed

Impact Area Enlarged with Turbine Numbers Visible for Identification

Turbine Layout Option 2 January 19, 2024 Map

- LEGEND**
- Project Lease Boundary
 - Solar Siting Area
 - Micrositing Corridor - No Turbines
 - Micrositing Corridor - Turbines
 - Proposed Turbine - Option 2
 - "East of Straub Canyon" Demarcation



- NOTES**
1. ALL INFRASTRUCTURE REMOVED:
 - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - EAST OF STRAUB CANYON AS DEMARCATED ON THE FIGURE
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CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

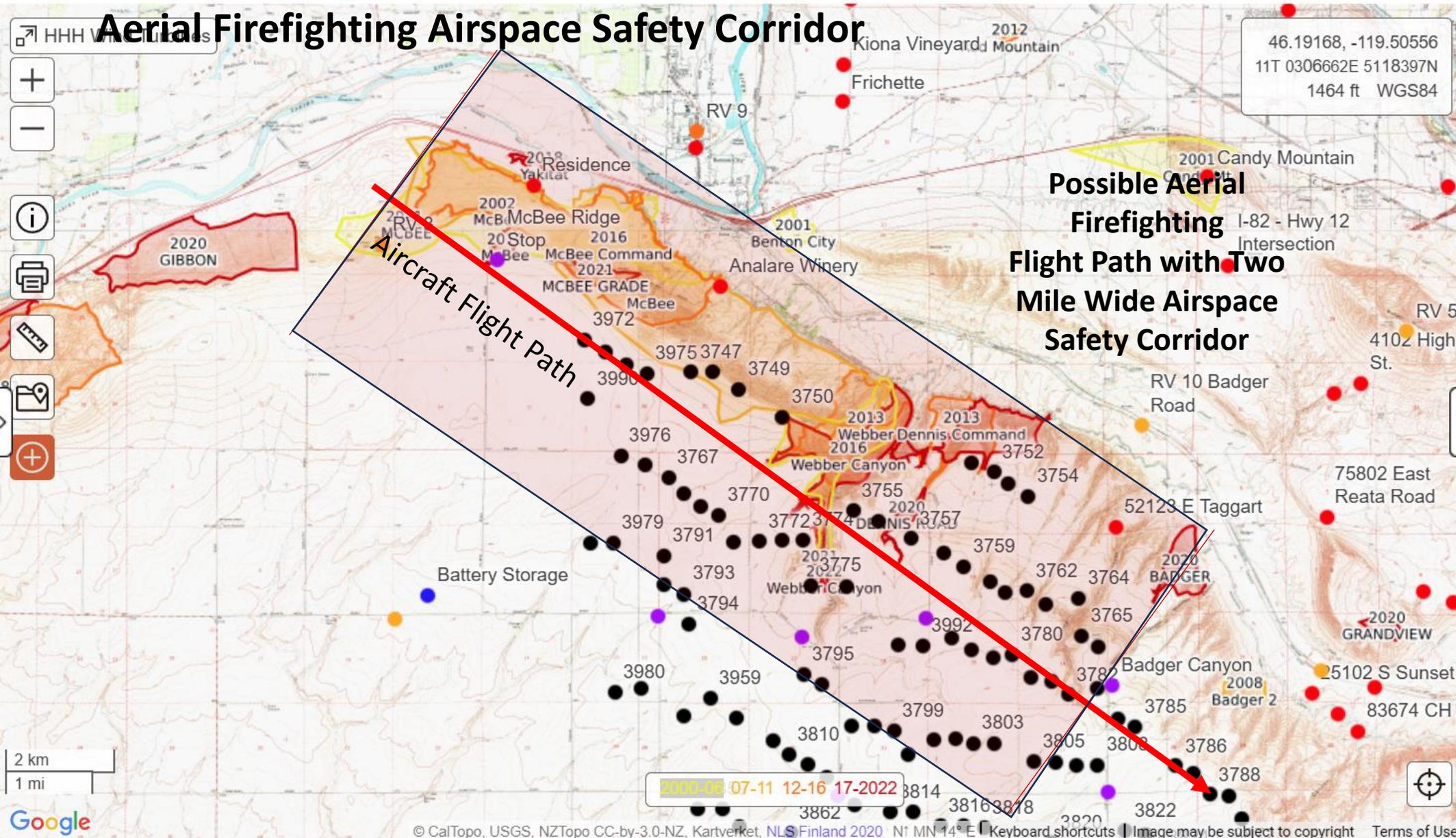
TITLE
TURBINE LAYOUT OPTION 2
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	BY	MK
PREPARED	BY	SCH
REVIEWED	BY	JP
APPROVED	BY	AH/SIG/AM

IF THIS DOCUMENT DOES NOT MATCH WHAT IS BROWN, THE BROWN IS CORRECT FROM 1980

Documented Fire History West Portion HHH Project with Two Mile

Aerial Firefighting Airspace Safety Corridor



Map Layers

Base Layers

- Scanned Topos
- + Stack Base Layer

Map Sheets

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Map Overlays

- Contours
- MapBuilder Overlay
- Slope Angle Shading
- Geology
- Public Lands
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Additional Mitigation Needed Due to Aerial Firefighting

Possible Aerial Firefighting Flight Path with Two Mile Wide Airspace Safety Corridor

Turbines & Infrastructure Needing to Be Removed to Prevent Creation of No-Fly Zone Impacts (Green Markers in Red Safety Corridor)

Turbine Layout Option 1 January 19, 2024 Map

LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 1
- "East of Straub Canyon" Demarcation

NOTES

1. ALL INFRASTRUCTURE REMOVED:
 - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - EAST OF STRAUB CANYON AS DEMARCATED ON THE FIGURE
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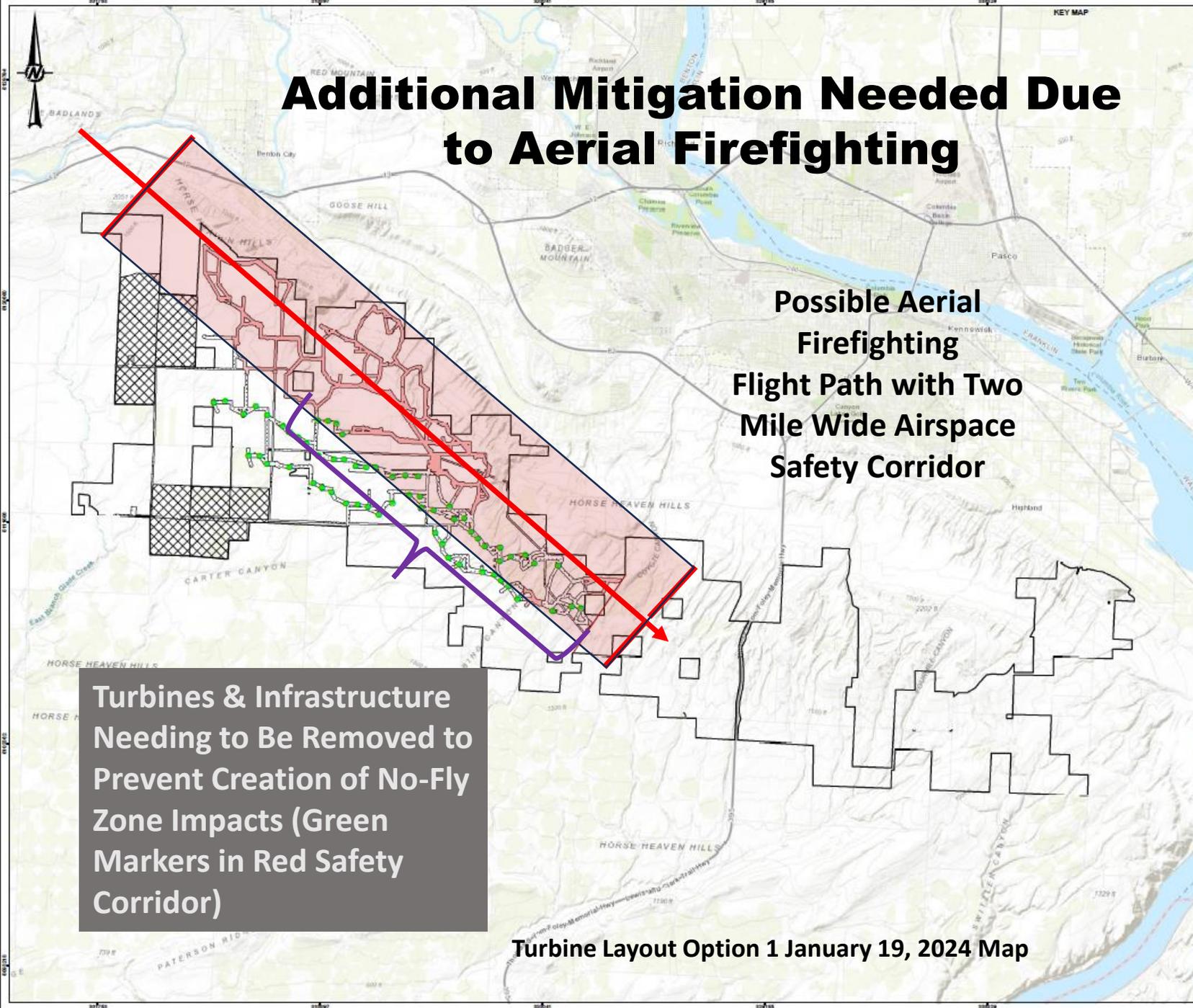
CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 1
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AHISG/AM	

PROJECT NO. 31405435.000 CONTROL 01 REV. 0 FIGURE X0.4-1



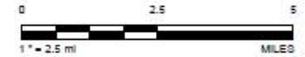
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Possible Aerial Firefighting Flight Path with Two Mile Wide Airspace Safety Corridor

Turbines & Infrastructure Needing to Be Removed to Prevent Creation of No-Fly Zone Impacts (Green Markers in Red Safety Corridor)

Turbine Layout Option 2 January 19, 2024 Map

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 - Solar Siting Area
 - Micrositing Corridor - No Turbines
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CLIENT
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PROJECT
HORSE HEAVEN WIND FARM

TITLE
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REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AHISG/AM	

From: [VICKEY STOLLE](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 5:57:40 PM

External Email

We have reviewed the maps you so hesitantly provided and agree that Option 4 is the only acceptable alternative and that they must adequately address aerial firefighting.

What is the purpose of your committee if you don't have the authority to make the decision? What kind of transparent government would you label that??

From: [Connie Gillispie](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 6:11:28 PM

External Email

Option 4 is the only acceptable alternative. Please adequately address aerial firefighting. Please do not ignore our concerns!

Fugitive Dust -Public Comment

Sunday January 21, 2024, Submittal Approximately 6:15 PM

David Sharp
Kennewick, WA
Tri-Cities CARES

Issue-The FEIS understates the impact of fugitive dust to close-in residents, the local area, and even threatens our regional National Air Quality Standard (NAAQS) attainment status.

Construction activities emissions are ranked as Low impact, and Confined in the Spatial Extent category: Reference FEIS Table 4.3-8a: Summary of Potential Impacts on Air Resources during Construction of the Proposed Action. The combination of the size and scope of this project, the fine silty soil, and the arid nature of this area almost ensures that there will be difficulties with fugitive dust control.

Discussion-The FEIS does not adequately address air quality impacts and mitigation for the HHH project. The Horse Heaven Hills are documented as a chronic source of fugitive dust that have resulted in exceedances of PM10 and PM2.5 under the NAAQS. There were numerous public comments regarding fugitive dust impacts from the project. Nowhere in the FEIS is there a mention of the impact of fugitive dust to on human health.

Comparison of the dispersion modeling and construction calculations imply that construction emissions will have a significant impact to residents living just off of lease boundary property to the North from Benton City to the East end of the Badger Canyon drainage.

We have a concern about the calculations and whether they represent this area. There is no attribution to who provided those calculations. Some entity must own and stand behind their accuracy.

1. These construction calculations do not appear in any of the three versions of the Application for Site Certification including the Final Application posted November 2023. They are only posted under the DEIS and FEIS, but still with no attribution.
2. Tri-Cities CARES believes that some of the calculations are not correct. A sample calculation was performed for dozing and grading. Our results showed the PM10 emissions to be 20 times higher than the FEIS document for all phases of the project.
3. Use local soil properties for calculation factors as recommended by AP-42.

4. Appendix 4.3-1 shows that construction emissions will be 1,158 tons of PM10 (FEIS Chapter 4, page 4-40). Without proper dust controls project emissions could rise to 25-30% of the total county emissions.
5. For comparison purposes, batch plant and laydown areas emissions were only 5.8 tons/year shown in Appendix 4.3-2 Table 3.13.
6. We request that EFSEC require dispersion modeling for the entire project rather than components.

Requested Additional Mitigation/Measures-Water use underpins the entire dust control strategy in the emissions calculations. We respect and understand there has been water supply uncertainty but a source will likely be identified. It must provide sufficient quantity.

Tri-Cities CARES recommends these additional mitigation or measures to reduce fugitive dust:

- Ensure availability of sufficient water for desired control efficiency.
 - Rationale-The entire emissions control strategy is based upon the use of water. Without the stated control efficiency of water, emissions would triple or quadruple.
- Provide wheel well washing facilities where equipment will enter paved roadways. Keep roads clean and bare at truck entry points.
 - Rationale-Without these, paved roads will become laden with fine particulate and will be emitted as fugitive dust.
- Maintain documentation of water quantity received and deployed.
 - Best management practice
- Include Benton Clean Air participation in development of the Fugitive Dust Control Plan.
 - Rationale-Both project and agency will be on the same page.
 - Faster approval of air permit.
- Develop a Fugitive Dust Plan before bid documents are tendered
 - Successful bidder will know what will be expected-No surprises.
- Include a High Wind Mitigation Action plan in the Fugitive Dust Plan, and include training of supervisors
 - Preparedness

The above mitigation measures/conditions/stipulations are reasonable, attainable, and attributable to a specific environmental impact.

In addition, we request that Ecology install a temporary PM2.5 monitor for the length of the project at an appropriate location in the Badger Valley, North of Badger Valley Road.

From: pixelate@mathsavers.com
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options - Best Option is Option 4 (minimize the project)
Date: Sunday, January 21, 2024 7:38:10 PM

External Email

Hello EFSEC Staff –

I am writing with respect to the HHH Wind and Solar Project proposal to be located to the southwest of the Tri-Cities / Eastern Washington State. Of the four Options on the table, the only viable option is Option 4 which minimizes the scope of this environmentally destructive project. I also encourage the EFSEC staff to address the needs of aerial firefighting over the Horse Heaven Hills by further reducing both the height and number of turbines in the project. Option 4 will also go some distance in preserving property values for individuals who own property in the greater Tri-Cities area since this option eliminates many of the turbines that would destroy the scenic vistas in the region.

Respectfully submitted,

Patrick D. Grengs II / Owner of 40 acres of farm and ranch land in West Richland, Washington

From: [Pam Minelli](#)
To: [EFSEC mi Comments](#); info@efsec.wa.gov; [Moon, Amy \(EFSEC\)](#); [Bumpus, Sonia \(EFSEC\)](#); [Owens, Joan \(EFSEC\)](#)
Subject: Public comment on Horse Heaven Wind Project re staff recommendations
Date: Sunday, January 21, 2024 7:46:59 PM
Attachments: [TCC Wildlife Comments for 01_24_24.pdf](#)
[Final TCC New Aerial Firefighting Maps Comments 012124_3_page.pdf](#)

External Email

Because the EFSEC public comment form for the HH Wind Project is erroneously closed before the 11:59 PM January 21 deadline, please accept my comments on behalf of TC CARES attached to this email.

Respectfully submitted.
Pam Minelli

TRI-CITIES C.A.R.E.S.
Phone: 509-539-6788
Email: pam@tricitescares.org

TRI-CITIES C.A.R.E.S
Community | Action for | Responsible | Environmental | Stewardship
Visit: www.TriCitiesCARES.org

Horse Heaven Action Item:

At the December 20, 2023 Council meeting, the Council directed staff to prepare the following options for consideration.

1. All Project components excluded from high-linkage wildlife movement corridors and all primary Project components (turbines, solar arrays and BESS) excluded from medium and above-linkage wildlife movement corridors and areas within 2 miles of a documented ferruginous hawk nest.
2. Option 1 exclusions, but also excluding all turbines identified as Class 1 Impact or above as per Figures 2-5 and 2-6 in the FEIS.
3. Option 1 exclusions, but also excluding all Project components from areas east of Straub Canyon.
4. A combination of Options 1, 2, and 3.

The staff have prepared maps of these options for Council review and discussion. The Council will direct staff following deliberations on what they would like to carry forward into recommendation documents at the January 24th Council meeting. Comment on the Council direction to staff is being sought at this time.

Tri-Cities CARES' Comments regarding effects of EFSEC Recommendation Options listed in the Horse Heaven Action Item for the January 24, 2024 EFSEC meeting **on Wildlife.**

To provide maximum protection of **Wildlife and Their Habitats**, Tri-Cities CARES prefers a No Build Option, but of the Options currently under consideration by EFSEC, TCC requests that **a version of Option 4 that combines all aspects of Options 1-3 plus the inclusion of the following additional project specifications be considered:**

1. Additional project specifications for the protection of Ferruginous Hawk:

- Require WDFW identification and formal approval of the nesting sites to be included in the two-mile no-build buffer. Dr. Jim Watson stated that hawks return to historic nests and unused nests should be included in those protected by a no-build buffer.
- Designate the no-build buffer around for hawk nests as permanent and prohibit **all** components of the project from this buffer. Allow no future changes to these buffer zones from Ferruginous Hawk nests.
- Increase the two-mile buffer from all Ferruginous Hawk nests to a six-mile no-build buffer; this is essential for their existence. Dr. Watson and others have stated Ferruginous Hawks' home range averages 6 miles.
- Designate WDFW as the authority to design and monitor all wildlife mitigation plans rather than the PTAG/TAC. This is essential to the protection of the Ferruginous Hawk and all wildlife and habitats impacted by the Horse Heaven Project.

2. Additional project specifications for the protection of all HHH wildlife:

- Require Yakama Nation's approval of the final version of Option 4 or any recommendation approved by EFSEC to confirm adequate protection for the Pronghorn Antelope and for the Ferruginous Hawk.

- Remove turbines impacting raptor nesting areas per Wild-8, Chapter 4 of the FEIS.
- Remove project components from Townsend Ground Squirrel habitat as designated and approved by WDFW.
- Remove turbines that prohibit aerial firefighting needed to protect Ferruginous Hawk nests on the steep slopes of the North boundary of the project and in Webber and Sheep Canyons and to protect the dwindling shrub steppe habitats.
 - The applicants response to Data Request 7, FEIS-Habitat-16 Appendix L, PDF page 29 confirms the real impact of fire on Ferruginous Hawk nests with this statement: “Since 1995, wildfires affected 15 nesting territories in 2010, 7 in 2015, and 5 in 2020”.
 - [See attached TCC aerial firefighting maps to identify additional turbines to be removal.](#)
- Remove additional green turbines **99 to 110 and 137 to 152 of Option 1** (or taller turbines in same area in Option 2) in the center of the project to provide a safer north to south migration path for many migrating birds including the endangered Sandhill Crane and Ferruginous Hawk.
- Include the mitigation to curtail turbines during migration of the endangered Sandhill Crane and Ferruginous Hawk through the Horse Heaven Hills.
- Assess remaining turbines, solar and all project components bordering the wildlife corridors for potential risk and impact on wildlife use of the wildlife movement corridors (noise and movement of turbine blades, glare from solar panels, flashing lights, etc.). Remove those project components deemed a risk to wildlife using the wildlife movement corridors.
- Exclude all transmission lines from medium and above-linkage wildlife movement corridors.

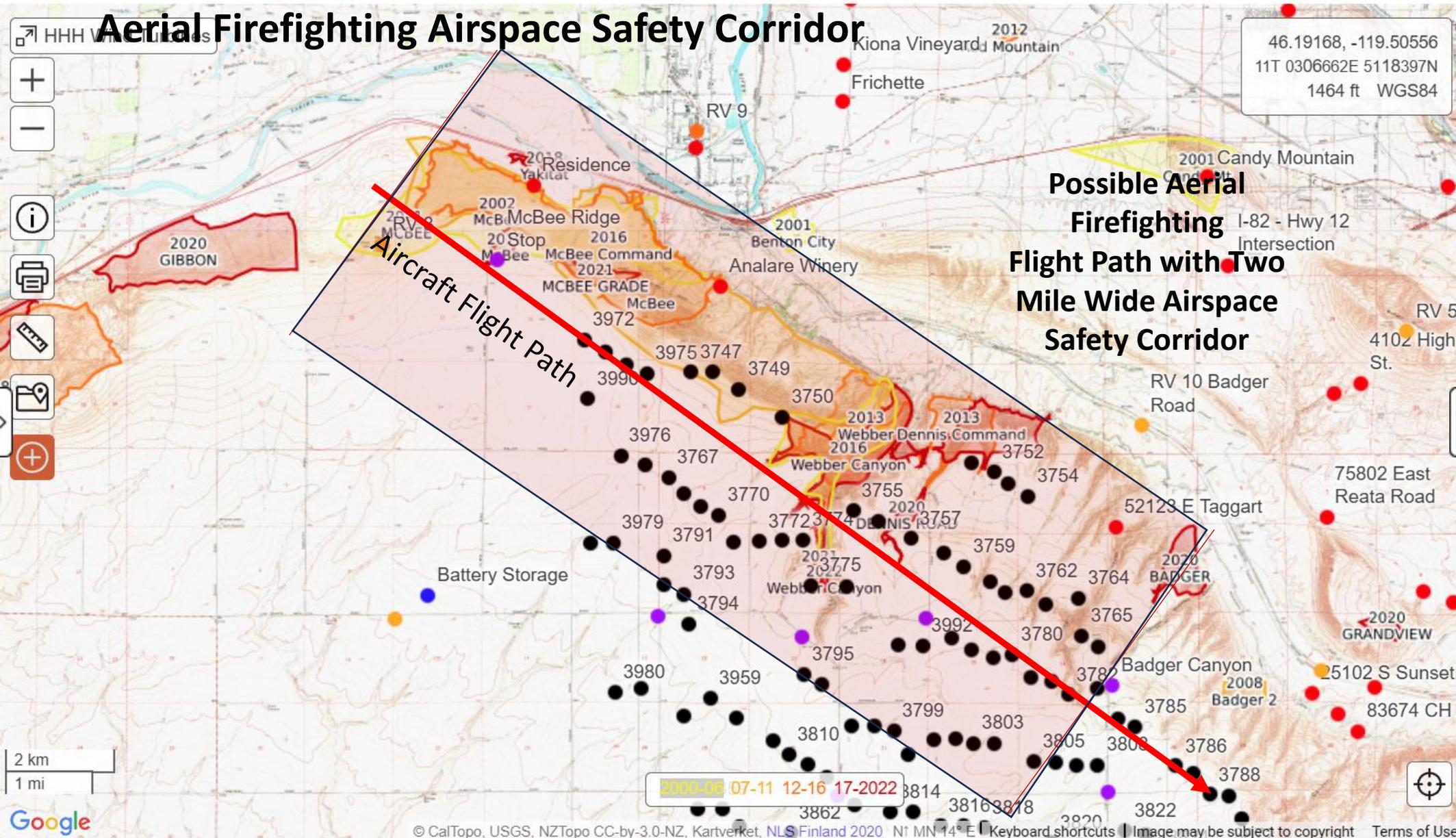
- Relocate all laydown yards outside the 2 mile buffer zone protecting Ferruginous Hawk nests.
- Authorize WDFW, not the developer, to develop all wildlife mitigations, monitoring programs, collection of observation data and adaptive management strategies during all phases of the project. (Table 4.6-9, FEIS) Developer-conducted surveys are not preferred as noted in this source: <https://www.propublica.org/article/washington-state-is-leaving-tribal-cultural-resources-at-mercy-of-solar-developers>
- Revise FEIS Hab-4, page 4-221 as noted below if a PTAG/TAC is created for any purpose:

The PTAG and TAC ~~may~~ **MUST** include representation by WDFW, the Washington Department of Natural Resources, interested tribes, Benton County, and the USFWS. The PTAG and TAC ~~may~~ **MUST** also include local interest groups, not-for-profit groups, and landowners. The exact composition of the PTAG and TAC would be determined through discussions between the Applicant, **WDFW** and EFSEC and would depend on the relevance and/or availability of proposed members.

Respectfully submitted by Pam Minelli on behalf of Tri-Cities C.A.R.E.S.

Documented Fire History West Portion HHH Project with Two Mile

Aerial Firefighting Airspace Safety Corridor



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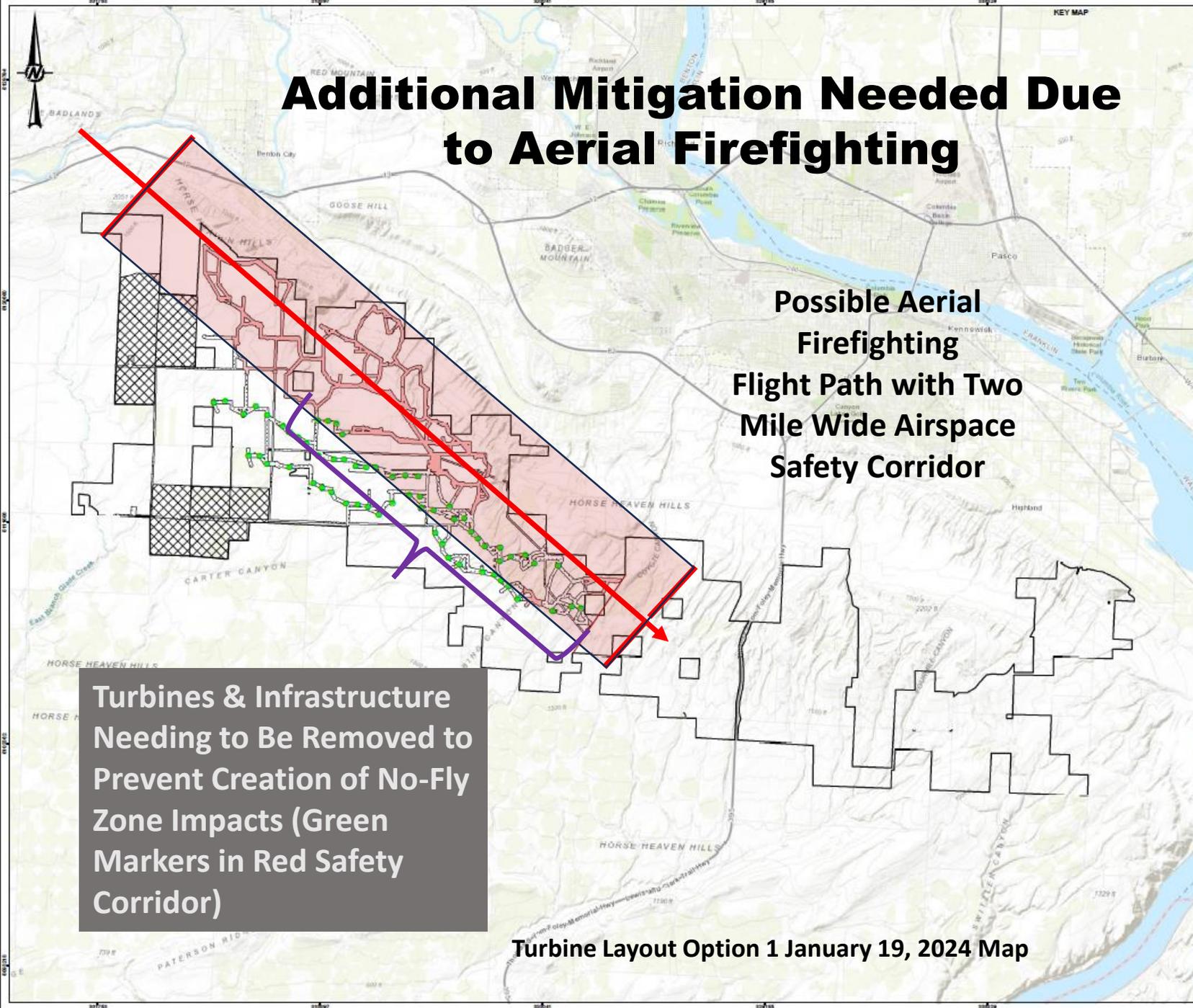
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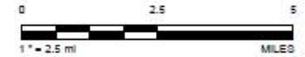
Additional Mitigation Needed Due to Aerial Firefighting

Possible Aerial Firefighting Flight Path with Two Mile Wide Airspace Safety Corridor

Turbines & Infrastructure Needing to Be Removed to Prevent Creation of No-Fly Zone Impacts (Green Markers in Red Safety Corridor)

Turbine Layout Option 2 January 19, 2024 Map

- LEGEND**
- Project Lease Boundary
 - Solar Siting Area
 - Micrositing Corridor - No Turbines
 - Micrositing Corridor - Turbines
 - Proposed Turbine - Option 1
 - "East of Straub Canyon" Demarcation



- NOTES**
1. ALL INFRASTRUCTURE REMOVED:
 - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - EAST OF STRAUB CANYON AS DEMARCATED ON THE FIGURE
 2. PROJECT COMPONENTS (TURBINES, SOLAR ARRAYS, AND BESS) REMOVED:
 - WITHIN MEDIUM OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - WITHIN THE 2MI FEHA NEST BUFFER
 - TURBINES IDENTIFIED WITH "CLASS 1" IMPACTS OR HIGHER
 3. PREVIOUSLY, IMPACTS WERE DEFINED AS:
 - CLASS 0 = ZERO IMPACTS TOTAL CLASS 1 = ONE IMPACT TOTAL CLASS 2 = TWO IMPACTS TOTAL CLASS 3 = ANY CULTURAL IMPACT, ANY FEHA NEST IMPACT, OR THREE OR MORE TOTAL IMPACTS
 IMPACTS WERE CALCULATED AS FOLLOWS:
 1. NOISE BASED IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD:
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 4. RECREATION IMPACT: THE VIEWED ANALYSIS FOR HORSE HEAVEN HILLS RECREATION AREA WAS PULLED OUT AS A SEPARATE IMPACT FROM SWCA'S DELIVERABLE DUE TO THE BLM-ADMINISTERED RECREATION AREA BEING ADJACENT TO THE LEASE BOUNDARY AND PARAGLIDING LAUNCH LOCATIONS OCCURRING WITHIN THIS RECREATION AREA.
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- REFERENCE(S)**
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 2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUM/ANALYSES/](https://waconnected.org/CP_ADDENDUM/ANALYSES/))

CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 1
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AHISG/AM	

From: [Bob](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 8:39:11 PM

External Email

I'm not a supporter of this project overall and absolutely despise the concept that the Governor can override local concerns as he wishes without reason or science as a basis.

That said, **Option 4 is the only acceptable alternative and that they must adequately address aerial firefighting.**

**Robert Birney
Richland, WA. 99354**

Yes, someone who will be impacted by this project!

From: [Dennis Simmelink](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 9:20:55 PM

External Email

My Grandfather started farming in the HHH in 1929. The wind turbine farm proposed does not fit in with our farming operations and in fact are a detriment to successful farming along with impediments to aerial firefighting options. While we are against the entire project concept, as it does virtually nothing for reliable energy production, the best we can do at this point is to support Option 4 of the EFSEC options. Put these in YOUR backyard. A waste of time, resources, and money.

Respectfully,
Dennis and Jullie Simmelink
98413 Lilliann Dr
Kennewick, WA 99338
509-947-2824

From: [Paul Krupin](#)
To: [EFSEC mi Comments](#); [Drew, Kathleen \(EFSEC\)](#); [Bumpus, Sonia \(EFSEC\)](#); [Moon, Amy \(EFSEC\)](#); [Hafkemeyer, Ami \(EFSEC\)](#)
Subject: Updated - Visual and Aerial Firefighting comments on directions for staff Jan 24 Council Meeting
Date: Sunday, January 21, 2024 9:59:40 PM
Attachments: [Visual Impacts of the HHH Wind Turbines on Tri-Cities 012124 comments set.pdf](#)
[20240109 Horse Heaven FEIS Council Exclusion Considerations 1 through 4 \(002\).pdf](#)
[HB 2117 SB 6188 Wildfire Safety Legislative Proposal Aerial Firefighting Needs.pdf](#)
[TCC New Visual Map Comments 012124 2 page.pdf](#)
[TCC New Aerial Firefighting Maps Comments 012124 3 page.pdf](#)
[EFSEC Options - Visual and Aerial Firefighting Comments PJK Final 0950 PM.pdf](#)

External Email

The EFSEC Options Visual and Aerial Firefighting Comments file is 19 pages (attached).

There are five additional pdf file attachments to this comments submission.

1. The Option maps from EFSEC
2. The Google Earth Simulation Graphics
3. The proposed aerial firefighting legislation HB 2117 / SB 6188
4. The Visual Impact Graphics 2 page
5. The Aerial Firefighting Impacts 3 page

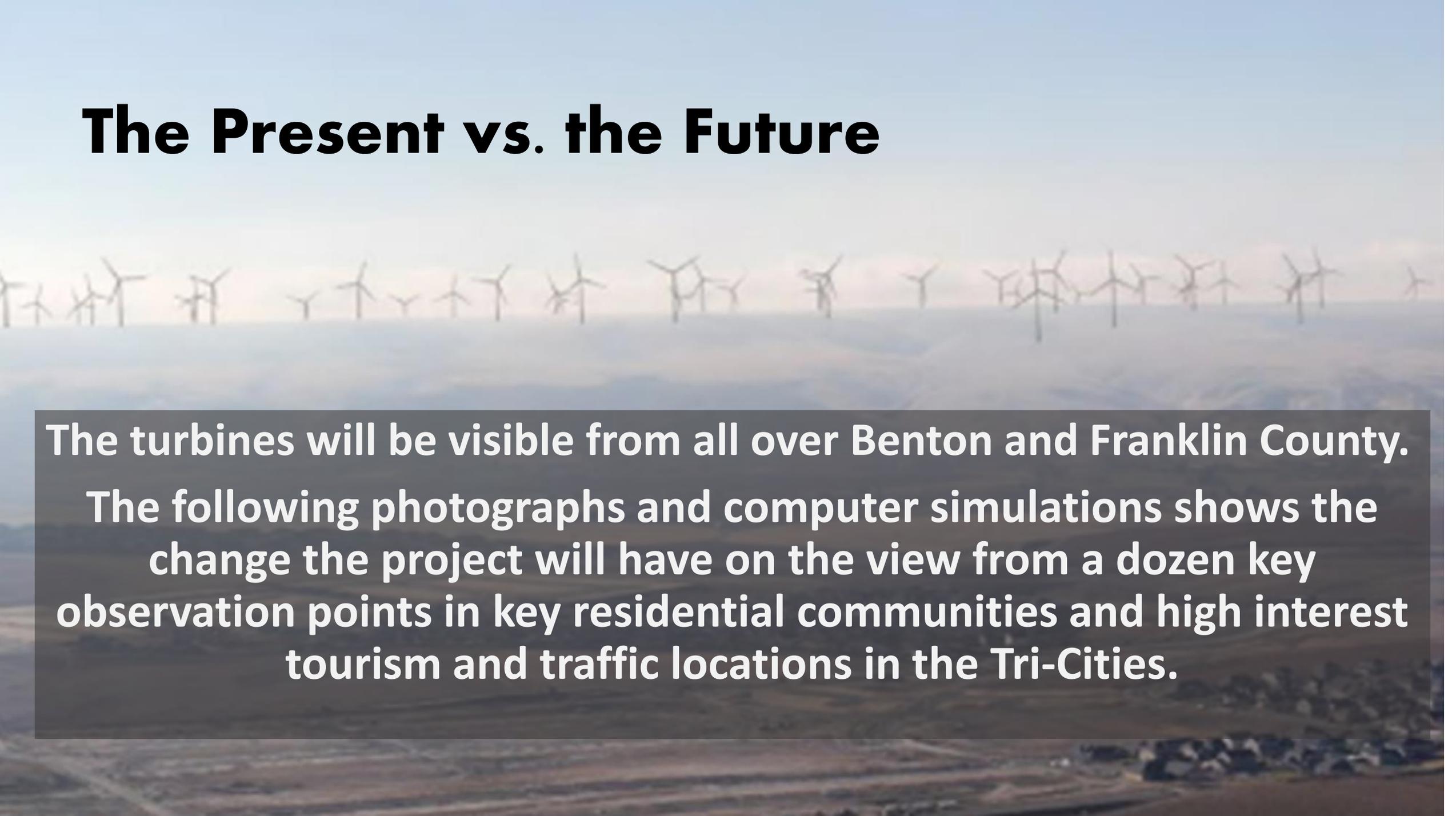
Appreciatively,

Paul J. Krupin, BA, MS, JD
Board Member on behalf of TRI-CITIES C.A.R.E.S
Visit: <http://www.TriCitiesCARES.org>
509-531-8390 cell 509-582-5174 landline Paul@Presari.com

Significant Unavoidable Adverse Impacts Visual Aspect (Operations)

The Final EIS states: “Post-mitigation and Applicant commitments, the turbines would still dominate views from many key observation points and the landscape would appear strongly altered.”

The Present vs. the Future

An aerial photograph of a vast wind farm. The turbines are arranged in long, parallel rows that stretch across a wide valley. The landscape is a mix of brown and green fields, with some roads and structures visible in the foreground. The sky is a pale, hazy blue, suggesting a clear day. The turbines are small in the distance, creating a rhythmic pattern across the horizon.

The turbines will be visible from all over Benton and Franklin County.

The following photographs and computer simulations shows the change the project will have on the view from a dozen key observation points in key residential communities and high interest tourism and traffic locations in the Tri-Cities.

Key Observation Points For Google Earth Pro Computer Simulations

Horse Heaven Wind Project



Overview Map
Turbine Layout Option 1
BENTON COUNTY, WA

- Project Lease Boundary
- Option 1 Turbine Layout
- 230-kV Interfe Transmission Line
- County Well Road 500-kV Transmission Line
- Solar Interfe 500-kV Transmission Line
- County Well Road 500-kV Transmission
- Project Substation
- BPA Substation
- Solar Array
- Solar Siting Area
- Laydown Yard
- Radar Tower
- Features Removed from Current Design

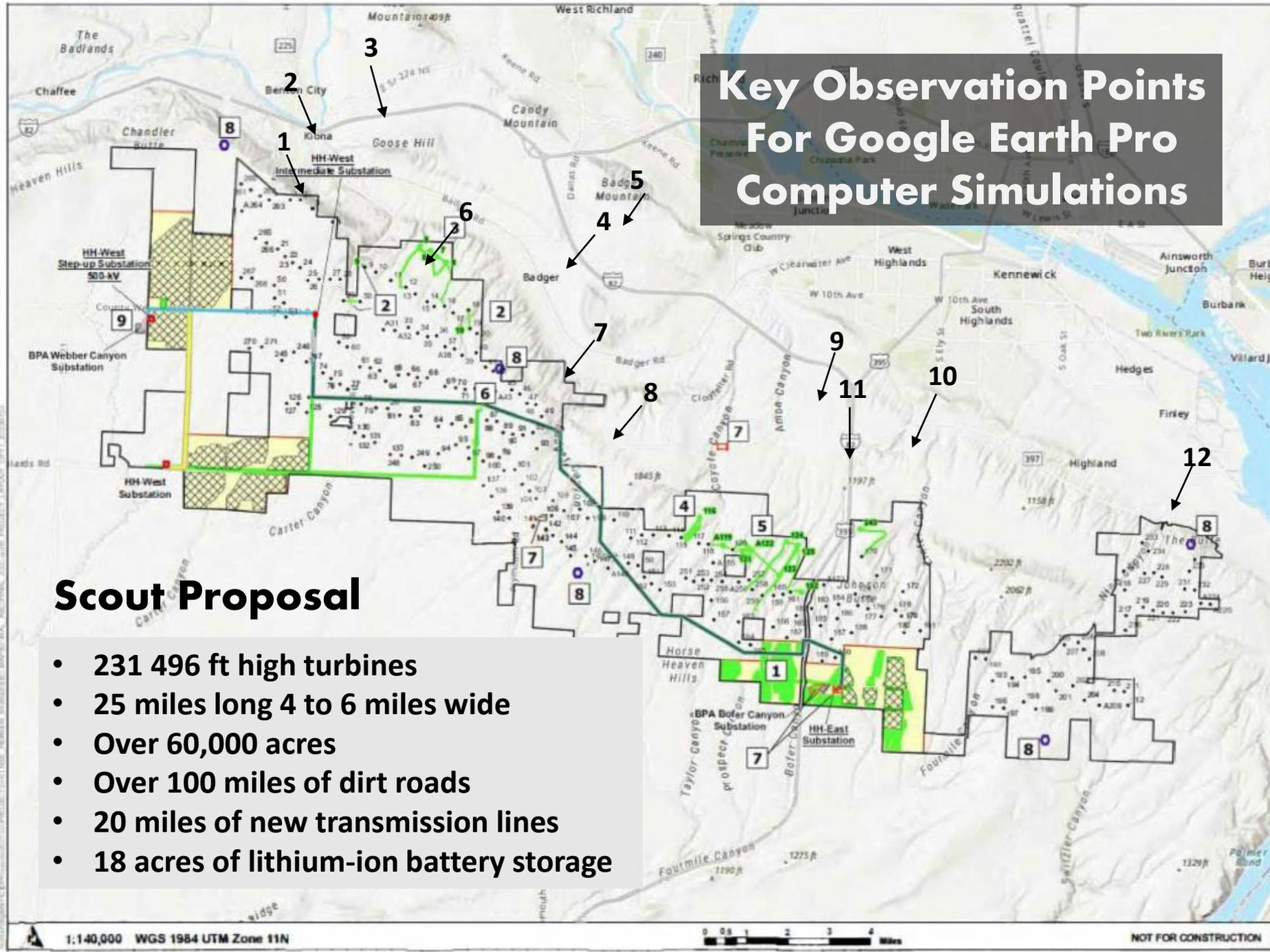


Reference Map



Scout Proposal

- 231 496 ft high turbines
- 25 miles long 4 to 6 miles wide
- Over 60,000 acres
- Over 100 miles of dirt roads
- 20 miles of new transmission lines
- 18 acres of lithium-ion battery storage



1:140,000 WGS 1984 UTM Zone 11N



NOT FOR CONSTRUCTION

1 - Anelare Winery - BLM Kiosk – McBee Grade Road

May 25, 2023



Google Earth Pro
Computer Simulation



2 - Benton City - RV9

May 5, 2023



TCC Google Earth Pro
Computer Simulation



3 - Fidelitas Winery – Sunset Road - Red Mountain

September 6, 2023



TCC Google Earth Pro
Computer Simulation



4 - Badger Mountain South – Dallas Road – I-82

May 24, 2023



Google Earth Pro Computer Simulation



5 - Top of Badger Mountain - RV 5

April 22, 2023



TCC Google Earth Pro
Computer Simulation



6 - Badger Canyon Road - RV 10

May 24, 2023



TCC Google Earth Pro
Computer Simulation



7 - Summitview Residences South Kennewick

September 5, 2023 8 AM



Google Earth Pro
Computer Simulation



8 - Tripple Vista – Clodfelter & Locust Grove Kennewick

September 7, 2023



TCC Google Earth Pro
Computer Simulation



9 - Thompson Hill Residences Kennewick Bob Olson Parkway

September 6, 2023



TCC Google Earth Pro
Computer Simulation



10 - Canyon Lakes Community Kennewick

September 6, 2023



TCC Google Earth Pro
Computer Simulation



11- Interstate 82 – Highway 395 Intersection, South of Kennewick

September 6, 2023



TCC Google Earth Pro
Computer Simulation



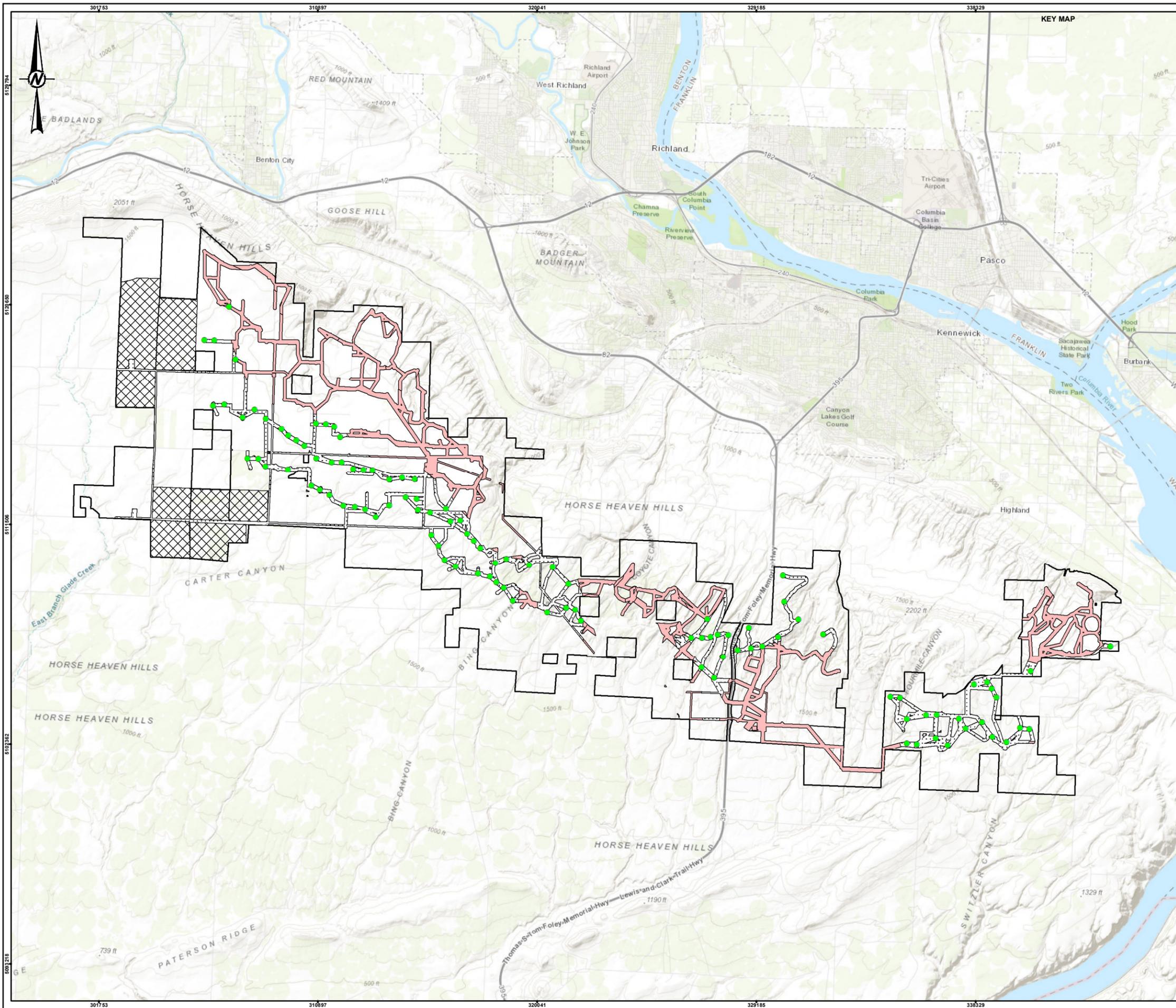
12 - Finley Elementary School in Finley

May 25, 2023



TCC Google Earth Pro
Computer Simulation





LEGEND

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- Solar Siting Area
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REFERENCE(S)

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STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

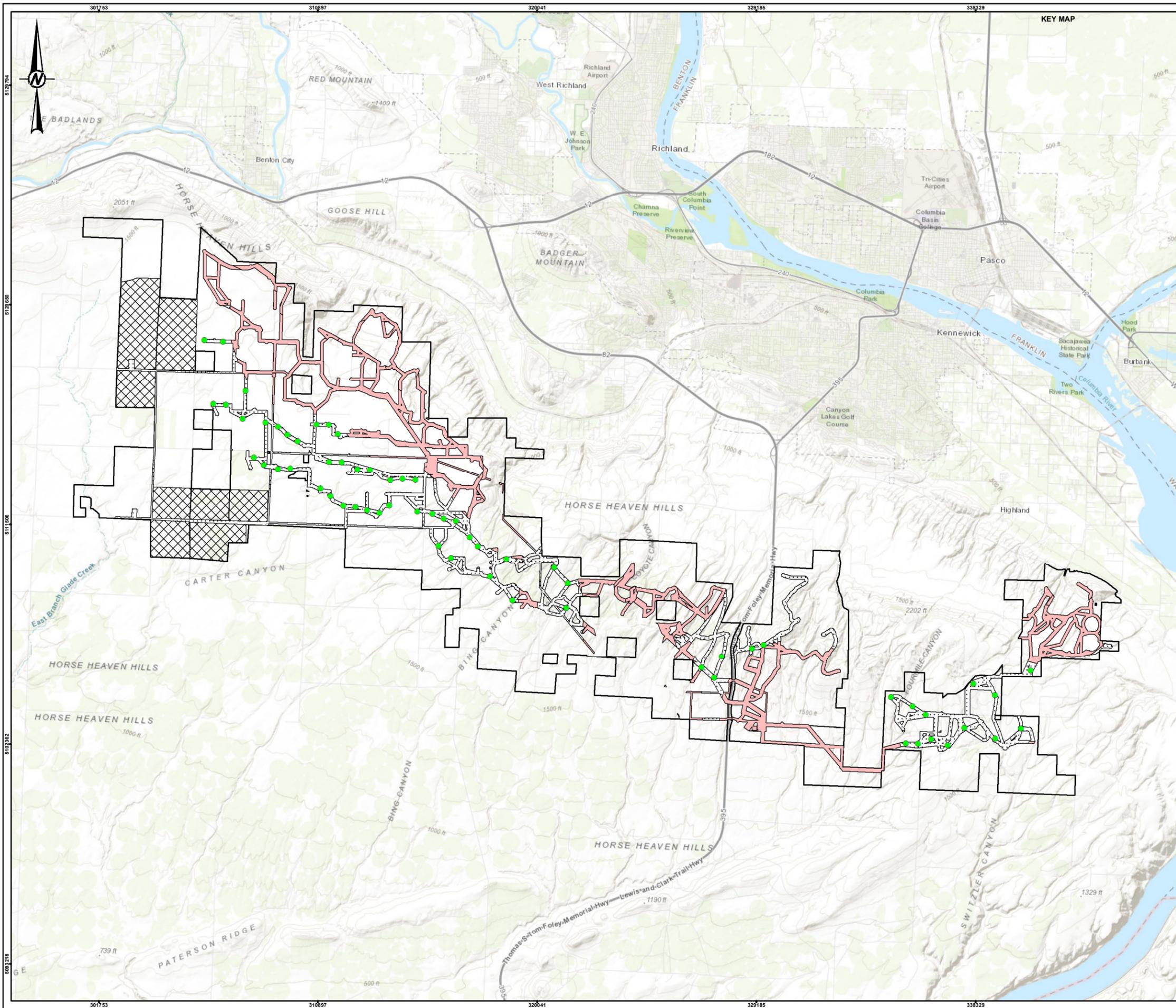
PROJECT
HORSE HEAVEN WIND FARM

TITLE
**TURBINE LAYOUT OPTION 1
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 1**

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED		MK
PREPARED		SCH
REVIEWED		JP
APPROVED		AH/SG/AM

PROJECT NO. 31405435.000 CONTROL 01 REV. 0 FIGURE X0.1-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSIS 11m



LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
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KEY MAP

0 2.5 5
1" = 2.5 mi MILES

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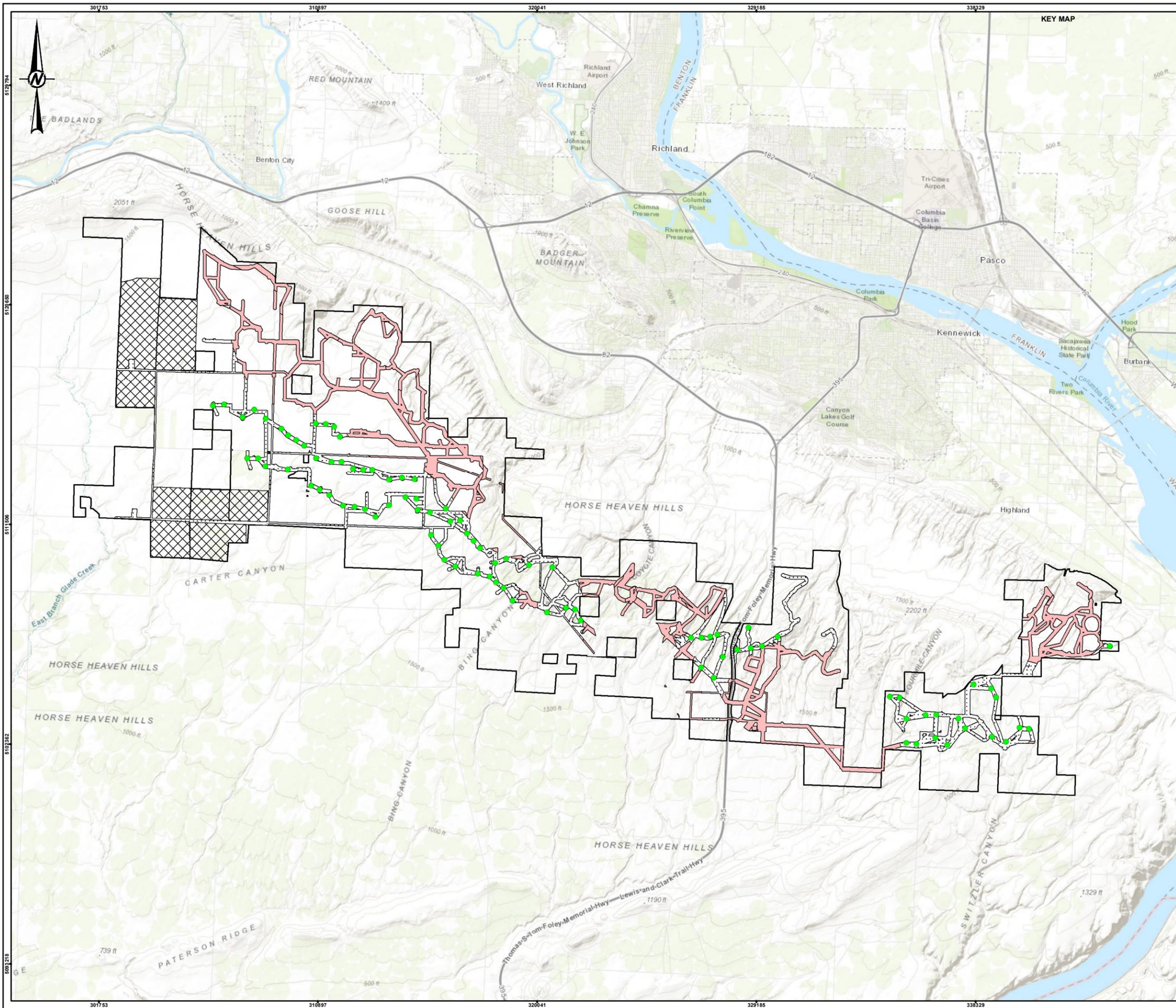
PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 2
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 1

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AH/SG/AM	

PROJECT NO.	CONTROL	REV.	FIGURE
31405435.000	01	0	X0.1-2

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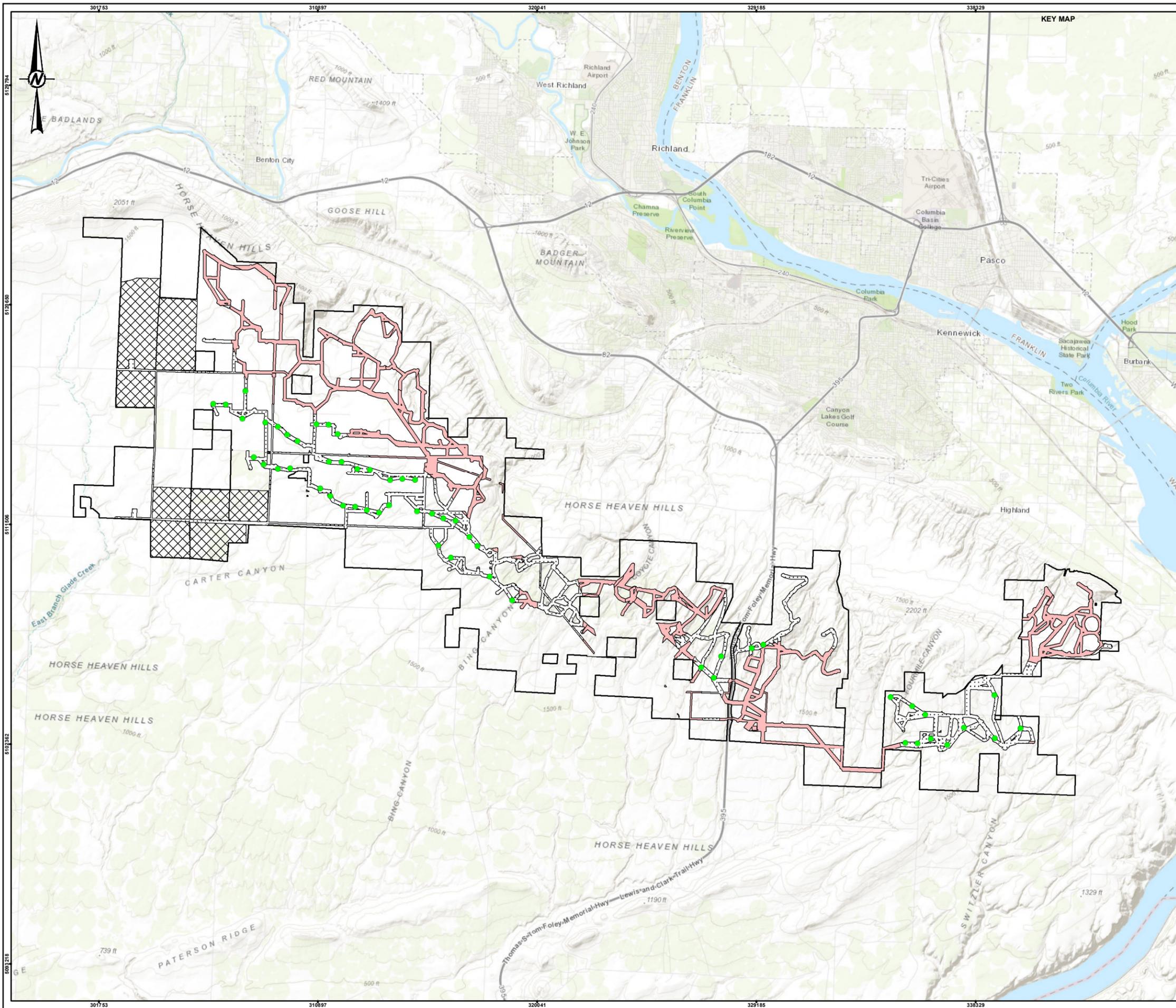
PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 1
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 2

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED		MK
PREPARED		SCH
REVIEWED		JP
APPROVED		AH/SG/AM

PROJECT NO. 31405435.000 CONTROL 01 REV. 0 FIGURE X0.2-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B



LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 2

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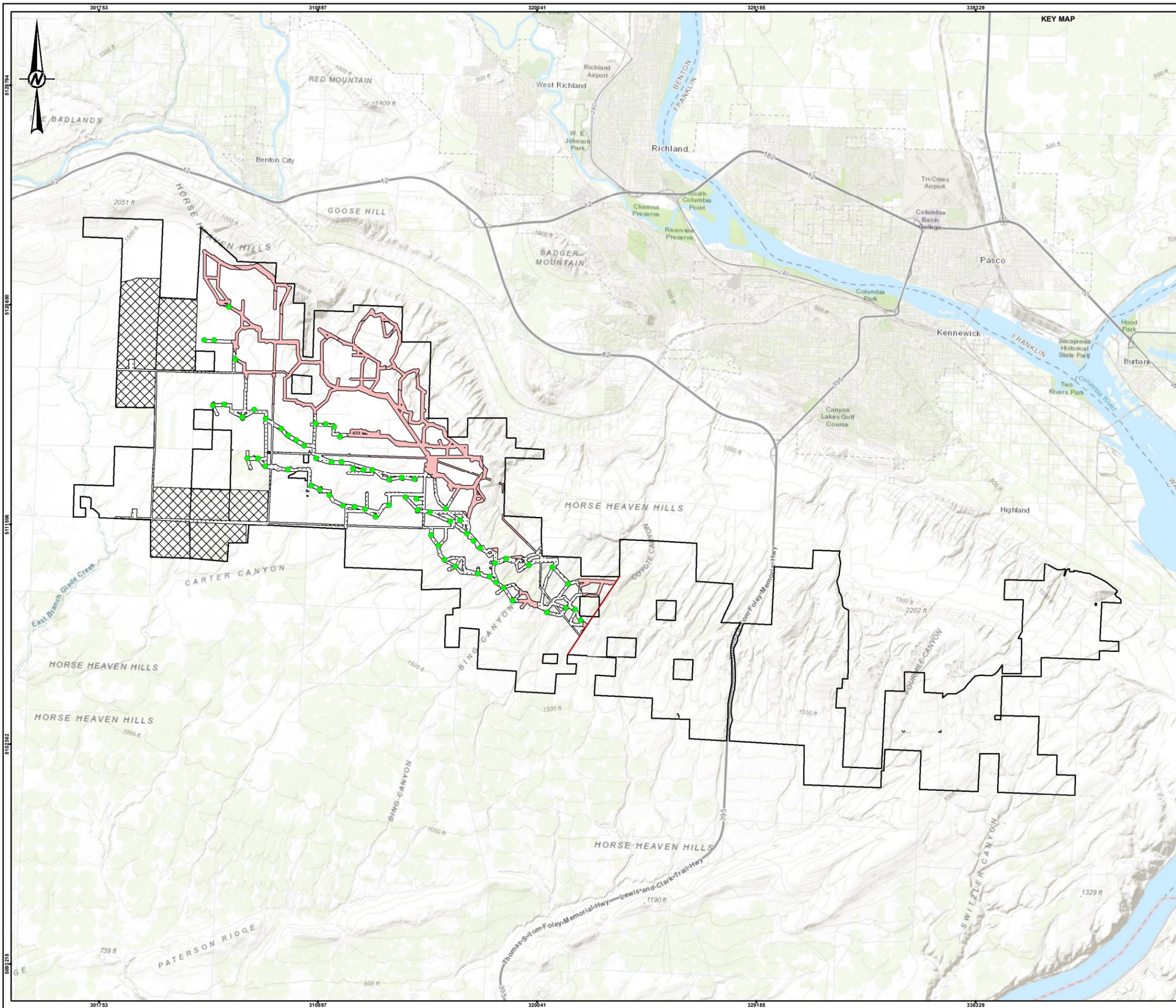
PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 2
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 2

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED		MK
PREPARED		SCH
REVIEWED		JP
APPROVED		AH/SG/AM

PROJECT NO. 31405435.000 CONTROL 01 REV. 0 FIGURE X0.2-2

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LEGEND

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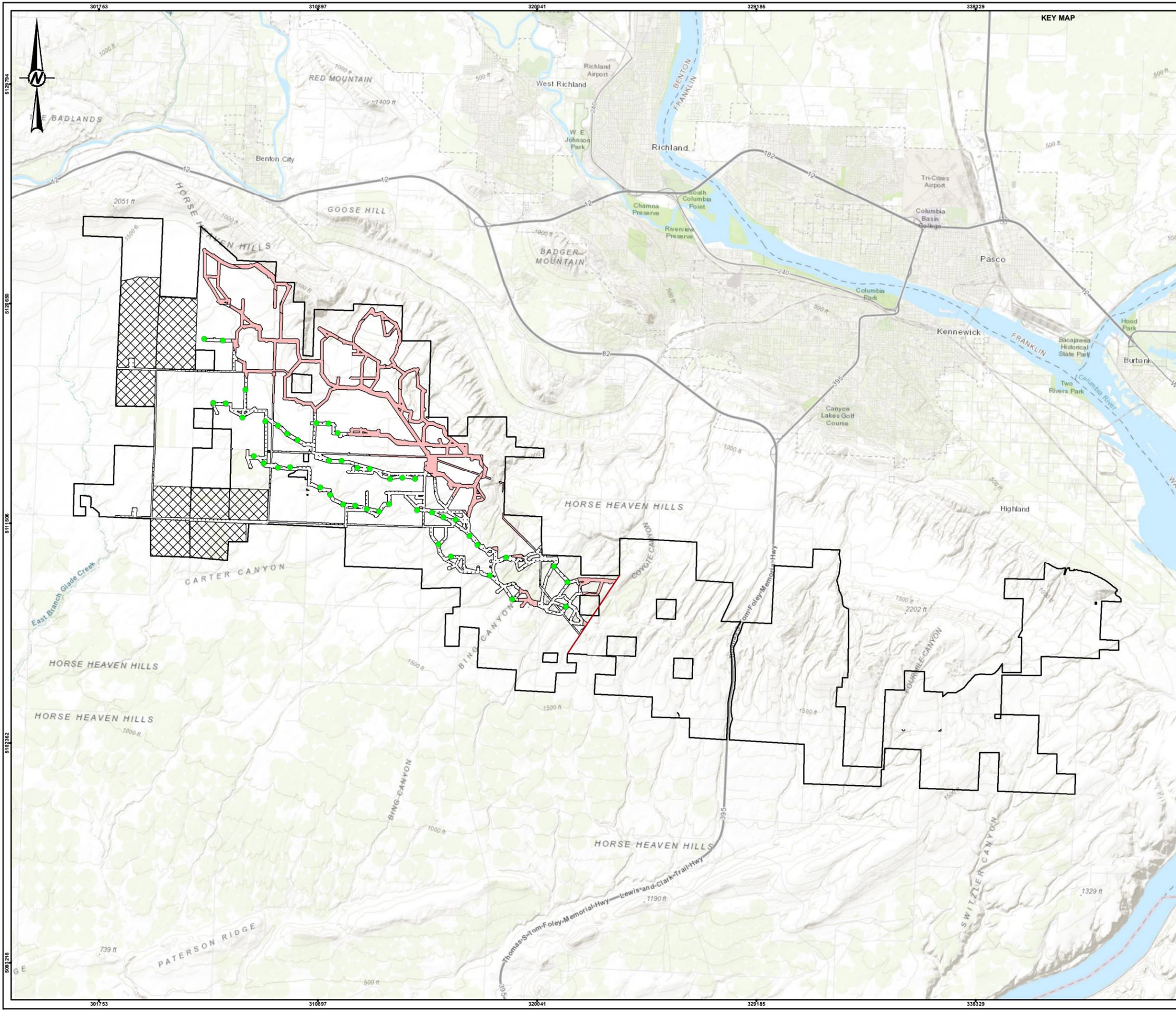
PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 1
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 3

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AH/SG/AM	

PROJECT NO. 31405435.000 CONTROL 01 REV. 0 FIGURE X0.3-1

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LEGEND

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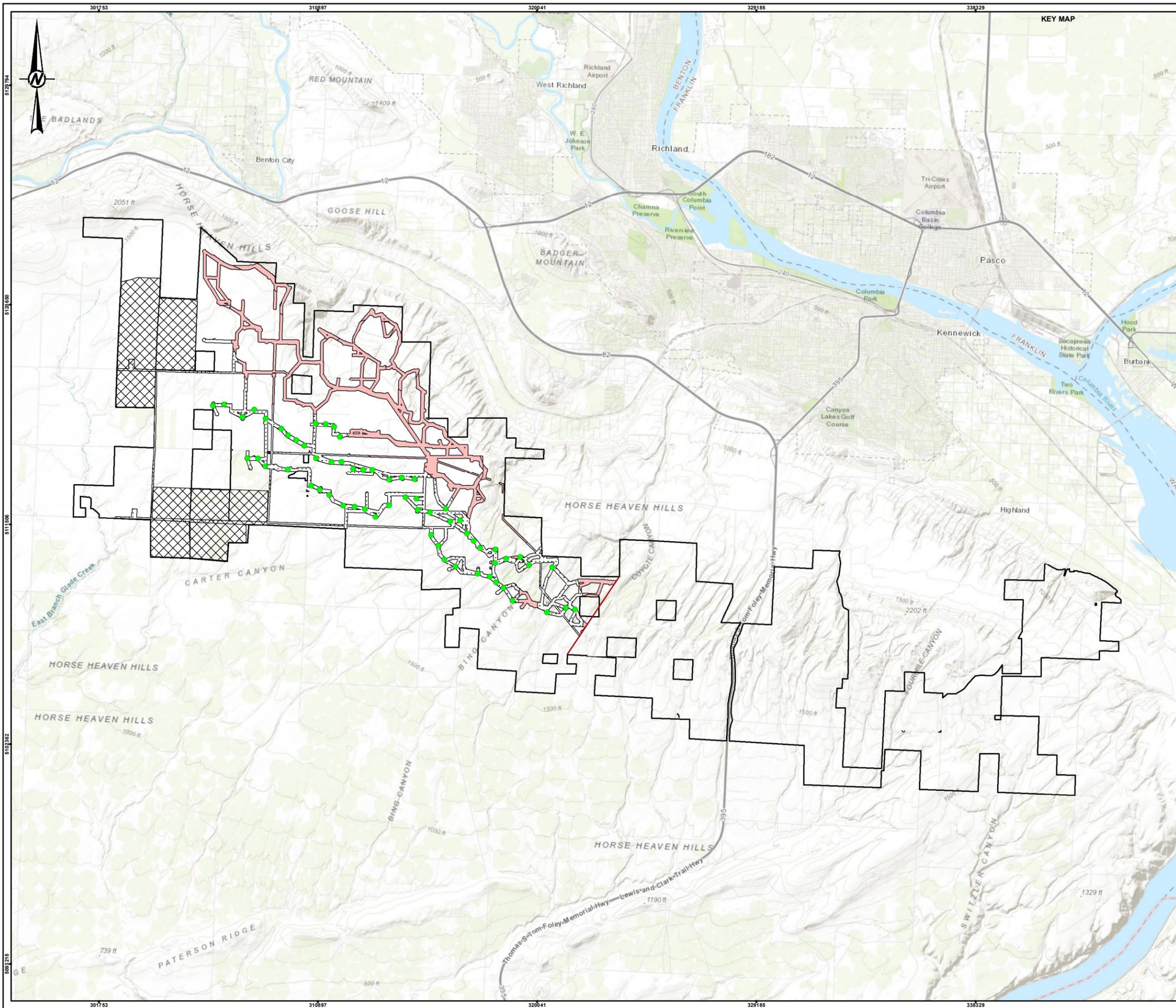
CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 2
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 3

CONSULTANT	DATE	REVISION
DESIGNED	2024-01-08	MK
PREPARED		SCH
REVIEWED		JP
APPROVED		AH/SG/AM

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KEY MAP

LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 1
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 2. SHADOW FLICKER IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD:
 - SHADOW FLICKER IMPACTS OF >15 HOURS AS SHOWN IN THE SHADOW FLICKER MODEL IN FIGURES 4.10-9 AND 4.10-10 OF THE DEIS.
 3. VISUAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS (TURBINE SELECTION/VIEWSHED MAY CHANGE BASED ON APPLICANT RESPONSE TO DATA REQUEST #7):
 - TURBINE REMOVAL RECOMMENDATIONS BY SWCA OR
 - VIEWSHED ANALYSIS PROVIDED BY SWCA
4. RECREATION IMPACT: THE VIEWSHED ANALYSIS FOR HORSE HEAVEN HILLS RECREATION AREA WAS PULLED OUT AS A SEPARATE IMPACT FROM SWCA'S DELIVERABLE DUE TO THE BLM-ADMINISTERED RECREATION AREA BEING ADJACENT TO THE LEASE BOUNDARY AND PARAGLIDING LAUNCH LOCATIONS OCCURRING WITHIN THIS RECREATION AREA.
5. WILDLIFE IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - INTERSECTION WITHIN A 2-MILE BUFFER AROUND FEHA NESTS OR
 - INTERSECTION WITHIN MIGRATORY CORRIDOR CLASSES OF HIGH OR VERY HIGH.
6. VEG IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - INTERSECTION WITH DWARF SHRUB-STEPPE OR
 - INTERSECTION WITH SAGEBRUSH SHRUB-STEPPE HABITAT
7. CULTURAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - KNOWN SENSITIVE AREAS WERE GIVEN A 30M BUFFER O
 - ADDITIONAL AREAS OF CONCERN PROVIDED BY EFSEC

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/](https://wacconnected.org/cp_addendumanalyses/))

CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

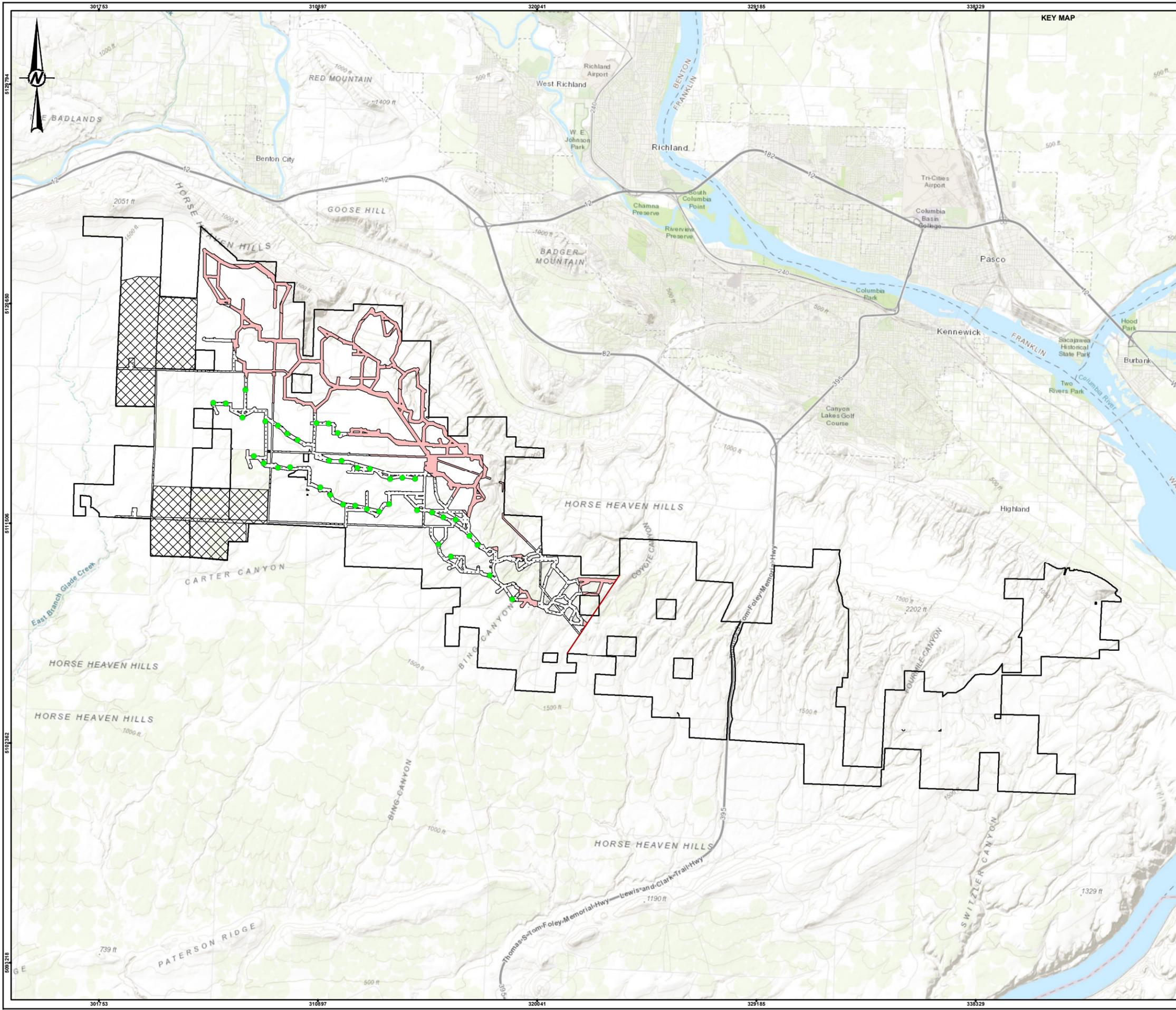
PROJECT
HORSE HEAVEN WIND FARM

TITLE
**TURBINE LAYOUT OPTION 1
 REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4**

CONSULTANT	YYYY-MM-DD	2024-01-08
	DESIGNED	MK
	PREPARED	SCH
	REVIEWED	JP
	APPROVED	AH/SG/AM

PROJECT NO.	CONTROL	REV.	FIGURE
31405435.000	01	0	X0.4-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSIS 11m



KEY MAP

- LEGEND**
- Project Lease Boundary
 - Solar Siting Area
 - Micrositing Corridor - No Turbines
 - Micrositing Corridor - Turbines
 - Proposed Turbine - Option 2
 - "East of Straub Canyon" Demarcation



- NOTE(S)**
1. ALL INFRASTRUCTURE REMOVED:
 - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - EAST OF STRAUB CANYON AS DEMARCATED ON THE FIGURE
 2. PROJECT COMPONENTS (TURBINES, SOLAR ARRAYS, AND BESS) REMOVED:
 - WITHIN MEDIUM OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - WITHIN THE 2MI FEHA NEST BUFFER
 - TURBINES IDENTIFIED WITH "CLASS 1" IMPACTS OR HIGHER
 3. PREVIOUSLY, IMPACTS WERE DEFINED AS:
 - CLASS 0 = ZERO IMPACTS TOTAL CLASS 1 = ONE IMPACT TOTAL CLASS 2 = TWO IMPACTS TOTAL CLASS 3 = ANY CULTURAL IMPACT, ANY FEHA NEST IMPACT, OR THREE OR MORE TOTAL IMPACTS IMPACTS WERE CALCULATED AS FOLLOWS:
 - 1.NOISE BASED IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD:
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 - 4.RECREATION IMPACT: THE VIEWSHED ANALYSIS FOR HORSE HEAVEN HILLS RECREATION AREA WAS PULLED OUT AS A SEPARATE IMPACT FROM SWCA'S DELIVERABLE DUE TO THE BLM-ADMINISTERED RECREATION AREA BEING ADJACENT TO THE LEASE BOUNDARY AND PARAGLIDING LAUNCH LOCATIONS OCCURRING WITHIN THIS RECREATION AREA.
 - 5.WILDLIFE IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
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- REFERENCE(S)**
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CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

TITLE
**TURBINE LAYOUT OPTION 2
 REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4**

CONSULTANT	DATE	REVISION
YYYY-MM-DD	2024-01-08	
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AH/SG/AM	

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSIS 11m

BILL REQUEST - CODE REVISER'S OFFICE

BILL REQ. #: HB-2117 and SB 6188

ATTY/TYPIST: MFW:jlb

BRIEF DESCRIPTION: Authorizing authorities to address aerial firefighting aspects as part of permitting processes for communities at risk of wildfires.

AN ACT Relating to authorizing authorities to address aerial firefighting aspects as part of permitting processes for communities at risk of wildfires; adding a new section to chapter 35.63 RCW; adding a new section to chapter 35A.63 RCW; adding a new section to chapter 36.70 RCW; adding a new section to chapter 80.50 RCW; and creating new sections.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

NEW SECTION. **Sec. 1.** The legislature finds that areas of Washington are at increasing risk in the frequency and severity of wildfires due to climate change. The legislature further finds that fighting wildfires with aerial firefighting can save lives, property, wildlife, habitat, and important cultural resources. Communities that have fought wildfires from sweeping through and destroying their lives and homes want better government policies that consider and address this threat. Therefore, the legislature is amending procedures for the siting of utility-scale wind turbines to improve the safety of the public in areas most at risk for wildfires.

NEW SECTION. **Sec. 2.** A new section is added to chapter 35.63 RCW to read as follows:

A permit required under this chapter for a utility-scale wind energy facility, as defined in RCW 70A.550.010, may address aerial firefighting and wildfire suppression concerns in a similar manner to the requirements authorized in section 4 of this act. This includes, but is not limited to, location adjustments or reduction in the height of the wind turbine or associated structures so that it does not interfere or endanger aerial firefighting and wildfire suppression efforts.

NEW SECTION. **Sec. 3.** A new section is added to chapter 35A.63 RCW to read as follows:

A permit required under this chapter for a utility-scale wind energy facility, as defined in RCW 70A.550.010, may be processed in a manner to address aerial firefighting and wildfire suppression concerns in a similar manner to the requirements authorized in section 4 of this act. This includes, but is not limited to, location adjustments or reduction in the height of the wind turbine or associated structures so that it does not interfere or endanger aerial firefighting and wildfire suppression efforts.

NEW SECTION. **Sec. 4.** A new section is added to chapter 36.70 RCW to read as follows:

(1) The county must consider, as part of the permitting process for a utility-scale wind energy facility as defined in RCW 70A.550.010, whether installation of such a facility or facilities will be an obstruction to aerial firefighting and wildfire suppression efforts in a manner that jeopardizes property, human lives, habitat, and cultural resources in areas that are designated as high risk for wildfires by the department of natural resources, are designated as high risk of wildfire in the most recent Washington state wildland fire protection strategic plan, or have had wildfires near the communities that have received aerial firefighting suppression in the last decade.

(2) If the county determines that the location and height of any structure associated with a utility-scale wind energy facility will obstruct or substantially endanger the ability of aerial fire suppression aircraft to be able to effectively suppress fires within and surrounding a town, city, urban area, or populated county area, the county may require location adjustments or reduction in the height of the wind turbine or associated structures so that it does not interfere or endanger aerial firefighting and wildfire suppression efforts. The county must consider the location, terrain, fire history, and proximity of people and developed properties to the proposed project, and the cumulative effect posed by the

structures associated with the utility-scale wind energy facility in combination with any existing structures in the area.

(3) The county may seek out and consider information provided by wildfire suppression experts at the department of natural resources, the state fire marshal, local fire agencies, and pilots, and companies that provide aerial fire suppression services regarding how a particular turbine configuration and location may impede or endanger aerial fire suppression activities in an area.

(4) The county must add to its applications for permitting of a utility-scale wind energy facility a requirement for the applicant to demonstrate how the height, location, and configuration of the turbines are not an unreasonable impediment and endangerment of aerial fire suppression activities.

NEW SECTION. **Sec. 5.** A new section is added to chapter 80.50 RCW to read as follows:

(1) The council must consider, as part of the permitting process for a utility-scale wind energy facility as defined in RCW 70A.550.010, whether installation of such a facility or facilities will be an obstruction to aerial firefighting and wildfire suppression efforts in a manner that jeopardizes property, human lives, habitat, and cultural resources in areas that are designated as high risk for wildfires by the department of natural resources, are designated as high risk of wildfire in the most recent Washington state wildland fire protection strategic plan, or have had wildfires near the communities that have received aerial firefighting suppression in the last decade.

(2) If the council determines that the location and height of any structure associated with a utility-scale wind energy facility will obstruct or substantially endanger the ability of aerial fire suppression aircraft to be able to effectively suppress fires in and surrounding a town, city, urban area, or populated county area, the council may require location adjustments or reduction in the height of the wind turbine or associated structures so that it does not

interfere or endanger aerial firefighting and wildfire suppression efforts. The council must consider the location, terrain, fire history, and proximity of people and developed properties to the proposed project, and the cumulative effect posed by the structures associated with the utility-scale wind energy facility in combination with any existing structures in the area.

(3) The council may seek out and consider information provided by wildfire suppression experts at the department of natural resources, the state fire marshal, local fire agencies, and pilots, and companies that provide aerial fire suppression services regarding how a particular turbine configuration and location may impede or endanger aerial fire suppression activities in an area.

(4) The council must add to its applications for permitting of a utility-scale wind energy facility a requirement for the applicant to demonstrate how the height, location, and configuration of the turbines are not an unreasonable impediment and endangerment of aerial fire suppression activities.

NEW SECTION. **Sec. 6.** The state and county must ensure that utility-scale wind energy facilities that have not been constructed by the effective date of this section are in compliance with the provisions of this act.

NEW SECTION. **Sec. 7.** If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.

--- END ---

Additional Mitigation Needed Due to Visual Impacts

Summitview KOP Viewshed

Impact Area Enlarged with Turbine Numbers Visible for Identification

Turbine Layout Option 1 January 19, 2024 Map

- LEGEND**
- Project Lease Boundary
 - Solar Siting Area
 - Micrositing Corridor - No Turbines
 - Micrositing Corridor - Turbines
 - Proposed Turbine - Option 1
 - "East of Straub Canyon" Demarcation



- NOTE(S)**
1. ALL INFRASTRUCTURE REMOVED:
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 - WITHIN THE 2MI FEHA NEST BUFFER
 - TURBINES IDENTIFIED WITH "CLASS 1" IMPACTS OR HIGHER
 3. PREVIOUSLY, IMPACTS WERE DEFINED AS:
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 IMPACTS WERE CALCULATED AS FOLLOWS:
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 - INTERSECTION WITH DWARF SHRUB-STEPPE OR
 - INTERSECTION WITH SAGEBRUSH SHRUB-STEPPE HABITAT
 7. CULTURAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - KNOWN SENSITIVE AREAS WERE GIVEN A 50M BUFFER OR
 - ADDITIONAL AREAS OF CONCERN PROVIDED BY EFS&C

- REFERENCE(S)**
1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
 2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/](https://wacconnected.org/cp_addendumanalyses/))

CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 1
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MMK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AH/SG/AM	

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM 11X17

Additional Mitigation Needed Due to Visual Impacts

Summitview KOP Viewshed

Impact Area Enlarged with Turbine Numbers Visible for Identification

Turbine Layout Option 2 January 19, 2024 Map

KEY MAP

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 2
- "East of Straub Canyon" Demarcation

0 2.5 5
1" = 2.5 mi MILES

NOTES

- ALL INFRASTRUCTURE REMOVED:
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 - EAST OF STRAUB CANYON AS DEMARCATED ON THE FIGURE
- PROJECT COMPONENTS (TURBINES, SOLAR ARRAYS, AND BESS) REMOVED:
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 - INTERSECTION WITH SAGEBRUSH SHRUB-STEPPE HABITAT
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REFERENCE(S)

- COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
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CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

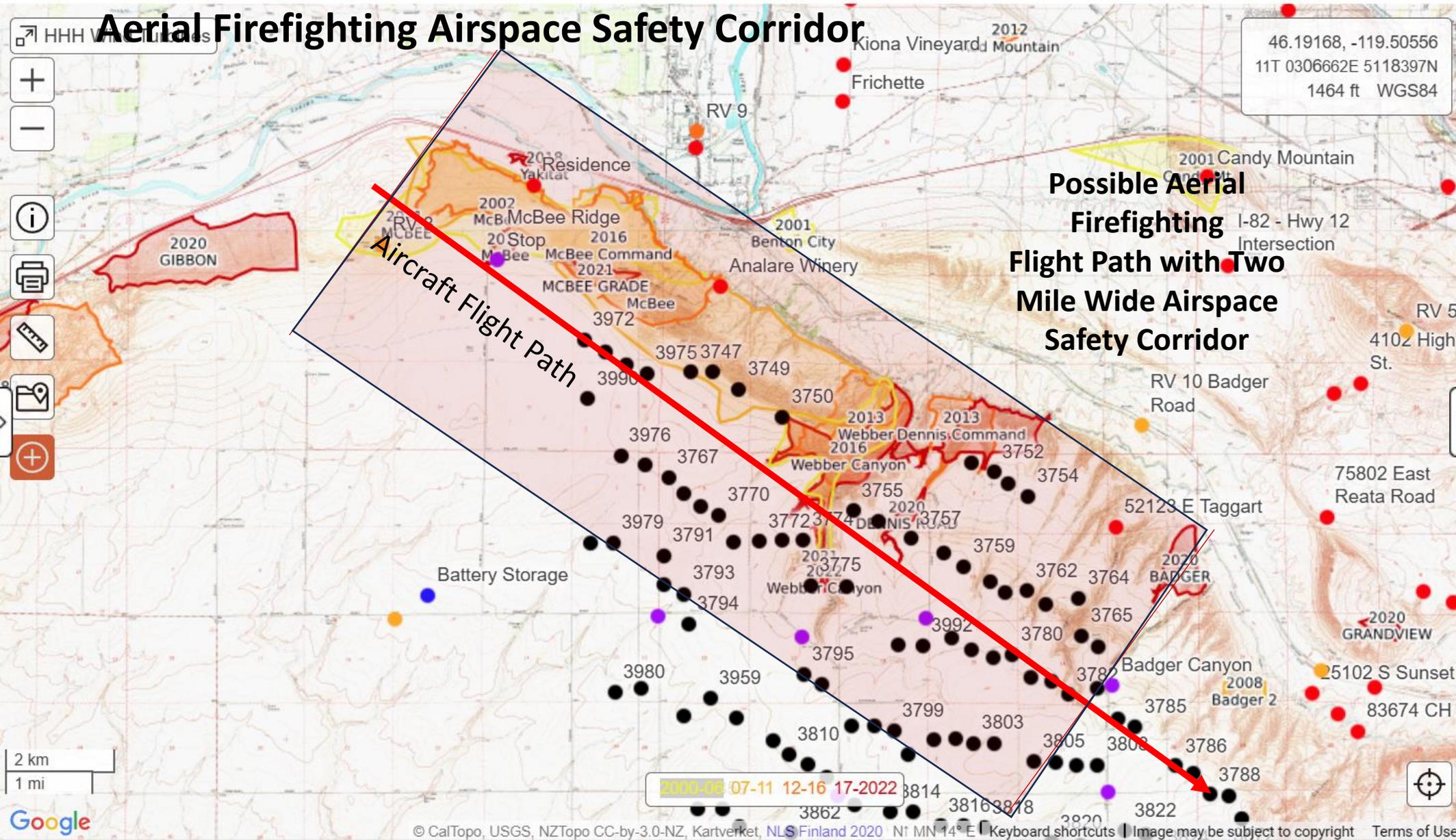
TITLE
TURBINE LAYOUT OPTION 2
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	BY	MK
PREPARED	BY	SCH
REVIEWED	BY	JP
APPROVED	BY	AH/SIG/AM

PROJECT NO. 31405435.000 CONTROL 01 REV. 0 FIGURE X0.4-2

Documented Fire History West Portion HHH Project with Two Mile

Aerial Firefighting Airspace Safety Corridor



Map Layers

Base Layers

- Scanned Topos
- + Stack Base Layer

Map Sheets

- + Stack Map Sheet

Map Overlays

- Contours
- MapBuilder Overlay
- Slope Angle Shading
- Geology
- Public Lands
- Parcel Data
- Structures
- Motor Vehicle MVUM
- Recreation
- Fire History
- Fire Activity
- Sun Exposure
- Cell Coverage

Custom Layers

- Preset Combinations

Additional Mitigation Needed Due to Aerial Firefighting

Possible Aerial Firefighting Flight Path with Two Mile Wide Airspace Safety Corridor

Turbines & Infrastructure Needing to Be Removed to Prevent Creation of No-Fly Zone Impacts (Green Markers in Red Safety Corridor)

Turbine Layout Option 1 January 19, 2024 Map

LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 1
- "East of Straub Canyon" Demarcation

NOTES

1. ALL INFRASTRUCTURE REMOVED:
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REFERENCE(S)

1. COORDINATE SYSTEM: NAD 83 UTM ZONE 11N
2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/](https://waconnected.org/CP_ADDENDUMANALYSES/))

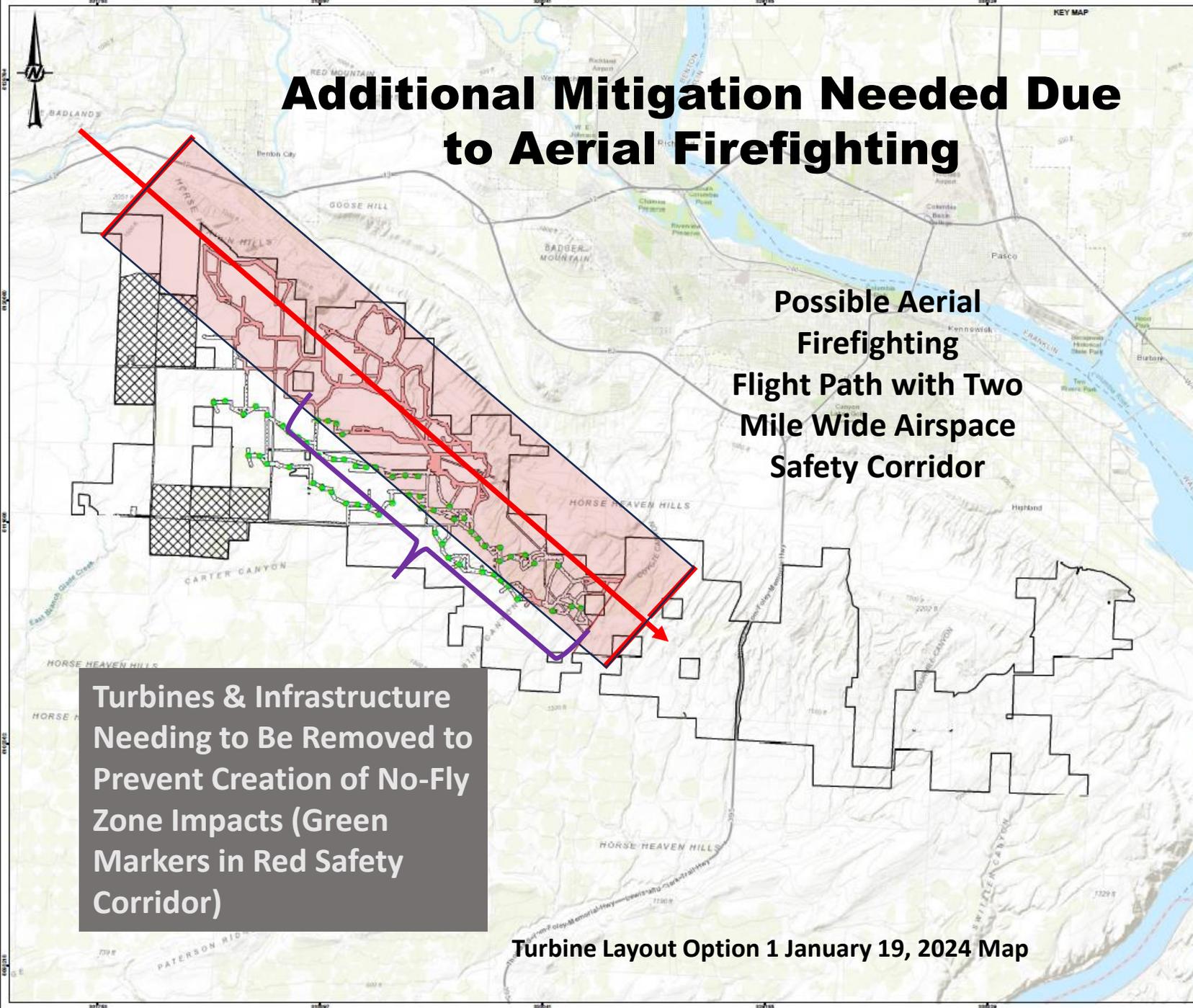
CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 1
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AHISG/AM	

PROJECT NO. 31405435.000 CONTROL 01 REV. 0 FIGURE X0.4-1



Additional Mitigation Needed Due to Aerial Firefighting

Possible Aerial Firefighting Flight Path with Two Mile Wide Airspace Safety Corridor

Turbines & Infrastructure Needing to Be Removed to Prevent Creation of No-Fly Zone Impacts (Green Markers in Red Safety Corridor)

Turbine Layout Option 2 January 19, 2024 Map

LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 1
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NOTES

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 IMPACTS WERE CALCULATED AS FOLLOWS:
 1. NOISE BASED IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD:
 - NOISE IMPACTS OF +50 DBA ON NON-PARTICIPATING NOISE RECEPTORS AS SHOWN IN THE SOUND LEVEL MODEL SHOWN IN FIGURES 4.11-3 AND 4.11-4. NOTE THAT 0 TURBINES WERE DESIGNATED AS HAVING A HIGH IMPACT DUE TO OPERATIONAL NOISE.
 2. SHADOW FLICKER IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD:
 - SHADOW FLICKER IMPACTS OF >15 HOURS AS SHOWN IN THE SHADOW FLICKER MODEL IN FIGURES 4.10-3 AND 4.10-10 OF THE DEIS.
 3. VISUAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS (TURBINE SELECTION/VIEWED MAY VARY):
 - CHANGE BASED ON APPLICANT RESPONSE TO DATA REQUEST #7)
 - TURBINE REMOVAL RECOMMENDATIONS BY SWCA OR
 - VIEWED ANALYSIS PROVIDED BY SWCA
 4. RECREATION IMPACT: THE VIEWSHED ANALYSIS FOR HORSE HEAVEN HILLS RECREATION AREA WAS PULLED OUT AS A SEPARATE IMPACT FROM SWCA'S DELIVERABLE DUE TO THE BLM-ADMINISTERED RECREATION AREA BEING ADJACENT TO THE LEASE BOUNDARY AND PARAGLIDING LAUNCH LOCATIONS OCCURRING WITHIN THIS RECREATION AREA.
 5. WILDLIFE IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - INTERSECTION WITHIN A 2-MILE BUFFER AROUND FEHA NESTS OR
 - INTERSECTION WITHIN MIGRATORY CORRIDOR CLASSES OF HIGH OR VERY HIGH.
 6. VEG IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - INTERSECTION WITH DWARF SHRUB-STEPPE OR
 - INTERSECTION WITH SAGEBRUSH SHRUB-STEPPE HABITAT
 7. CULTURAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - KNOWN SENSITIVE AREAS WERE GIVEN A 2M BUFFER 0
 - ADDITIONAL AREAS OF CONCERN PROVIDED BY EFSEC

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/](https://waconnected.org/CP_ADDENDUMANALYSES/))

CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 1
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AHISG/AM	

PROJECT NO. 31405435.000 CONTROL 01 REV. 0 FIGURE X0.4-1

Overview of Comment on EFSEC Option Maps (January 19, 2024 version)

Option 4 is the only option presented that provides reasonable mitigation through avoidance of conflict with critical important resources.

However, none of the options offer sufficient mitigation in two key areas:

- Visual Impacts
- Aerial Firefighting

Option 4 (which is described as a combination of Options 1,2, and 3, plus East of Straub Canyon), fails to adequately take into consideration visual Impacts and aerial firefighting needs .

Option 4 should be modified to include additional removal of turbines:

- causing a significant negative visual impact that have not yet been included or addressed, due to a lack of key observation points in numerous residential communities; and
- to assure that wind turbine (and other tall obstructions including power lines and met towers) heights and locations do not compromise or restrict aerial firefighting capabilities needed to protect people and property near the Tri-Cities.

EFSEC Needs to Explain the Impacts “Attributable to Specific Environmental Impacts” Clearly

On November 20, 2023 Sean Greene summarized the WAC 197-11-660 requirements for mitigation when he stated:

“any mitigation that has been designed by Staff or would be imposed by the Council should meet the three requirements outlined within Washington Administrative Code, which is that the mitigation should be reasonable, be capable of being accomplished, **and be attributable to a specific environmental impact.**”

The exact quote from WAC 197-11-660 is as follows (with emphasis added):

(d) Responsibility for implementing mitigation measures may be imposed upon an applicant **only to the extent attributable to the identified adverse impacts of its proposal.** Voluntary additional mitigation may occur.

In the case of wildlife and cultural resources, confidential maps have been utilized to protect the resources from harm.

However, there are no maps or explanation provided for visual impacts and there are also no maps or explanation to show how the Council is addressing aerial firefighting.

The Option Maps and the Notes received from EFSEC on January 19, 2024 (attached) do not adequately describe or comply with the WAC requirement to show how the proposed mitigations are “**attributable to the identified adverse impacts of its proposal**”.

Supporting information with appropriate analysis needs to be clearly identified and described to explain the rational scientific basis for the Options.

This documentation needs to be made available to the public with adequate time for review and comment so that the reasonableness and adequacy of the proposed mitigations can be understood.

In both these cases, the mitigations needed require avoidance and/or relocation – turbine removal from key proposal areas.

These represent substantial changes in the proposal and additional explanation is needed to create a rational basis for the mitigation of significant adverse environmental impacts.

Additional Turbine Removal is Needed to Adequately Address Visual Impacts

Option 4 needs to be revised to include additional turbines causing a significant visual impact that have not yet been included or addressed.

The newest maps and the notes provided do not clearly explain which turbines and other project components were removed due to visual impacts

The Notes on the Maps indicate reliance on a “**Turbines Selection Viewshed based on Applicant Response to Data Request #7**”.

3.VISUAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS (TURBINE SELECTION/VIEWSHED MAY CHANGE BASED ON APPLICANT RESPONSE TO DATA REQUEST #7):

- TURBINE REMOVAL RECOMMENDATIONS BY SWCA OR
- VIEWSHED ANALYSIS PROVIDED BY SWCA

The Notes on the January 19, 2024 maps contain the only information provided to explain the mitigations proposed in response to the adverse visual impacts caused by the wind turbines.

This note refers to documentation identified as “**Applicant Response to Data Request #7**”. Neither this nor the SWCA documents mentioned are available for review in the public record.

8111000	NOTE(S) 1. ALL INFRASTRUCTURE REMOVED: - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS - EAST OF STRAUB CANYON AS DEMARCATED ON THE FIGURE 2. PROJECT COMPONENTS (TURBINES, SOLAR ARRAYS, AND BESS) REMOVED: - WITHIN MEDIUM OR ABOVE WILDLIFE MOVEMENT CORRIDORS - WITHIN THE 2MI FEHA NEST BUFFER - TURBINES IDENTIFIED WITH "CLASS 1" IMPACTS OR HIGHER 3. PREVIOUSLY, IMPACTS WERE DEFINED AS: CLASS 0 = ZERO IMPACTS TOTAL CLASS 1 = ONE IMPACT TOTAL CLASS 2 = TWO IMPACTS TOTAL CLASS 3 = ANY CULTURAL IMPACT, ANY FEHA NEST IMPACT, OR THREE OR MORE TOTAL IMPACTS IMPACTS WERE CALCULATED AS FOLLOWS: 1. NOISE BASED IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD: - NOISE IMPACTS OF >50 DBA ON NON-PARTICIPATING NOISE RECEPTORS AS SHOWN IN THE SOUND LEVEL MODEL SHOWN IN FIGURES 4.11-3 AND 4.11-4. NOTE THAT 0 TURBINES WERE DESIGNATED AS HAVING A HI IMPACT DUE TO OPERATIONAL NOISE. 2. SHADOW FLICKER IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD: - SHADOW FLICKER IMPACTS OF >15 HOURS AS SHOWN IN THE SHADOW FLICKER MODEL IN FIGURE 4.10-9 AND 4.10-10 OF THE DEIS. 3. VISUAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS (TURBINE SELECTION/VIEWSHED MAY CHANGE BASED ON APPLICANT RESPONSE TO DATA REQUEST #7): - TURBINE REMOVAL RECOMMENDATIONS BY SWCA OR - VIEWSHED ANALYSIS PROVIDED BY SWCA 4. RECREATION IMPACT: THE VIEWSHED ANALYSIS FOR HORSE HEAVEN HILLS RECREATION AREA WAS PULLED OUT AS A SEPARATE IMPACT FROM SWCA'S DELIVERABLE DUE TO THE BLM-ADMINISTERED RECREATION AREA BEING ADJACENT TO THE LEASE BOUNDARY AND PARAGLIDING LAUNCH LOCATIONS OCCURRING WITHIN RECREATION AREA. 5. WILDLIFE IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS: - INTERSECTION WITHIN A 2-MILE BUFFER AROUND FEHA NESTS OR - INTERSECTION WITHIN MIGRATORY CORRIDOR CLASSES OF HIGH OR VERY HIGH. 6. VEG IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS: - INTERSECTION WITH DWARF SHRUB-STEPPE OR - INTERSECTION WITH SAGEBRUSH SHRUB-STEPPE HABITAT 7. CULTURAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS: - KNOWN SENSITIVE AREAS WERE GIVEN A 30M BUFFER OR - ADDITIONAL AREAS OF CONCERN PROVIDED BY EFSEC
8111000	REFERENCE(S) 1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N 2. MOVEMENT CORRIDORS: WDFW 2021 (HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/)

Data Request #7 Does Not Include Several Residential Area Key Observation Points

The FEIS and the Updated ASC do not provide KOP simulations at several residential communities which will experience significant unavoidable adverse impacts to highly sensitive populations. These include:

- Summitview Residences
- Badger Mountain South Residences

- Thompson Hill Residences
- I-82 Highway 395 Intersection.

The identification and evaluation of the visual impacts on these residential areas needs to be included in the decision-making process.

Up to 35 additional turbines need to be colored in red and removed from consideration in the proposed project Options.

Google Earth Simulations are provided for these locations:

7 - Summitview Residences South Kennewick

September 5, 2023 8 AM



Google Earth Pro
Computer Simulation



4 - Badger Mountain South – Dallas Road – I-82

May 24, 2023



Google Earth Pro Computer Simulation



9 - Thompson Hill Residences Kennewick Bob Olson Parkway



TCC Google Earth Pro
Computer Simulation



11- Interstate 82 – Highway 395 Intersection, South of Kennewick



TCC Google Earth Pro
Computer Simulation



A complete set of Google Earth Computer Simulations for 12 locations near Tri-Cities is provided in the **Attachment**.

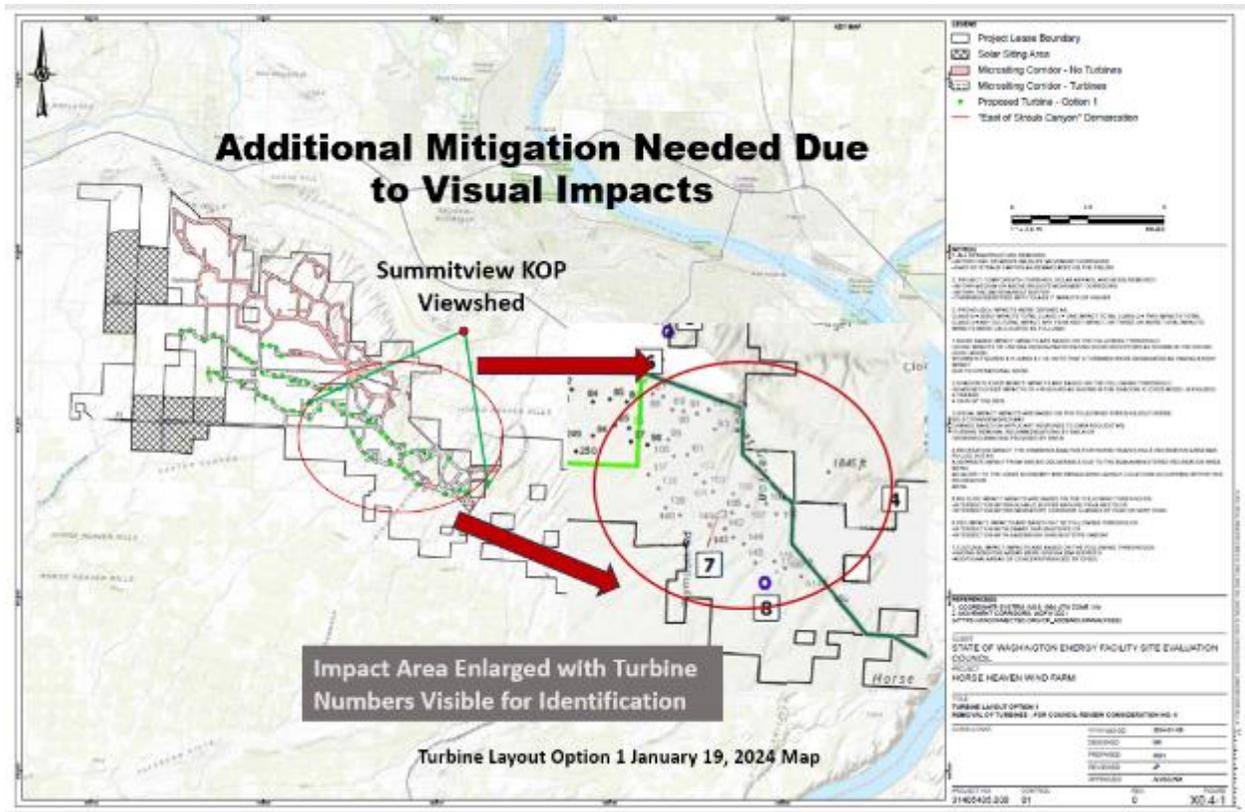
These simulations can be used to identify areas where additional mitigation is needed to avoid significant adverse impacts.

The following maps present an evaluation of the Option 4 maps acquired by TCC on January 19, 2024.

The Key Observation Point is the Summitview residences. The maps show the views depicted in the Google Earth Simulation from the Summitview Residential Community.

There is a map for Option 4 for the 496 ft high turbines and a second map for the 671 ft high turbines.

Below the maps a table is presented identifying the additional turbines that need to be removed from the project in order to protect the visual resources to the same extent as provided in the SWCA analysis done to date.



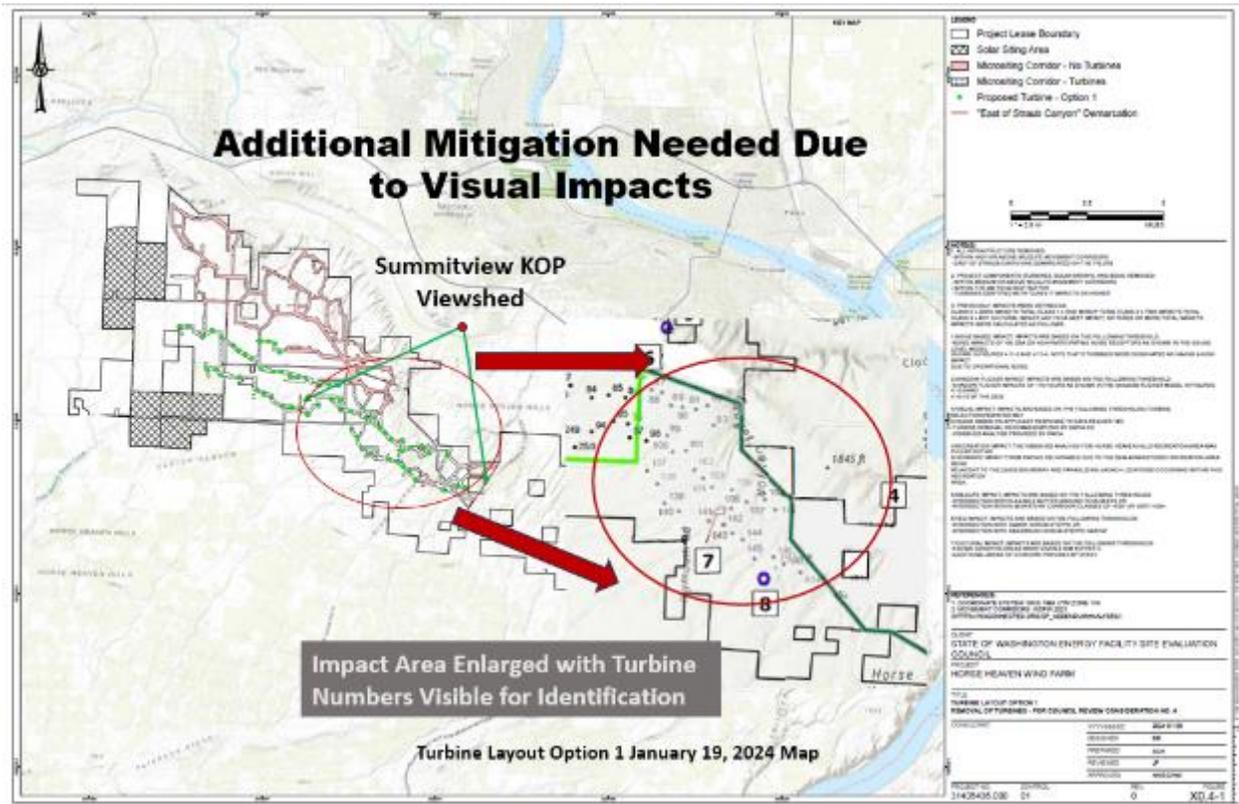


Table Identifying Additional Turbines that Need to Be Removed Due to the Visual Impacts of Turbines on KOP's in Kennewick That Were Not Identified and Included in FEIS and Data Request #7.

Option 1	Option 2
87	47
88	49
89	86
90	87
91	88
92	90
93	91
95	93
96	94
97	97
98	A98
99	A99
100	A100
101	A102
102	104
103	105
104	106

105	107
106	110
107	111
108	113
109	138
137	139
138	142
139	145
140	146
141	149
142	
143	
144	
145	
146	
147	
A148	

Additional Turbine Removal is Needed to Adequately Address Visual Impacts

Option 4 needs to be revised to identify and remove additional turbines in order to ensure that aerial firefighting needs are addressed.

The newest maps and the notes provided do not clearly explain which turbines and other project components were removed due to visual impacts

Aerial Firefighting Impacts Must Be Addressed Prior to a Final Agency Action and Recommendation is Presented to the Governor

The exact quote from WAC 197-11-660 is as follows (with emphasis added):

(d) Responsibility for implementing mitigation measures may be imposed upon an applicant **only to the extent attributable to the identified adverse impacts of its proposal.** Voluntary additional mitigation may occur.

Aerial firefighting was discussed at the December 20, 2023 special meeting on public safety mitigation measures.

At 01.46 Ms. Amy Moon stated the following:

Amy Moon 01:46

The third question from the council was would the proposed turbine heights up to 657 feet maximum total height ground to blade tip affect fire suppression methodology. The DNR response: turbines up to 657 feet would severely restrict or prohibit the use of tactical aircrafts known as UAS, which is unmanned aircraft system. We could probably just call this drones. So turbines up to that 657 foot height would severely restrict or prohibit the use of drones for tactical fire suppression. .

Amy Moon 02:30

Question four, what is the typical height planes and helicopters fly when responding to a range fire or suppression? DNR responded nearly all tactical wildland missions are conducted below 500 feet above ground level.

Amy Moon 02:46

And the last question five. Are there any other aerial criteria or accommodations for planes or helicopters that will require DNR fire response related to access to water and or fire retardants and follow up is, any specific turnaround criteria for the aircraft? The DNR response: Nothing specific. The density and spacing of the towers would essentially create a no fly zone over the entire project area. We would apply an

additional safety buffer of one to two tower heights around the project to ensure safe separation for aircraft operations.

Chair Drew 04:57

This, what I heard from the collection of questions and thank you for getting those certainly is that in the area that on the project itself that would be a non fly zone, however, they would consider one to two turbine lengths from the closest turbine as their safety zone out outside of, from where the turbines are to where they would be able to use their equipment. Is that correct?

Amy Moon 05:34

So I'm not sure if that's quite how that should be interpreted and there may be somebody on the line from DNR that could respond to that. I took the answer as one to two tower heights above the project. But but it could be like like you pose outside the project limits and I could certainly follow up on that.

Chair Drew 06:00

Okay, Do we have somebody online to answer questions?

Chair Drew 06:10

Okay, that would be helpful because I was looking at it similarly to how we look at the distance between a turbine and a neighboring residence so that would be good to clarify.

Amy Moon 06:29

Yeah, I'll do that. And any other questions on this? Nope. Okay, thanks.

Unknown 06:43

So we've been so this is new information for council to consider. We've been working through with staff on the mitigation, additional mitigation we might want to apply to the Final EIS. So how should we anticipate being able to use this information to look at you know, various target strings and how to propose some mitigation?

Amy Moon 07:14

That is a fairly complex question, Mr. Livingston. Ami Hafkemeyer might be able to help out on this or Shawn Greene. We are looking at more dialogue with the DNR on their answers to this and particularly on whether they have any mitigation measure ideas or criteria. And we'll, I'm hoping that I can report that back to you in January, but as of yet partly due to the holiday season and the end of the year I wasn't able to, to have that dialogue with DNR. So can we hold a more formal response until January?

Mike Livingston 08:02

Yes, absolutely. I just wanted to make sure I understood when they can might be able to get that information. So thank you any I appreciate that. You're welcome.

In summary, the Council sought to receive and discuss more information to answer the question how close can the turbines be.

However, to date, there is no additional information to indicate the manner in which aerial firefighting is being addressed.

A Proper Assessment of Aerial Firefighting Impacts Must Be Conducted Prior to a Final Agency Action and Recommendation is Presented to the Governor

This very situation in the Horse Heaven Hills triggered the development of proposed legislation and the creation of HB 2117 / SB 6188 (attached).

The proposed legislation provides explicit and concise guidance describing the manner in which a proper and adequate assessment of aerial firefighting impacts should be conducted.

This includes, but is not limited to, location adjustments or reduction in the height of the wind turbine or associated structures so that it does not interfere or endanger aerial firefighting and wildfire suppression efforts.

Turbines and other infrastructure shall not be sited and constructed in areas that create a no-fly zone for aerial firefighting aircraft typically used in Washington. The proposed guidance to EFSEC states the following:

NEW SECTION. Sec. 1. *A new section is added to chapter 80.50 RCW to read as follows:*

(1) The council must consider, as part of the permitting process for a utility-scale wind energy facility as defined in RCW 70A.550.010, whether installation of such a

facility or facilities will be an obstruction to aerial firefighting and wildfire suppression efforts in a manner that jeopardizes property, human lives, habitat, and cultural resources in areas that are designated as high risk for wildfires by the department of natural resources, are designated as high risk of wildfire in the most recent Washington state wildland fire protection strategic plan, or have had wildfires near the communities that have received aerial firefighting suppression in the last decade.

(2) If the council determines that the location and height of any structure associated with a utility-scale wind energy facility will obstruct or substantially endanger the ability of aerial fire suppression aircraft to be able to effectively suppress fires in and surrounding a town, city, urban area, or populated county area, the council may require location adjustments or reduction in the height of the wind turbine or associated structures so that it does not interfere or endanger aerial firefighting and wildfire suppression efforts. The council must consider the location, terrain, fire history, and proximity of people and developed properties to the proposed project, and the cumulative effect posed by the structures associated with the utility-scale wind energy facility in combination with any existing structures in the area.

(3) The council may seek out and consider information provided by wildfire suppression experts at the department of natural resources, the state fire marshal, local fire agencies, and pilots, and companies that provide aerial fire suppression services regarding how a particular turbine configuration and location may impede or endanger aerial fire suppression activities in an area.

(4) The council must add to its applications for permitting of a utility-scale wind energy facility a requirement for the applicant to demonstrate how the height, location, and configuration of the turbines are not an unreasonable impediment and endangerment of aerial fire suppression activities.

The following testimony was given by Mr. Mark Baird to the House Energy and Environment Committee Hearing on January 15, 2024.

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Thank you for submitting your written comments on HB 2117 Aerial firefighting/permits. Your comments will be made available to legislative committee members and staff of the committee, and will be included in the legislative record for bill and meeting archival purposes, but will not be used as part of testimony summary materials on the bill report.

The text of your submission is below:

Wind Projects are not normally built directly adjacent to cities or towns in the urban/rural fire interface zones. The subject cities and towns are for all practical purposes indefensible by air. These projects should never be placed on ridges located in heavy timber in steep terrain because of the maneuvering room and tactics typically used by large and very large air tankers. Turbine spacing precludes category C, and D aircraft the required maneuvering room to safely avoid these very tall towers, or to operate effectively within the project area. Aerial assets are prohibited from dispensing retardant which may impact electrical infrastructure, water courses, or structures. When the aforementioned obstacles lie within the fire traffic area it increases the risk to the property, environment and flight crews. In addition, the towers themselves are potential ignition sources and thus present an increased danger to lives and property. I have fought fire near these turbines on two continents. We usually wait until the fire burns a sufficiently long distance away from the project to ensure the safety of the aircraft. In addition, the project itself requires transmission lines to carry the generated power. This additional infrastructure further limits our ability to maneuver and operate effectively to protect lives and structures of nearby populations. The perfect solution is not to build these projects anywhere near populated areas. The next best option is this legislation.

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Site Contents

Selected content listed in alphabetical order under each group

The Council Must Adequately Address Aerial Firefighting

At the very end of the Nov 29, 2023 special meeting, the topic of aerial firefighting was raised when discussing the public safety element of the presentation on the Horse Heaven Hills (HHH) FEIS Mitigation.

The question was asked what type of aircraft was used in the recent fires in the Horse Heaven Hills. A council member asked how close to the turbines the aircraft used can fly. The Scout technical expert who responded at the request of EFSEC staff did not provide accurate information.

The following information is in the public comments and adjudication record submitted to EFSEC for the Horse Heaven Hills Project.

Testimony was submitted in the DEIS public comments and the HHH adjudication record addressing aerial firefighting requirements along with photos of the actual aircraft and fire maps and fire perimeters of the fire.

The aircraft used on June 13-14, 2023 in the Hanson Fire that swept the northern slope adjacent to the Horse Heaven Hills Project was a DC-10.

Paul Krupin submitted fire history maps (EXH-5307-R) that were admitted into testimony on August 8, 2023. The maps are on the EFSEC website at the following link: https://www.efsec.wa.gov/sites/default/files/210011/admitted/EXH-5307_R.pdf. The maps include mileage rings from fire perimeters that can be used to identify the turbines in zones too close to the areas where aerial firefighting aircraft are utilized.

Lonnie Click, Fire Chief, gave regular and supplemental testimony (EXH-5631_R and EXH-5912_R) that was admitted into testimony on August 22, 2023.

Dennis Bates, Fire Chief gave supplemental testimony (EXH-5911_S) that was admitted into testimony on September 14, 2023.

Linda Lehman, Mayor of Benton City gave testimony to the adjudication that states in pertinent part:

“Comment #3 – The Application and the DEIS do not address the safety of fire suppression aircraft over ridgelines in the Horse Heaven Hills, northern areas of the project, or in Webber and Badger Canyon.... [] ... Aerial firefighting will be seriously hindered if there are 499-foot wind turbines in close proximity to the flight paths of the aircraft and helicopters.

Mark Baird, aerial firefighter pilot gave supplemental testimony (EXH-5913_S Testimony and EXH-5910_S Resume) that was stricken from the adjudication record by Judge Torem on September 22, 2023.

Page 5 line 5 to 13 of the testimony states in pertinent part:

“Between three and four nautical miles spacing would at least make aerial firefighting possible in order to save lives and property. FAA TERPS, and ICAO Pan Ops dictate maneuvering minimum radius of turn for large aircraft as well as minimum climb rates to avoid known obstacles in approach and departure corridors where obstructions are known and accurately mapped; 2.7 nautical miles is the minimum radius of turn for category E aircraft with maneuvering speeds of 168 plus knots. A climb of 200 feet per nautical mile is the minimum for most departure procedures. If the ridge top is 2000 feet msl and it has a 500-foot tower on top of it, climb capability would be exceeded quickly.”

David Wardall, Chairman of the National Aerial Firefighters Association gave testimony (EXH-5096_S and EXH-5908_S) that was stricken from the adjudication record by Judge Torem on September 22, 2023 states in pertinent part:

Page 2 lines 17 to 22, state in pertinent part,

“Wind turbines present severe impediments to aerial firefighting operations. The existence of the wind turbines effectively creates a “no fly” zone which greatly increases the risk that any wildfire that either began in or near the project site or spread into it from any surrounding area, could not be quickly contained, and would grow. I believe there is a threat to the adjacent communities from this proposal by eliminating the possibility of fixed wing air attacks that needs to be acknowledged.”

Page 3 lines 8 to 26 state in pertinent part:

“... the Horse Heaven Hills Wind Farm Project is huge – 25 miles and four to six miles wide – over 60,000 acres with up to 850 MW from up to 244 turbines,

each one 500 foot to 671 foot high in up to 6 rows along the ridgeline. This is a huge major obstruction to responding firefighting efforts. The size of this proposed project will make a huge “No Fly” zone for civil aircraft, medivac helicopters and of course firefighting aircraft.”

“The extraordinary length of the project creates a 25-mile barrier to fixed wing tanker aircraft. The wind turbines produce a lot of air rotating vortices type turbulence that will interfere with safe aerial firefighting operations.

Depending on the winds and the terrain, in order to make effective air drops, the minimum obstruction setback distance should be three to four miles along any flight paths needed to conduct aerial operations, and two to three miles perpendicular to the flight paths to reduce the risks posed by the turbulence downwind of the wind turbines.

Also, brush and grass are “flash” fuels easily ignited up to two miles ahead of the fire front from blown embers during wind events at 15 mph or greater.”

Page 4 lines 1 to 6 state:

“This is a leapfrog-type fast-moving fire which fills in between the fire front and the new ember hot spots. The fire essentially explodes. Little time to evacuate.

This project would require lots of pre-fire planning and vegetation removal and maintenance along roadway escape routes and wide fire breaks around the entire project and down-wind structures.”

All this is available information in original and redlined strikeout versions at the EFSEC website.

The fire history can be validated on the DNR website in the Washington DNR Large Fires Dataset:

<https://geo.wa.gov/datasets/6f31b076628d4f8ca5a964cbefd2cccc/explore>

Additional Turbine Removal is Needed to Adequately Address Aerial Firefighting Impacts

Option 4 needs to be revised to include additional turbines causing a no-fly zone that restricts and impairs aerial firefighting capabilities adjacent to the proposed project.

The newest maps and the notes provided do not clearly explain which turbines and other project components were removed to address aerial firefighting needs.

The following maps were prepared to offer assistance in the development of an aerial firefighting airspace safety corridor.

This first map shows the documented fire history of the area north and west of the project area. The map identifies a northwest to southeast flight path similar to that utilized by the DC-10 on June 13, 2023 on the Hansen Road Fire. The flight path centers on the southernmost boundary of the fire perimeter. A two-mile wide safety corridor is then drawn around the flight path, consistent with the testimony provided by aerial firefighters David Wardall and Mark Baird during the adjudication.

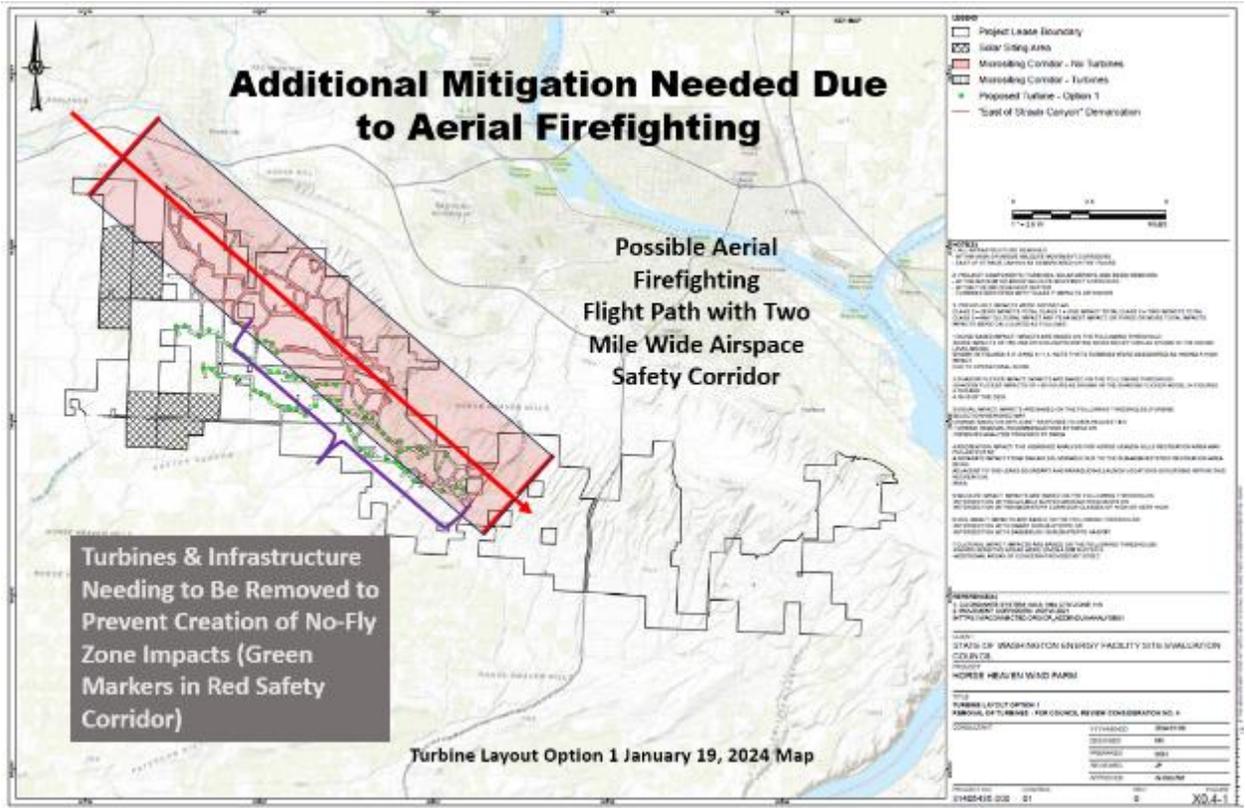
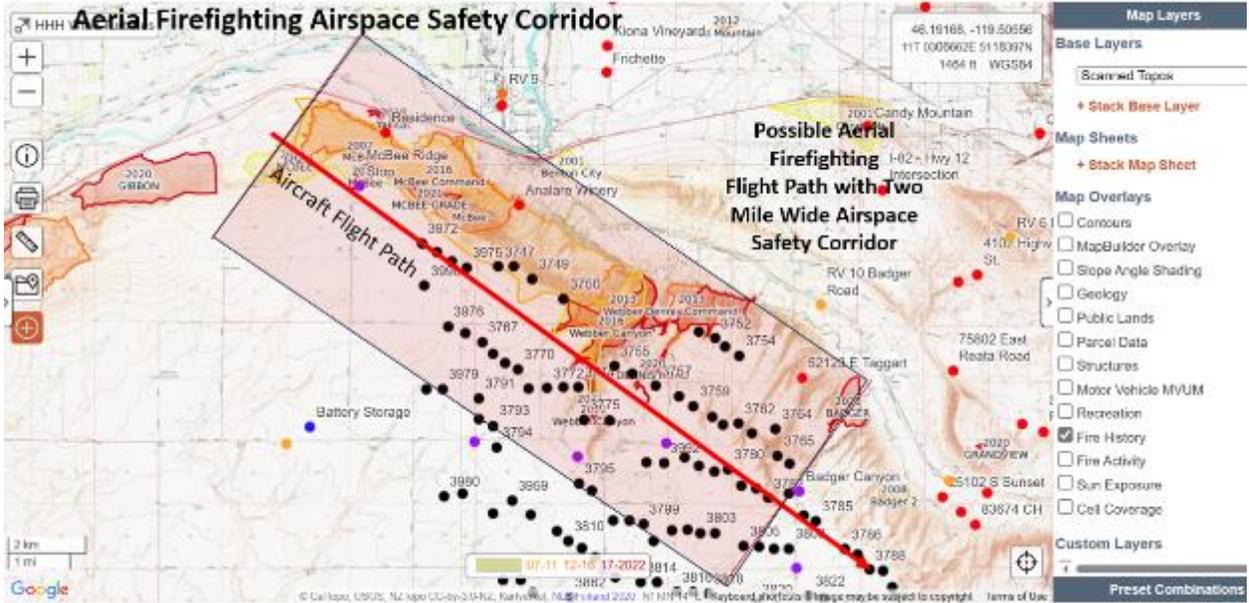
The next two maps on the Option 4 Maps provided to TCC on January 19, 2024 for Turbine Layouts Option 1 and 2.

In both cases there are about 20 turbines labelled in green that are within the safety corridor.

These turbines need to be removed from consideration.

These maps are provided in the attached PDF file.

Documented Fire History West Portion HHH Project with Two Mile



From: [ROBERT CAROSINO](#)
To: [EFSEC mi Comments](#)
Subject: Comments on the Mitigation Options and the Recommendation to Governor Inslee on the proposed Horse Heaven Hills Wind Farm and Solar Project
Date: Sunday, January 21, 2024 10:31:52 PM

External Email

I am submitting comments on the four Council Mitigation options and possible recommendation to Governor Inslee, to be discussed at the January **24th** EFSEC Monthly Meeting for the proposed Horse Heaven Hills Wind Farm and Solar Project. **The four Mitigation options developed by the Council are supposed to be based on their recognition of the significant negative impacts the project may have on the surrounding population and environment. While the mitigation options recognize and provide mitigation to some degree, the options are all inadequate, as while they mitigate some adverse impact on wildlife, cultural resources, and visual impacts, these options do not yet address aerial firefighting needs. Furthermore, they do not provide adequate mitigation for impacts of the other noted impact areas, especially in my view, visual impacts and cultural impacts.**

EFSEC cannot just issue an inadequate package to the Governor, and argue that it couldn't do any better with the time it had. It must do a better job and consider additional mitigation by removing the currently allowed wind turbines that could be seen from the Tri Cities area, and removing those wind turbines that would be impediments to the aerial firefighting needs of the community. The latter is especially important from an environmental protection and life safety standpoint, especially as Summers become drier, hotter, longer, and more wildfire prone. Cultural concerns of the Native American tribes must also be better mitigated.

On the basis of my review, I believe that Option 4, with yet **additional turbines removed** to permit aerial firefighting to be effectively conducted in the area, and to more adequately mitigate for visual, wildlife, cultural and fugitive dust issues associated with the project, is the only acceptable option.

I incorporate by reference the detailed comments and additional mitigation maps showing additional wind turbines that must be removed from the project, which I have reviewed, and which are being submitted in comments by TRI CITY CARES, into my

comments upon the proposed EFSEC action.

I must also note that the limited amount of public information provided to the public on adverse impacts, mitigation measures, and the unreasonably short time frame to review and comment on the current mitigation proposals, certainly leaves an impression that the public interest is of little importance to the state decision-making process. HOW SAD FOR THE STATE OF WASHINGTON AND ITS CITIZENS.

Respectfully submitted,

Robert M. Carosino

130 Terrace Drive

Pasco, WA 99301

From: [Beki Reese Van Buren](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Sunday, January 21, 2024 10:34:01 PM

External Email

After having looked at the offered 4 options for the Horse Heaven Hills Turbine Park I have to say Option 4 seems the only acceptable one, However it fails to consider the need for flying firefighters to be able to access the hills when there is a fire. I live in Benton City and I watched all day as the water planes flew low over my house and yard carrying fire ro several fires that surrounded us, especially the horse heaven hills fire. We sat in our yard and watched the fire come across the hill and burn down the Yakima River side toward the Kiona area. It was crucial for the planes to get in there to stop the fire before it hit the homes and property at the bottom. Those same planes earlier carried water to the Prosser fire and the portion of the Horse Heaven Hills that were burning in between. The planes flew back and forth very low with water all day with very quick turnarounds. I can't imagine them being able to do that with turbines in the way. Any plan must ensure they will always have access when these fires happen again as we all know they will. I am not personally so concerned as others about every kind of animal that lives there as I am about preserving human life and the homes they have worked so hard to build. As important is the beauty that surrounds us in Benton City that made us choose to build lives here and those hills are a large part of it. My own opinion is the turbines are a waste of money,,,they will never generate enough electricity to justify their cost and destruction of the beauty of those hills out our front and back doors, The reality is they can only run when there is wind of a particular speed and that must be pretty hide to produce even a minimal amount of power, The wind does not blow all the time just as the sun doesn't shine all the time for solar power. But if you must build them, build them far enough back from the ridge/edge so we won't see them. I have heard the people who live there are in favor because of the money they will make, but at the cost of drawing future people to the area? No one will want to live here and our community will stop growing, Let them have very little visible impact on those who live below. I also have a concern about noise pollution. The orchard turbines already keep us awake all night whenever they run and these turbines will potentially most of the the time. All of this has been said before but most important at this point is to accommodate for community safety, endure the flying firefighters will be able to do their jobs!

Rebecca Van Buren
Benton City Resident

From: [David Cole](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Monday, January 22, 2024 5:48:33 AM

External Email

Option 4 is the only acceptable alternative. Additionally, aerial firefighting must be addressed sufficiently.

From: [Kathy Kaser-Nichols](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Monday, January 22, 2024 6:29:55 AM

External Email

I agree with CARES that **"Option 4 is the only acceptable alternative and that they must adequately address aerial firefighting."**

My true and fiercely held opinion is that there should be NO MORE WINDMILLS INSTALLED! They are too destructive to the environment and not viable. To add more is insane.

Please stop the madness of these schemes.

Kathryn Kaser-Nichols

From: [Kevin Lewis](#)
To: [EFSEC mi Comments](#)
Subject: Comments on HHH Council Mitigation Options
Date: Monday, January 22, 2024 7:39:16 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

External Email

We are aware that EFSC is considering four Council Mitigation options for the Horse Heaven Wind and Solar Project based recognition of the significant negative impacts the project has on wildlife, cultural resources, and visual impacts.

Having reviewed the options with the information available to us, we feel Option 4 is the only acceptable alternative. In addition, we feel EFSEC must adequately address aerial firefighting in the area should the project go through. This would require that additional turbines be removed from what is currently proposed in option 4.

Please consider these recommendations as you discuss further action.

Sincerely,

Kevin Lewis



[Visit Tri-Cities.com](http://Visit-Tri-Cities.com)

KEVIN LEWIS

President & CEO | Visit Tri-Cities

☐ (509) 873-5936
☐ 7130 W. Grandridge Blvd., Ste. B
Kennewick, WA 99336



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From: [Paul Krupin](#)
To: [EFSEC mi Comments](#); [Drew, Kathleen \(EFSEC\)](#); [Bumpus, Sonia \(EFSEC\)](#); [Hafkemeyer, Ami \(EFSEC\)](#); [Moon, Amy \(EFSEC\)](#)
Subject: Aerial Firefighting Concerns - Horizontal Buffer Distance Issue
Date: Tuesday, January 23, 2024 11:27:39 AM
Attachments: [TCC New Aerial Firefighting Maps Comments 012124 3 page.pdf](#)

External Email

The January 22 2024 email message regarding the EFSEC January Agenda and Minutes from Andrea Grantham contains a transcript of the Nov 29 meeting and a transcript of the Dec 20 meeting.

There is also additional firefighting information from Washington Department of Natural Resources DNR and comments from BCFD#1 Chief Lonnie Click, on pages 62 to 63.

While the Council question regarding the horizontal buffer distance needed was asked, the transcript does not appear indicate that a specific distance of the airspace needed was clearly identified.

As far as I know, the testimony from Tri-Cities CARES witnesses David Wardell and Mark Baird originally submitted in the adjudication is still the only expert evidence addressing the horizontal buffer distance question specifically.

Their testimony indicates that the necessary buffer for the tactical aircraft utilized (DC-10's and above) is at least four miles along the flight path and two miles on the perpendicular.

I highly recommend you either utilize that distance or specifically ask the experts at Washington DNR to comment on and specifically ascertain a recommended minimum distance.

In either case, whatever distance you utilize, please state the horizontal distance explicitly and then describe your rationale in the record.

Once you receive and decide on appropriate specific distance guidelines, you can apply them to the Option 4 maps and identify any additional turbines for removal in order to achieve an appropriate airspace restriction. The maps we submitted in comments yesterday utilizing the four mile/two mile setback is attached to illustrate how to identify the remaining turbines for removal.

Appreciatively,

Paul J. Krupin, BA, MS, JD

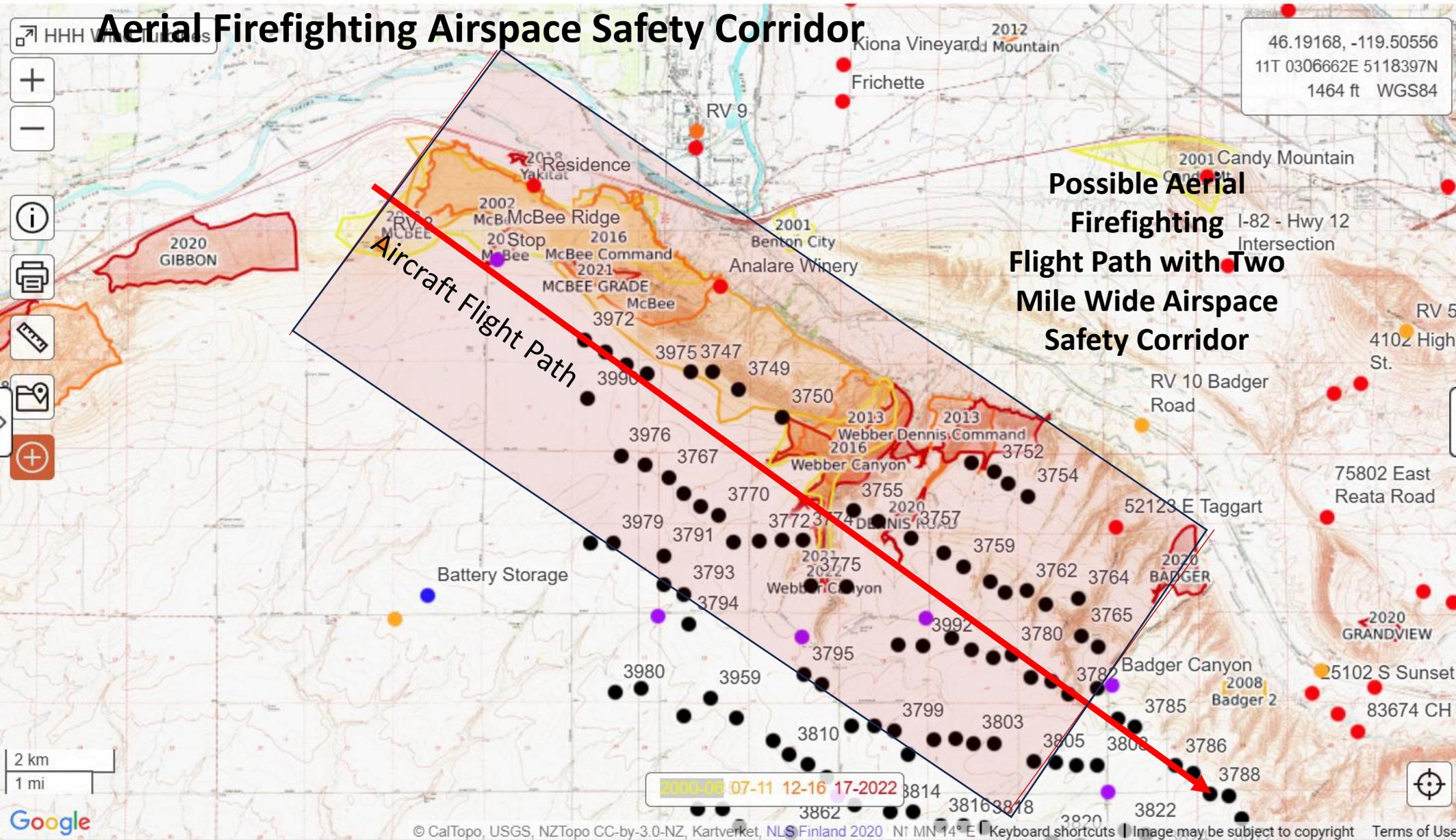
Board Member on behalf of TRI-CITIES C.A.R.E.S

Visit: <http://www.TriCitiesCARES.org>

509-531-8390 cell 509-582-5174 landline Paul@Presari.com

Documented Fire History West Portion HHH Project with Two Mile

Aerial Firefighting Airspace Safety Corridor



Map Layers

Base Layers

- Scanned Topos
- + Stack Base Layer

Map Sheets

- + Stack Map Sheet

Map Overlays

- Contours
- MapBuilder Overlay
- Slope Angle Shading
- Geology
- Public Lands
- Parcel Data
- Structures
- Motor Vehicle MVUM
- Recreation
- Fire History
- Fire Activity
- Sun Exposure
- Cell Coverage

Custom Layers

- Preset Combinations

Additional Mitigation Needed Due to Aerial Firefighting

Possible Aerial Firefighting Flight Path with Two Mile Wide Airspace Safety Corridor

Turbines & Infrastructure Needing to Be Removed to Prevent Creation of No-Fly Zone Impacts (Green Markers in Red Safety Corridor)

Turbine Layout Option 1 January 19, 2024 Map

LEGEND

- Project Lease Boundary
- Solar Siting Area
- Micrositing Corridor - No Turbines
- Micrositing Corridor - Turbines
- Proposed Turbine - Option 1
- "East of Straub Canyon" Demarcation

NOTES

1. ALL INFRASTRUCTURE REMOVED:
 - WITHIN HIGH OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - EAST OF STRAUB CANYON AS DEMARCATED ON THE FIGURE
2. PROJECT COMPONENTS (TURBINES, SOLAR ARRAYS, AND BESS) REMOVED:
 - WITHIN MEDIUM OR ABOVE WILDLIFE MOVEMENT CORRIDORS
 - WITHIN THE 2MI FEHA NEST BUFFER
 - TURBINES IDENTIFIED WITH "CLASS 1" IMPACTS OR HIGHER
3. PREVIOUSLY, IMPACTS WERE DEFINED AS:
 - CLASS 0 = ZERO IMPACTS TOTAL CLASS 1 = ONE IMPACT TOTAL CLASS 2 = TWO IMPACTS TOTAL CLASS 3 = ANY CULTURAL IMPACT, ANY FEHA NEST IMPACT, OR THREE OR MORE TOTAL IMPACTS
 IMPACTS WERE CALCULATED AS FOLLOWS:
 1. NOISE BASED IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD:
 - NOISE IMPACTS OF +50 DBA ON NON-PARTICIPATING NOISE RECEPTORS AS SHOWN IN THE SOUND LEVEL MODEL SHOWN IN FIGURES 4.11-3 AND 4.11-4. NOTE THAT 0 TURBINES WERE DESIGNATED AS HAVING A HIGH IMPACT DUE TO OPERATIONAL NOISE.
 2. SHADOW FLICKER IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLD:
 - SHADOW FLICKER IMPACTS OF >15 HOURS AS SHOWN IN THE SHADOW FLICKER MODEL IN FIGURES 4.10-3 AND 4.10-10 OF THE DEIS.
 3. VISUAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS (TURBINE SELECTION/VIEWED MAY VARY):
 - CHANGE BASED ON APPLICANT RESPONSE TO DATA REQUEST #7)
 - TURBINE REMOVAL RECOMMENDATIONS BY SWCA OR
 - VIEWED ANALYSIS PROVIDED BY SWCA
 4. RECREATION IMPACT: THE VIEWSHED ANALYSIS FOR HORSE HEAVEN HILLS RECREATION AREA WAS PULLED OUT AS A SEPARATE IMPACT FROM SWCA'S DELIVERABLE DUE TO THE BLM-ADMINISTERED RECREATION AREA BEING ADJACENT TO THE LEASE BOUNDARY AND PARAGLIDING LAUNCH LOCATIONS OCCURRING WITHIN THIS RECREATION AREA.
 5. WILDLIFE IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - INTERSECTION WITHIN A 2-MILE BUFFER AROUND FEHA NESTS OR
 - INTERSECTION WITHIN MIGRATORY CORRIDOR CLASSES OF HIGH OR VERY HIGH.
 6. VEG IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - INTERSECTION WITH DWARF SHRUB-STEPPE OR
 - INTERSECTION WITH SAGEBRUSH SHRUB-STEPPE HABITAT
 7. CULTURAL IMPACT: IMPACTS ARE BASED ON THE FOLLOWING THRESHOLDS:
 - KNOWN SENSITIVE AREAS WERE GIVEN A 2M BUFFER 0
 - ADDITIONAL AREAS OF CONCERN PROVIDED BY EFSEC

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 11N
2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/](https://waconnected.org/CP_ADDENDUMANALYSES/))

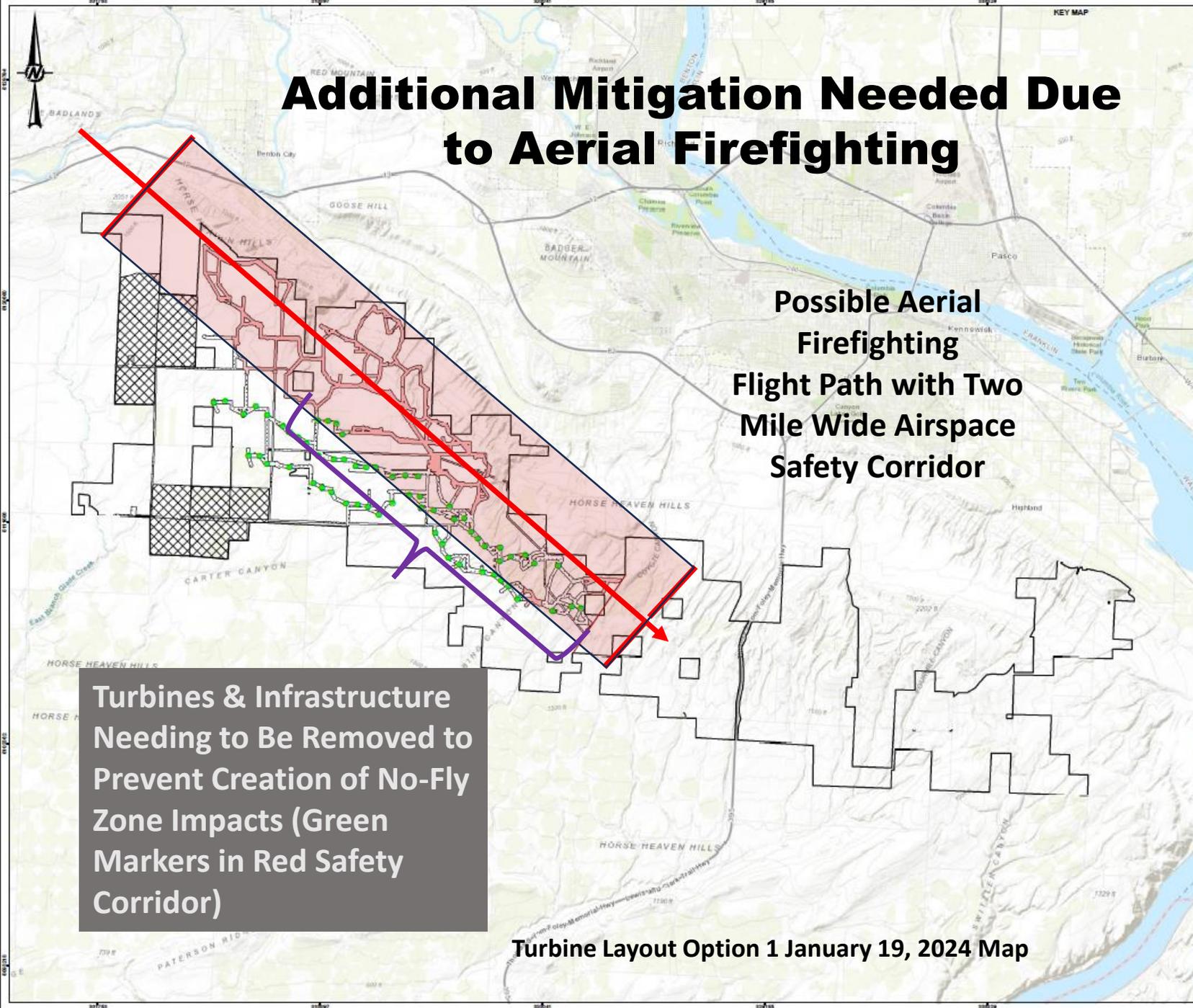
CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 1
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AHISG/AM	

PROJECT NO. 31405435.000 CONTROL 01 REV. 0 FIGURE X0.4-1



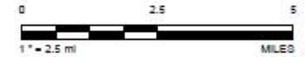
Additional Mitigation Needed Due to Aerial Firefighting

Possible Aerial Firefighting Flight Path with Two Mile Wide Airspace Safety Corridor

Turbines & Infrastructure Needing to Be Removed to Prevent Creation of No-Fly Zone Impacts (Green Markers in Red Safety Corridor)

Turbine Layout Option 2 January 19, 2024 Map

- LEGEND**
- Project Lease Boundary
 - Solar Siting Area
 - Micrositing Corridor - No Turbines
 - Micrositing Corridor - Turbines
 - Proposed Turbine - Option 1
 - "East of Straub Canyon" Demarcation



- NOTES**
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- REFERENCE(S)**
1. COORDINATE SYSTEM: NAD 83 UTM ZONE 11N
 2. MOVEMENT CORRIDORS: WDFW 2021 ([HTTPS://WACONNECTED.ORG/CP_ADDENDUMANALYSES/](https://waconnected.org/CP_ADDENDUMANALYSES/))

CLIENT
STATE OF WASHINGTON ENERGY FACILITY SITE EVALUATION COUNCIL

PROJECT
HORSE HEAVEN WIND FARM

TITLE
TURBINE LAYOUT OPTION 1
REMOVAL OF TURBINES - FOR COUNCIL REVIEW CONSIDERATION NO. 4

CONSULTANT	YYYY-MM-DD	2024-01-08
DESIGNED	MK	
PREPARED	SCH	
REVIEWED	JP	
APPROVED	AHISG/AM	

From: [Colleen Bowman](#)
To: [EFSEC mi Comments](#)
Subject: Horse Heaven Hills Industrial Wind Complex
Date: Sunday, January 21, 2024 2:49:47 PM

External Email

To whom it may concern,

The Horse Heaven Hills Industrial Wind Complex has only one acceptable option. Option #4 as shown in the attached photo is the best option for aerial firefighting. Wildfire firefighting is a real concern in the Basin. This is not a theoretical issue, this is an issue proven by the Horse Heaven Hills wildfire of August 2023. Without aerial firefighting the devastation of this wildfire would have had greater threat to human life and property.

Sincerely,
Colleen Bowman

From: [David McDonald](#)
To: [EFSEC mi Comments](#)
Subject: Horse Heaven Hill Wind Farm Comments
Date: Sunday, January 21, 2024 3:13:09 PM

External Email

January 21, 2024

Washington Energy Facility Site Evaluation Council
621 Woodland Square Loop SE
PO Box 43172
Olympia, WA 98503-3172

Re: Horse Heaven Wind Farm Proposal Opt. 4

Dear Council Members:

After seeing the recent news about the problems of the Alberta electric grid this past week it leaves me concerned about Washington State relying more and more on wind and solar power. A University of Alberta professor told the CBC News that they could have all the wind and solar farms in the world located in Alberta last week and “it still wouldn’t have come anywhere close to closing the gap” in their shortfall of power. Wind and solar were both unable to contribute to the power needs in the province due to the lack of wind and dark cold nights. To avert a catastrophic collapse of the Alberta grid people were among other things asked not to charge their EV’s

While I am concerned about what solar and wind farms are doing to our electric grid, I think the Option 4 proposal being considered by the Council is a major improvement over the original Horse Heaven Wind and Solar proposal. However, Option 4 still needs to address the significant problem the wind turbines create for aerial firefighting that is so necessary to protect life, property and vital infrastructure in Eastern Washington. Wildfires are a major threat to communities in Eastern Washington every summer. And we are told they are becoming a more frequent threat due to climate change. Therefore, it is important that we do not add to this increasing threat by making it more difficult to protect people and communities by making it more difficult to fight wildfires. The core purpose of government is to protect the health, safety and welfare of citizens. We can’t protect the health and safety of our communities if government creates conditions (aerial obstructions in fire prone areas) that jeopardize our ability to quickly fight wildfires. The Council needs to consider reducing the concentration and location of wind turbines in Option 4 to ensure the option for aerial firefighting is preserved.

Another health, safety and welfare issue that is not addressed properly in this proposal is that of blowing dust, commonly referred to as fugitive dust. This is a big issue in the Tri-Cities and not controlling it creates major health problems for local residents. The proponents of these wind turbines are asking the residents of the Tri-Cities to accept the burden of increased dust pollution and resulting health hazards without any benefits. If the firefighting concerns listed above are addressed by lessening the concentration of turbines fewer dirt roads will be needed. Lessening fugitive dust falls within the core purpose of government in protecting the health, safety and welfare of citizens.

The Council should also review the need to better protect wildlife in the area of the proposed wind and solar farm. In many parts of Eastern Washington, we have fragmented remnants of the shrub steppe habitat left. Further fragmentation and covering our remaining habitat with solar panels and turbines will make it more difficult for our wildlife to survive. The cumulative impacts of wind turbines, solar panels, dirt access roads, fencing and new transmission lines doesn't support government initiatives to preserve habitats and wildlife.

I am also hoping Option 4 limits the visual impact of industrial structures being located beside a major urban center and within a habitat area.

Thank You for your time

David McDonald

David McDonald
10312 W. Argent Rd
Pasco, Washington

From: [Karen Brun](#)
To: [EFSEC mi Comments](#)
Subject: Horse Heaven Wind & Solar Project
Date: Sunday, January 21, 2024 5:45:05 PM

External Email

Having spent the last 18 months following this project and all the omissions, inaccuracies, and downright fabrications along the way, I find it ludicrous that EFSEC would consider approving it in any form.

Governor Inslee needs to get his head out of the sand and realize that wind as a renewable energy source in Washington State just isn't feasible. NIMBYism has nothing to do with it as the Tri-Cities are more than willing to have any number of small modular nuclear reactors located here. We know that those SNMRs are a 24/7 efficient and reliable source of energy not the least bit dependent on weather.

Taxpayer subsidies should be going toward SNMR development rather than a technology that doesn't work when the wind doesn't blow.

Karen Brun
Treasurer, TRI-CITIES C.A.R.E.S.
Phone: 509-392-1156
Email: karen@tricitescares.org

TRI-CITIES C.A.R.E.S.
Community Action for Responsible Environmental Stewardship
Visit: www.TriCitiesCARES.org

From: [Pam Minelli](#)
To: [EFSEC mi Comments](#); [EFSEC \(EFSEC\)](#); [Moon, Amy \(EFSEC\)](#); [Bumpus, Sonia \(EFSEC\)](#); [Owens, Joan \(EFSEC\)](#)
Subject: Comments on Horse Heaven Wind Project re staff recommendations
Date: Sunday, January 21, 2024 7:41:04 PM
Attachments: [TCC Cultural Comments pdf.pdf](#)

External Email

Because the EFSEC public comment form for the HH Wind Project is erroneously closed before the 11:59 PM January 21 deadline, please accept my comments on behalf of TC CARES attached to this email.

Respectfully submitted.
Pam Minelli

TRI-CITIES C.A.R.E.S.
Phone: 509-539-6788
Email: pam@tricityscares.org

TRI-CITIES C.A.R.E.S
Community | Action for | Responsible | Environmental | Stewardship
Visit: www.TriCitiesCARES.org

Tri-Cities CARES' Comments regarding effects of EFSEC Recommendation Options listed in the Horse Heaven Action Item for the January 24, 2024 EFSEC meeting on **Historic and Cultural Resources**.

To provide maximum protection of **Historic and Cultural Resources**, Tri-Cities CARES **prefers a No Build Option**, but of the Options currently under consideration by EFSEC, TCC requests that **a version of Option 4 that combines all aspects of Options 1-3 plus the inclusion of the following additional project specifications be considered:**

1. Include data collection and surveys done by Yakama Nation, DNR, and DAHP to determine Historic and Cultural mitigations needed to eliminate and reduce negative impacts of the HH Wind and Solar Project.

- Developer-conducted surveys are not preferred as noted in this source: <https://www.propublica.org/article/washington-state-is-leaving-tribal-cultural-resources-at-mercy-of-solar-developers>

2. Require Yakama Nation approval of all final CR mitigations for this project.

Summary:

Tri-Cities CARES fully supports Yakama Nation efforts to reduce project components including removal of turbines necessary to protect the Pronghorn Antelope and the endangered Ferruginous Hawk, TCPs and First Foods procurement. We also support off-site mitigations to perpetuate their oral history and legends and use of a Cultural Resource Monitor. (CR-1 of the FEIS)

From: [Diana McPherson](#)
To: [E2SE-09 Comments](#)
Subject: Public Comment on E2SE: Final Action
Date: Sunday, January 21, 2024 9:28:28 PM

External Email

I oppose the proposed wind turbines at Horse Heaven Hills for the following reasons:

- * Horse Heaven Hills is the last remaining functional and uninterrupted shrub-steppe and natural grasslands area, an important wildlife habitat plus an important cultural land for the Yakima Nation.
- * Horse Heaven Hills is a known nesting area for ferruginous hawks that are seriously threatened with extinction in Washington state.
- * Wind turbines emit low-frequency noise (20-200 Hz) which poses health risks to nearby residents (<https://www.nature.com/articles/s41598-021-97107-8>) and can be detrimental to wildlife ([https://www.sciencedirect.com/science/article/pii/S1364682122006852#---text=Wind%20turbine%20noise%20\(WTN\)%20can%20be%20detrimetal%20effect%20on%20nearby%20wildlife.&text=WTN%20can%20harm%20vital%20survival%20mechanisms%20in%20certain%20species](https://www.sciencedirect.com/science/article/pii/S1364682122006852#---text=Wind%20turbine%20noise%20(WTN)%20can%20be%20detrimetal%20effect%20on%20nearby%20wildlife.&text=WTN%20can%20harm%20vital%20survival%20mechanisms%20in%20certain%20species))
- * Fire risk is increased with no access for planes to fly low to drop fire retardant.
- * Construction will require access to excessive amounts of water sources, which have not been secured, to control the dust and will cause excessive runoff from the stripped-off habitat.
- * Horse Heaven Hills lies within the Pacific Flyway, an important area for migratory birds.
- * The proposed turbines are taller than any standard turbines already in the area.
- * Turbine propellers last 15-25 years and typically end up in landfills because they're difficult to recycle.

Thank you for listening.

Diana McPherson
Richland, WA
505-699-2065
dmcph0@gmail.com