

LAGI 2020 Fly Ranch Q+A: Version 7 (September 22, 2020)

SCROLL TO THE BOTTOM TO SEE THE MOST RECENT QUESTIONS.

DEADLINE EXTENDED TO OCTOBER 31, 2020.

READ MORE: <https://landartgenerator.org/blagi/archives/77083>

Looking for teammates? Post on the Fly Ranch Project Facebook Page:

<https://www.facebook.com/groups/flyranch/>

Want to learn more from a webinar? Here is the recording and comment thread from February 19th:

<https://www.facebook.com/burningman/videos/647342462692242/>

Virtual tour of Fly Ranch is now available: <https://ibareitall.com/360/fly-ranch/>

Fly Ranch Microbial Biogeochemistry report by Dr. Scott D. Hamilton-Brehm and Dr. Marjorie Brooks

is now available: <https://landartgenerator.org/lagi2020/FlyRanch-Microbial-Biogeochemistry.pdf>

Questions and Answers

1. Q: In reading the guidelines, I saw that excavation was discouraged, but can't help but think earth dwellings with seasonally designed southern exposure (e.g. eaves that shade in the summer but provide heat/light in the winter and an earthen roof that insulates year-round) could be a good idea.

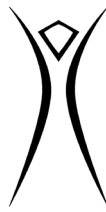
A. There are three levels of site boundary by land use types. Excavation is discouraged in the secondary design sites (green color on the map) and forbidden in the conservation areas (grey color on the map). In the primary design site boundary (yellow color on the map) you may explore earth berm design strategies and deep excavations are permitted. Check out Frank Lloyd Wright's solar hemicycle Jacob's house and the life work of Malcolm Wells for inspiration.

2. Q: Can teams visit the 360 acres near Gerlach?

A. While we encourage teams to take advantage of the guided tours of Fly Ranch that are being provided by Friends of Black Rock High Rock (<https://blackrockdesert.org/lagi-participant-preview/>), the 360 acres just outside of Gerlach is viewable from the road, and the portion immediately west of County Road 34 is easy to check out on foot. The fenced-in portion on the east side of the road is not accessible to the public.

3. Q: Would you please notify us how much is the registration fees?

A. There are no registration fees for LAGI 2020. Participation is free. We encourage early registration so that we can communicate updates.



4. Q: Does submitting my design give LAGI or Burning Man Project ownership of my design?
- A. **Your design remains the intellectual property of your design team. LAGI takes this commitment seriously and takes all measures within our control to ensure that each design team is properly credited for when representations of their work are shared out into the world. Participation in the competition is also a way for teams to time-stamp their ideas in the public domain, as they will be published in the LAGI portfolio online and selected projects will be included in the publication. LAGI does not take responsibility for the legal protection of the IP of any design. For a more complete answer to this question, please refer to the Terms & Conditions.**
5. Q: Are the winners of honorariums required to build something or may they use the winnings for other purposes?
- A. **If selected, your team must use your honorarium (winnings) towards the production of a functioning prototype on site at Fly Ranch. Please keep in mind that the prototype should be a proof of concept only and may focus on the technical elements of your proposal.**

From the Terms & Conditions, Section 10.2:

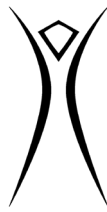
Each Entrant who is invited to participate in on-site prototyping (“Winner”) will be provided with an honorarium for the express purpose of completing the prototyping process.

6. Q: If a winner of an honorarium decides to put together a team together to build a prototype and it goes over budget, what happens then?
- A. **You will be required to provide a budget for the use of the honorarium prior to disbursement of funds, the purpose of which is to help ensure that the prototyping process stays on budget. Burning Man Project and LAGI will assist winning teams in the development of their budgets by answering questions and offering advice.**

From the Terms & Conditions, Section 10.5:

BURNING MAN will provide a budget template that must be completed by the Entrant prior to the release of their honorarium. The template will be similar to that provided to artists who receive honoraria grants for the annual Burning Man event (e.g. <https://docs.google.com/spreadsheets/d/1kih7CqA3Bya0V-Gfaz4QbgFXDOxR9lxPGdsWsbVLK1w/edit#gid=742956664>).

Please also keep in mind that this prototyping process is one additional step towards the eventual full-scale commissioning of infrastructural artworks at Fly Ranch. Your team is competing—through your ~~May 31st~~ ^{May 31st} October 31st, 2020 submission and again through the delivery of your prototype—to eventually win a contract to design and oversee the construction of your vision.



From the Terms & Conditions, Section 10.3:

Honoraria are exclusive of professional fees related to any later stage commission or scope of work agreed to between Entrant and Sponsor.

This means that should you be selected through the process to implement your idea at scale, you will be a part of a larger architecture/engineering and construction team, including a registered Nevada architect of record and engineer of record. Your consultancy for the full-scale delivery will be negotiated directly with Burning Man Project as a part of that larger implementation strategy for the development of Fly Ranch.

7. Q: Is the winner of an honorarium obliged to use their "fee" to pay for any cost overruns of the prototype?

A. The conditions around the use of the honoraria grants will be set by Burning Man Project and will follow the model that has been established over many years by Black Rock City art grants. Oftentimes (at the discretion of artist teams) the amount of the grant is augmented by crowdsourcing campaigns that Burning Man Project can assist with raising awareness around. Recently, the artwork Baba Yaga's House was installed at Fly Ranch. Burning Man Project and the Fly Ranch team helped the artist team raise an additional \$10,000 to cover the costs of transportation, insurance/legal fees, maintenance, engineering, and materials & supplies.

From the Terms & Conditions, Section 10.5:

Winners are expected to use their honorarium to demonstrate the feasibility of their design proposal to BURNING MAN. This could be accomplished by building one small (yet critical) full-scale component of the design, by building a scaled version of the design, or some combination thereof. While the prototyping process will likely require a continuation of the design process (drawings, 3D models, virtual reality, and other design drawings or instruments), the prototype must be physical, and must be installed at Fly Ranch. Winners may choose to augment the honorarium provided by BURNING MAN with additional third-party funding (grants, loans, or investments), but there is no expectation as such, and Winners are under no obligation to do so.

8. Q: In the yellow zone area (Primary Site Boundary) there roads inside or roads or is it simply symbolic? I say it because there are lines on which it can be built but given its layout it seems to be for a possible route, does that route exist or is it the one that is proposed? I say it in the sense that there are the big yellow areas. Are the lines that connect the big yellow areas existing or future roads or roads?

A. Please refer to satellite imagery in the Google Map version of the site boundary here: <https://tinyurl.com/LAGI2020>. You will see that there are some dirt roads within the primary boundary area. These pre-date Burning Man Project's acquisition of the property. The primary boundary has been delineated to mostly encompass the areas of the land that have been previously disturbed, and these roads are one example of that. There is no requirement to maintain the layout of those unpaved roads. You will also find natural paths of the wild horses and the deer. You may want to consider how your proposal can minimize disturbance of those. The



long slender areas of the primary boundary are meant to provide "connective tissue" for the circulation of energy, water, goods, or people between the larger primary focal sites, but they need not be turned into conventional "roads" for this purpose and they do not need to be utilized at all. If you choose to leave them be in their natural state that is fine. Please consider the impact on stormwater should you propose to develop routes of circulation.

9. Q: Is there a topographic map that the surrounding mountains can be seen to know the highest level in relation to our area? A 1/5000 or 1/10000 or 1/25000 scale

A. You can download maps of the type you are requesting from USGS at <https://www.usgs.gov/core-science-systems/ngp/tnm-delivery/topographic-maps>. We've added a new link to the supplemental documents page with a direct download here: https://landartgenerator.org/lagi2020/NV_Hualapai_Flat_South_20141230_TM_geo.pdf.

10. Q: The area of the train rails, is it a freight or people train?

A. There are rail lines a distance south and east of the site, but they do not come near the site. They are used for freight.

11. Q: I saw the access that reaches our project area, how wide it is and how many lanes?

A. County Road 34 is paved and is one lane in each direction with a typical shoulder. It's about seven meters wide.

12. Q: What scale or size should that sculpture have?

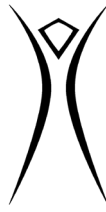
A. This is up to you within the limits of the guidelines.

13. Q: In the same way that you don't have to develop a proposal for all five systems, do you need to build in all the areas that are marked as such? Can you leave free zones in areas that are suitable for construction?

A. You may leave large areas of the site undisturbed, including areas within the primary boundary area (yellow on the map). In other words, you do not need to design for the entire site.

14. Q: What kind of edible crops occur in the state or area in question? That is, what plantations are apt to be planted in the area. Thank you.

A. Please read the Fly Ranch Roadmap document as a part of the links on the supplemental downloads page: <https://flyranch.burningman.org/2019roadmap/>. You'll find a lot of information there, including a link to a full accounting of all plants on the property. Historically alfalfa has been grown in the area, but we invite proposals for other crops. See the "food" page of the LAGI 2020



Fly Ranch Reference Guide (<https://landartgenerator.org/lagi2020/LAGI2020-ReferenceGuide.pdf>).

15. Q: What scale or size should that sculpture have?

A. This is up to you within the limits of the guidelines.

16. Q: In reading the guidelines, I saw that excavation was discouraged, but can't help but think earth dwellings might be beneficial, with seasonally designed southern exposure and with eaves that shade in the summer but provide heat/light in the winter and an earthen roof that insulates year-round.

A. There are three levels of site boundary or land use types. Excavation is discouraged in the secondary design sites and forbidden in the conservation areas. In the primary design site boundary deep excavations are permitted and you may explore earth-berm design strategies.

17. Q: I want to know if there's any geographic restriction for being in the competition

A. There is no geographic restriction for participating in LAGI 2020 Fly Ranch. The competition is free and open to anyone in the world.

18. Q: My question is about eligibility, specifically, Section 4.2, page 6, of the Terms and Conditions. The clause is clear that "full-time employees" of Burning Man are ineligible. That applies to at least one of our possible team members, so it's clear they cannot participate on our team. Several other possible team members, including me, have worked seasonally for Burning Man, some for several years. Our job category as seasonal workers is defined as "temporary full-time" employee. Are "temporary full-time" employees ineligible? The clause also does not address "volunteers," but my thought would be that volunteers are eligible, especially since Burning Man's foundation is made up of thousands of volunteers.

A. Every person involved in the review and selection process—technical advisors, shortlisting committee members, and jury members—are required to sign a conflict of interest form that commits them to recusing themselves from commenting on or rank voting any submission where they are sure that they know or have strong reason to believe that they know the identity of any team members behind the design. *The process is anonymous*, so there may be instances where a juror knows someone on a team but is not aware of that fact during the review process. There is no issue there.

We have put in place strong safeguards against favoritism, with the foreknowledge that the Burning Man community is many thousands-strong around the world and there is a likelihood of there being prior relationships between those involved in selection and those participating in submitting ideas.

In terms of specific eligibility regarding employment, we are defining this strictly as full-time current employees of Burning Man Project at the time of the October 31st ~~May 31st~~ deadline. *Part*



time, temporary full-time, DPW and other BRC employees, and volunteers are still eligible to participate.

19. Q: I am concerned about Section 11 of the Terms & Conditions "Promotion and Exhibition." It says that LAGI and Burning Man will have the "unlimited, irrevocable, non-exclusive and royalty free license" to use the documents I upload to the LAGI 2020 Fly Ranch design challenge website for any use.

A. LAGI takes great pride in running fair design challenges that protect the intellectual property of participants. Per Section 13 of the Terms & Conditions, "any design and intellectual property undergirding a submitted entry ("Submission") remains the property of the Entrant and may be used for Entrant's own purposes."

LAGI 2020 Fly Ranch is not licensing your intellectual property at all.

Section 11 of the Terms & Conditions allows LAGI and Burning Man Project to promote representations (the files you upload) of your ideas in the world through exhibitions, educational content, to journalists, and in publications using only the images and text that you upload to the design challenge. Each time we do so we always enforce the credit format shown below.

[Title of the Work], by [Names of all team members].

An entry to the LAGI 2020 Fly Ranch design challenge.

If there is enough space, we will list the technology and annual capacity of the design.

We provide all your team member names (exactly the way you give them to us) to all project partners, journalists, designers, publishers, exhibition planners, and anyone else who reproduces your work. By uploading your content and nothing more you are opting in and allowing us to promote your work in this way with credit to you. Section 13 protects you and your team from anyone in the world appropriating your concept. You own your work 100% and if your concept gets built someday, you will be leading the design process.

If you would like to enter LAGI 2020 Fly Ranch but would prefer that LAGI or Burning Man Project not promote your concept design images and text that you upload to the website, we will honor that request. Please send an email to lagi@landartgenerator.org with the subject "Opt Out." By doing so, your work will only be seen anonymously by the jury to maintain a fair selection process. Afterwards it will not be promoted by LAGI or Burning Man Project anywhere in the world (not on websites, not given to journalists, not included in publications, not included in videos, not shown in exhibitions, etc.).



20. Q: I live outside the USA. If I'm selected to make a prototype and I must ship to Nevada, is the expense of that included in the honorarium?

A: The answer to this question will be determined in conversations between the winning team and Burning Man Project following selection and award. See Section 10.5 of the Terms & Conditions document. Burning Man Project has committed to assisting winning teams with securing additional funding if required.

21. Q: When it is said that there will be a Shelter, can they be a greenhouse? Are they housing and will people really live inside?

A: Shelter for residential use can be considered for short-term stays: for artists in residence, field researchers, etc. It is not intended for permanent residency. You are not obligated to propose a design for shelter. This is one of the five systems, the others being energy, water, food, and regeneration. You may pick one, more than one, or all five to design for as you prefer. Greenhouses are one potential type of shelter that could by its nature cross-over into each of the other four systems. A greenhouse can be considered shelter. It can also be considered a solar thermal energy device, an agricultural technique, a system for water condensation and collection, and a part of a composting system. While greenhouses are a useful technology, they are only one of many potential design solutions for Fly Ranch. If you propose a greenhouse, we ask that you think creatively about the idea of a greenhouse, how its built form could be engaging to the public as a work of art in the landscape, how it might serve multiple and flexible programmatic activities and uses, and how it might be adapted to fit the unique context of the site.

22. Q: Where is the Geiser sculpture? Can it be removed, or must it be respected?

A: The geysers (artesian wells to be precise) are not sculptures but rather travertine mounds composed of calcium carbonate deposits that have formed over decades either naturally or as the consequence of mid-20th century explorative drilling activities on the site. They are to be respected.

23. Q: There are marked areas where you can't build, but can you do power there? That is, can generators be placed for wind power or solar panels? In those areas that cannot be built, can interventions be carried out? For example, a series of bushes to define spatial unity with the rest of the project?

A: You are discouraged from proposing power generation infrastructure in the "conservation boundary areas." You may propose power infrastructure within both the "primary boundary" and "secondary boundary" areas. Conservation interventions that include reintroduction of native plants and habitat restoration may be proposed within the conservation areas.

24. Q: We are trying to determine parameters to design towards, for instance, the size of the project, amounts of users etc. We are not certain if we are designing for 100 people to use, or 5 for instance. Do you consider



this a village, or do you consider this as a functional sculpture that aims to make a statement? Or perhaps a system that is adaptable and scales?

A: The brief intentionally leaves some of these questions open to participating teams (see page 10 of the Design Guidelines). Adaptability, modularity, scalability, and the potential to be phased are all design characteristics that might help to provide the greatest flexibility as decisions are made regarding next steps in the regenerative development of Fly Ranch.

25. Q: What onsite machinery/tools can be expected to be at our disposal during the prototyping process?

A: Although we cannot guarantee any particulars, Burners Without Borders has expressed interest in helping to facilitate the implementation of prototypes at Fly Ranch. If BWB is able to provide a Mobile Resource Unit (MRU) during prototyping, it will contain most if not all of the items on the list here: <http://bit.ly/2rALFvE>. For more information see: <https://www.burnerswithoutborders.org/projects/mru>.

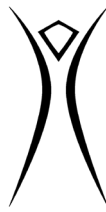
26. Q: If we are selected to make a prototype, may we look for external sponsors (for cases such as supplying certain parts for the project, for the purpose of reciprocal benefit of commercial association) if it were to benefit the project from a financial and practical perspective?

A: Teams are welcome to search for external funding and that search is greatly appreciated. Fly Ranch support staff will seek further funds to assist teams as necessary and possible. Fly Ranch staff will also help teams by partnering with them on budget planning, finding volunteers, and publicizing their fundraisers. This is the way art is built at Black Rock City and speaks to what Fly Ranch is: a platform for people to test their ideas and build community.

Regarding reciprocal benefit of commercial association in exchange for sponsorship, such an arrangement of support would likely need to abide by the decommodification principle of Burning Man, which would not allow for corporate logos, taglines, or advertisement to be displayed at Fly Ranch in return for the sponsorship. For more information please see <https://burningman.org/culture/philosophical-center/10-principles/>. Examples of financial support that comply with the decommodification principle include crowdfunding campaigns and direct giving.

27. Q: What is the maximum size of a team?

A: There is no minimum or maximum size for your team. Good ideas come from individuals or groups of any number. We encourage large interdisciplinary teams.



28. Q: I have a wide range of technical and non-technical skills. I'm particularly interested in eliminating human bio waste. I'm a builder by profession and good with CAD, 3d printing, prototyping, and CNC manufacturing. If you know of a team who might benefit from my help, please share my information.

A: We will make teams aware through Q+A that you are interested in assisting and that they should reach out to us to connect you. You might want to try posting on an online Burning Man forum offering your skills.

For anyone who is looking for a team member or anyone who is looking for a team, feel free to reach out to [LAGI](#) and let us know. We'll do our best to put you in touch.

29. Q: In the Guidelines document, the Shelter category reads in part: "High performance dwelling and event space that exceeds the highest standards of environmental design and provides the greatest flexibility and adaptability of uses." Are you looking for a design that is both a dwelling and an event space, or one or the other?

A: There will be a need for some temporary overnight dwellings for people who come to Fly Ranch for residencies or weekends. There will also be a need for spaces where people can gather. You are not required to include shelter as a part of your design proposal. It is one of the five categories you may choose to address with your artwork. As such, if you choose to address shelter, you can decide to design event space, dwelling space, both, and/or other kinds of spaces as you so choose.

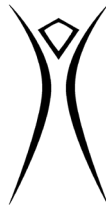
30. Q: What scale of dwelling are you looking for?

A: We leave that to you and your team to decide. Keep in mind the embodied carbon in materials and that larger spaces typically require more materials.

31. Q: Do the "dwellings" need to have typical amenities... kitchen, toilet, running water?

A: Spaces should be accessible, safe, and comply with governing building codes (keeping in mind that this is a concept proposal and details are not required). There should be access to the typical amenities of a dwelling, considered in relation to their environmental impact. They can be shared. The rest is for you and your team to answer. We don't want to limit the definition of what a dwelling could be.

32. Q: In the Guidelines document, the optional criteria reads in part, "Consider ideas of portability and replicability as they relate to sustainable uses of Fly Ranch but also extending to support the sustainability of Black Rock City and/or other external places and events (refer to the work of Burners without Borders)" Is something portable and replicable more desirable/likely to be chosen?



A: No. The jury criteria do not include this as a formal consideration. If your solution is not portable or replicable it will have just as strong a chance at being chosen.

33. Q: I have a potential entry for this project, which is completely in line with my company's vision. However, the information I would like to share with you is amidst a patent process. Is it possible to execute an NDA with LAGI before submitting a proposal?

A: The LAGI 2020 Fly Ranch design challenge is an open call competition, and all submitted entries will be subject to a review process that is three tiered—technical review, shortlisting review, and final jury. The number of people involved in the selection process exceeds 100 and they may all see your work.

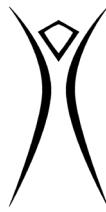
All design teams absolutely maintain full ownership of the intellectual property of their proposals and copyright protection against unauthorized reproduction of their work. We often have submissions that incorporate proprietary technology. We simply ask that you "black box" that component of your design. In other words, describe the function of the technology in your narrative, while leaving out the details that would allow someone in the world to reverse engineer your patent-pending intellectual property.

Following the selection process, we will be promoting the shortlisted ideas in exhibitions, publications, and news outlets, all with credit to the full team. By submitting the materials (diagrams, photos, renderings, and narrative text) that you upload to the LAGI 2020 Fly Ranch website, you agree to grant LAGI and Burning Man Project the right to engage in this outreach. The materials you upload will also live on the LAGI website, again with full credit to the team. Due to the reasons stated above, it is impossible for LAGI to sign an NDA that would limit our ability to engage in the sharing of your proposal with others.

34. Q: We are far along in the development process for a proprietary system and have been prototyping and testing an element of this design for years. There are (or there will soon) be images of our system on social media and exhibitions. The guidelines say, "Your **entry** must not have been used in any other context, and it must not have been previously published or exhibited anywhere in the world. The design must be kept confidential and anonymous until the results of the challenge are announced." Are we unable to use this design as a part of our LAGI 2020 Fly Ranch entry?

A: In the section you quote from the design guidelines, the term "entry" should be thought of as the entirety of your design, including 1. your technical system(s) or the technical system(s) of others (these should be named or specified in your narrative) that may have been developed over many iterations and that may be already well known in the world, and 2. the creative application of the technical system(s) within the specific context of the Fly Ranch site and the requirements of the brief, including other sculptural and structural forms.

It is the combined sculptural form that results from the collective application of those technologies and their composition in response to site conditions that constitutes the "entry" and which should



be unique to LAGI 2020 Fly Ranch. Look through past LAGI entries in the online portfolio to see many examples of teams who have incorporated proprietary technology as media for their creative work. True solutions come from generations of experimentation and testing of products and technologies. Within any of the installations that will be implemented as infrastructure at Fly Ranch, we expect there to be dozens, if not hundreds of patented technologies, from the screws and metal channels that hold things together, to the monitoring software for energy management, and the face lamination on the solar modules. Each of these technologies will have secured their own protections in the marketplace and they will all be specified and come together in multiple layers to make the final complex sculptural and infrastructural installations in the landscape of Fly Ranch. It is your total composition that must be new to the world.

35. Q: Is there any information available about the water profile/quality (salinity, nutrients, minerals, biochemical oxygen demand, etc.) of the geyser and surrounding reservoirs?

A: We have gotten approval from the authors (Dr. Scott D. Hamilton-Brehm and Dr. Marjorie Brooks) of a scientific report on the Microbial Biogeochemistry of the water around the Fly Ranch Geyser to share it with LAGI 2020 Fly Ranch participating design teams. The document contains field measures of mineral content, pH, and nutrients for multiple pools. It is available at <https://lagi2020flyranch.org/supplemental-materials.html>:

<https://landartgenerator.org/lagi2020/FlyRanch-Microbial-Biogeochemistry.pdf>

This is the extent of the information that we presently have on the water at Fly Ranch.

36. Q: We had a question regarding the honoraria, would the \$150,000 stipends be rewarded to each of the 10 selected projects (\$150,000 each) or will it be shared between the 10 selected projects (\$15,000 each).

A: Ten is the maximum number of projects that may be awarded, and \$150,000 is the minimum amount that is dedicated in total for honoraria grants to be disbursed among the winning teams. Within those boundaries, Burning Man Project has discretion to make decisions on honoraria grant awards based on the nature and details of projects that are submitted.

The prototyping process is one additional step towards the eventual full-scale commissioning of infrastructural artworks at Fly Ranch. Your team is competing—through your ~~May 31st~~ **October 31st, 2020** submission and again through the delivery of your prototype—to eventually win a commission to design and oversee the detailed design and construction of your larger vision that you are illustrating in your LAGI 2020 Fly Ranch submission.



37. Q: Considering the location of the property, is geothermal energy being considered as another option?
- A. Yes. The geysers (artesian wells to be precise) are a consequence of mid-20th century explorative drilling activities on the site by those who were looking to generate power. While the interested parties at the time decided there was insufficient geothermal energy for utility-scale power generation, the use of geothermal locally for power, heating, and other purposes is quite practical.
38. Q: How permanent should the design be?
- A. Since these installations are intended to provide sustainable, renewable, and resilient infrastructure to meet human needs (energy, water, food, shelter, and waste reduction), they should be considered as permanent infrastructures. The longer the life cycle of productivity, the more efficient the use of the embodied carbon and environmental impact in materials manufacture and construction.
39. Q: How do we balance between art and function?
- A. That is a good question and one that is up to each team to decide for themselves. The most successful projects will be those that offer profound experiences, tell compelling stories, contain meanings that are revealed over time and across multiple visits, and that also contribute in a significant and environmentally responsible way to the sustainable operations of Fly Ranch, supporting one or more of the five systems outlined in the design brief.
40. Q: Is chemical analysis of the waters around the Fly Geyser site as well as the geology there?
- A. Two following two links have been kindly provided by a fellow participant in the February 19th Facebook Live information session.
- http://data.nbmq.unr.edu/public/Geothermal/GreyLiterature/Grose_Gerlach-Hualapai_Geology_1978.pdf?fbclid=IwAR0yjPv9SZfUG_alakPhFslrAxDKFj8rQOafiHwvB1ISzXT4Ea_gp4kc_riU
- http://data.nbmq.unr.edu/public/Geothermal/GreyLiterature/Matlick_GerlachGeoSystem_1995.pdf?fbclid=IwAR0k3RX2Qy156oPb7ErFie5ozY02s2SeHtM6Vf0NXVa45Y870Afjqy0LLGM
- Additional information is available on the LAGI 2020 Fly Ranch supplemental materials page:
<https://lagi2020flyranch.org/supplemental-materials.html>
41. Q: What are the needs for water and wastewater?
- A. Fly Ranch will require systems of localized wastewater management, and water filtration that are designed to work in harmony with the natural environment. Care should be taken to protect the freshwater resources and to conserve the use of water.



42. Q: Can you please provide an estimate of your annual water consumption both now and for the foreseeable future?

A. Between 17 and 18 million gallons of water is taken from Fly Ranch each year during the Burning Man event for Black Rock City dust abatement. For more about this please see the following Google Document: <https://tinyurl.com/vcfrvbv>.

Future consumption will depend on the details of the intended future uses of the site, which are not yet determined. Ideally, solutions will be developed to conserve and recycle water, and to provide the greatest flexibility for scaling water consumption.

43. Q: Would you consider using existing geothermal energy at McGinnis Hills outside Gerlach as an offset, maybe licensing power from them over developing onsite?

A. Proposals should not rely on the use of external resources, should not externalize waste (to the extent possible), and should not exist outside of the design site boundary.

44. Q: Can a proposal consume "invasive plant" species at the sites?

A. Seems reasonable. Some background here if you're interested: https://docs.google.com/document/d/1MKtC7Aty3chYclj2AnAjA6HT-4o6Q6X74M6O6Ro8XI/edit?fbclid=IwAR1Q8OyHNU9FYH3O1ED3Bf_2CwnKY_WgjdpbYt1U9Wb5qfZ_XpO5h1SjH9IE

45. Q: Can you talk a bit about the site closer to Gerlach? Does it have equal importance in the competition? Is there an intended physical connection between the two?

A. The south 360 acres should be considered a secondary site (light footprint installations that could include food or energy landscapes). The only intended physical connection will be Road 34.

46. Q: Are designs encouraged to make ONE proposal for the site, or can we propose MULTIPLE ideas that are geographically spread out and are integrated (or not)?

A. Teams can only submit one proposal to LAGI 2020 Fly Ranch and individuals can only be on one team. Proposals can be as simple or as multifaceted as you like. Any one proposal can be for an installation (idea) in one area of the site, installations (ideas) geographically spread across multiple areas of the site, and/or can propose to interconnect many areas of the site. Proposals can address one system (energy, water, food, shelter, zero-waste), integrate more than one system, or integrate all systems.



47. Q: With regard to “thoughtful integration,” do you imagine interventions that preserve the view from the road and other vista points? Would it be helpful if our design focused on a specific intervention that was not at all evident from the road or other natural vista points on the land?

A. It is up to teams to decide how visible or invisible their interventions will be. We ask that you be respectful of the land and that your intervention align with the intention to be a good neighbor in the community.

48. Q: What advice do you have for teams that may not have a deep technical, artistic, or architectural background? My team is a bit concerned we don't have an architect or designer who is experienced in putting together a "client pitch."

A. Good ideas are what we are looking for and they can come from anywhere and anyone. We hope that you will submit even if you don't have all the details worked out. We recommend interdisciplinary collaborations, so you may want to reach out to an architect and/or designer to collaborate with you, but that is not necessary. You can look through past Land Art Generator Initiative entries at <https://landartgenerator.org/> for a sense of the level of narrative and design detail that is typically submitted.

49. Q: What is the number of people (or range) that are anticipated to use the LAGI 2020 fly ranch design site at a given time? Maximum number of people?

A. The short answer is no one really knows. And that's exciting! Because you get to be a part of illustrating what is possible. We refer you to the Fly Ranch Roadmap for answers about what might take place at Fly Ranch in the future: <https://flyranch.burningman.org/2019roadmap/>. See also page 10 of the Design Guidelines document, “WHAT KINDS OF THINGS WILL HAPPEN AT FLY RANCH?” <https://landartgenerator.org/lagi2020/LAGI2020-DesignGuidelines.pdf>

50. Q: I made an installation for Burning Man Pavilion last year. I know that Burning Man doesn't typically have "repeats" but if we were to reinvent our past Burning Man artwork for this purpose would that be "OK"?

A. Fly Ranch and Black Rock City are different projects! Take a close look through the LAGI 2020 Fly Ranch design guidelines. If your project fits you should apply!

51. Q: What have been the relative assessments of soil depletion in various areas?

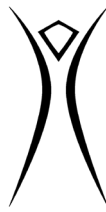
A. Any information that is available on soil composition will be found in the LAGI 2020 Fly Ranch supplemental materials page (<https://lagi2020flyranch.org/supplemental-materials.html>) see the Black Rock and Hualapai Science Literature section: https://landartgenerator.org/lagi2020/Desert-Research-Institute_Fly-Ranch.zip, and the Fly Ranch Roadmap (<https://flyranch.burningman.org/2019roadmap/>). Any new information that becomes available will be updated on the Supplemental Materials page of the design challenge website.



52. Q: Which entrances to Fly Ranch will be prioritized?
- A. The primary entrance that is used today is to the middle area of the site. There is an access road near on the north near Fly Geyser, and a smaller access road to the south. All are unpaved. How these or other entrances might work in the future remains undecided and will likely unfold organically over time. See the Fly Ranch Roadmap (<https://flyranch.burningman.org/2019roadmap/>) for more information.
53. Q: Realistically, how much infrastructure do you expect to fund within the \$150k budget?
- A. \$150,000 is not the budget to build the infrastructure. That number is the budget to support the installation of prototypes as a part of the design challenge. Please see the Design Guidelines for more information.
54. Q: When will the winners be announced, how many will be selected and what is the timeline to complete the Proof of Concept?
- A. Winners will be communicated to teams in ~~September 2020~~ March 2021, and prototyping will take place starting shortly thereafter in the spring of 2021. Timelines for completion of prototypes will be arranged individually with each selected team and based on the details of their prototype. Up to ten projects will be invited to prototype.
55. Q: Can we team up with innovative partners who can help fund the project and/or donate technology for the installation?
- A. You can team up with innovative partners for any reason. Regarding reciprocal benefit of commercial association in exchange for sponsorship, such an arrangement of support would likely need to abide by the decommodification principle of Burning Man, which would not allow for corporate logos, taglines, or advertisement to be displayed at Fly Ranch in return for the sponsorship. For more information please see <https://burningman.org/culture/philosophical-center/10-principles/>. Examples of financial support that comply with the decommodification principle include crowdfunding campaigns and direct giving.
56. Q: Can you speak to the uses of water: drinking (we assume), hydroponics, waste, etc.? Can you provide some specifics on the water supply?
- A. Those uses of water (we would add personal hygiene, cooking, and other forms of irrigation to the list) will all be required by Fly Ranch. As a part of your proposal you do not need to address each of these systems, although you are welcome to do so. See the site plan for more information about water resources available on site. There is no public water service to the site. There are wells that pre-date Burning Man Project's ownership along with multiple reservoirs.



57. Q: Are earthworks/excavation/underground design elements allowed? If so, to what depth? And what are the Paiute's views on the sanctity of the land/earth in this site, and is there a respectful way to address this?
- A. Yes. Earthworks/excavation/underground design is allowed in the primary boundary area (shown in yellow in the site plan): <https://tinyurl.com/LAGI2020>.**
- There are no design restrictions on depth.**
- To learn about Paiute culture, please see <https://pyramidlake.us/museum> and page 9 of the reference guide: <https://landartgenerator.org/.../LAGI2020-ReferenceGuide.pdf>.**
58. Q: Regarding farming, has Fly Ranch determined how many acres will be allowed to be cultivated?
- A. Please see the site plan for area restrictions. Agriculture is allowed in the yellow and green areas of the site (primary and secondary boundaries): <https://tinyurl.com/LAGI2020>.**
59. Q: How can I find a team, camp or group to get involved with?
- A. On the subject of finding teammates, we have posted here: <https://www.facebook.com/landartgenerator/posts/10157853320283213>
Feel free to post there with inquiries to others.**
60. Q: How much should our submissions contemplate the wildlife in the area? Should we try to make our interventions "horse-proof" for example?
- A. Proposals should be respectful of the flora, fauna, habitats, and the entire ecology of the site, should be suitable to the climate, and resilient to foreseeable natural events.**
61. Q: Does the site flood?
- A. Yes. Parts of the site do flood seasonally, mostly in the winter and spring.**
62. Q: Per 'treading lightly' and 'leave no trace,' may we re-purpose natural resources (Soil, rocks, etc.) from the site for developing an infrastructural feature?
- A. Yes, you may repurpose natural resources from the site, being mindful of your long-term impact. The idea of "leave no trace" should be considered slightly differently in the context of Fly Ranch. The intention is to build lasting zero-carbon infrastructures that work in harmony with nature and that have minimal impact on the environment, both locally and globally.**



The infrastructures themselves will "leave a trace" at Fly Ranch, but that trace will contribute a positive environmental legacy and help Burning Man Project leave less of a trace upon the planet (carbon emissions and externalized waste streams for example).

End of q+a.pdf document posted on March 1, 2020

63. Q: Given that there is an existing transmission line relatively nearby the design site, would it be safe to assume that if a micro grid design was implemented that the necessary infrastructure would be built to connect the micro grid to the main grid? Thus, allowing it to continuously give back to the surrounding communities via excess power generated, as opposed to building an advanced isolated power generation system (standalone) that effectively wastes power constantly and does not give back to the community unless they are utilizing the energy on site.

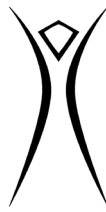
A. Fly Ranch is 7.5 miles from the nearest transmission line (over the 2,737 meter elevation Granite Peak) and more than 12 miles following the roads. The lower 360 acre secondary site is closer (3.7 miles) but is itself disconnected from the primary site at Fly Ranch. You can download a KML file of transmission lines here: <https://hifld-geoplatform.opendata.arcgis.com/datasets/electric-power-transmission-lines>

In the meantime, if you are interested in solutions around energy, you might propose a design that makes use of on-site storage mechanisms so that renewable energy is not curtailed unnecessarily and is rather conserved for use on site and potentially for export offsite, for example using batteries, hydrogen, or other sustainable and carbon neutral liquid fuels.

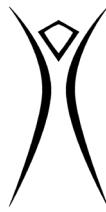
64. Q: Is it correct that there is a total of \$150,000 in award stipends (honoraria) that will be split up between 10 teams for winning proposals? In other words, if all 10 winning teams were offered equal amounts, that'd equate to \$15,000 max. each?

A. The prototype honoraria amount should not influence your overall design proposal. Please keep in mind that the prototype process is intended as a proof of concept to complement your drawings and narrative proposal—an additional means of demonstrating the merits of investing in your larger idea.

You are correct. The total amount available for the prototyping of all proposals selected is at least \$150,000. Should you be selected—following the prototyping process—to implement your idea at scale at Fly Ranch, your consultancy for full-scale detail design and project administration will be negotiated directly with Burning Man Project as a part of the larger implementation strategy for the development of Fly Ranch, and the next stages towards construction will occur under a separate capital expenditure unrelated to the \$150,000 design challenge honoraria.



65. Q: With the winning honoraria provided for this purpose of building a prototype, is there a rough timeline this prototype would need to be built and/or installed by?
- A. There is no specific timeline defined at this time. Each selected team will work through budget and schedule with LAGI and Burning Man.**
66. Q: How deep is the water in the northern reservoir and how tall is the dam? Also is there any data concerning the flow rate in cubic feet/second of the water coming out of Fly Geysers and flowing through the drainage ditches?
- A. Based on the topographic mapping done by drone, the large pond adjacent to the geyser (the one with the pier where people typically soak) may be as deep as 7 meters at the lowest point. Based only on the water color in satellite images we would approximate that Fly Reservoir is not much more than one meter deep in most places. We do not have flow rate information for Fly Geysers.**
- From Lisa Schile-Beers, wetland ecologist and Burning Man Project Land Fellow:
"You are correct in your guesstimate. It is no deeper than one meter. I've seen horses cross it and it barely grazes their stomachs."**
67. Q: I signed up for a tour but need to change the date - but I seem now unable to find the link on the website, please advise.
- A. *Site Tours Canceled Until Further Notice***
Land Art Generator, Burning Man Project, and the Fly Ranch team have been monitoring developments related to the outbreak of COVID-19 (coronavirus). Out of caution and care for our community, all LAGI 2020 Fly Ranch site tours have been canceled until further notice. Please stay safe, take all precautions, and look out for each other. We look forward to seeing your design proposal to LAGI 2020 Fly Ranch – it is more important than ever that we work to transition our world to more resilient and sustainable systems.
68. Q: How is Black Rock Station related to Fly Ranch? Can we do something to connect them?
- A. Black Rock Station is the Work Ranch for Burning Man DPW (<https://burningman.org/event/black-rock-city-guide/infrastructure/dept-of-public-works/>). It is the behind-the-scenes and authorized-personnel-only Nevada property owned by Burning Man Project and dedicated to supporting the logistics related to constructing, deconstructing, maintaining, and storing the massive infrastructure of Black Rock City, including DPW vehicles and equipment. Black Rock Station is a separate parcel that adjoins Fly Ranch. You are invited to propose interventions within and for this area. It is categorized as a Low-Impact Site Boundary area. Please be mindful of the existing buildings, container storage, and staging areas of the site (apparent by looking at the satellite image on the site plan). Black Rock Station has a significant energy demand and could benefit from renewable energy resources that are a part of LAGI 2020 Fly Ranch proposals.**



69. Q: Within the Low-Impact Site Boundary (green zone) there is a use that is allowed apart from energy and others that is recreation. What is recreation?
- A. You may propose any use in the Low-Impact Site Boundary (green zone) that complies with the Washoe County development code and that does not require deep foundations, concrete pads, or paving.
70. Q: Apart from the cultivation of alfalfa that has worked in the area, what other type of cultivation is permissible in the area and is it not of a high impact? Given the high level of drought or high temperatures, is it profitable from a water point of view?
- A. Recognizing that water is scarce during many times of the year, we are looking for proposals—including those that involve regenerative agriculture—that conserve water resources. Regarding the types of crops, please read the Fly Ranch Roadmap document as a part of the links on the supplemental downloads page: <https://flyranch.burningman.org/2019roadmap/>. You'll find a lot of information there, including a link to a full accounting of all plants on the property. Historically alfalfa has been grown in the area, but we invite proposals for other crops. To see what has historically been grown in the area, see the "Hualapai Flat ag.pdf" document in the Black Rock and Hualapai Science Literature section: <https://landartgenerator.org/lagi2020/Desert-Research-Institute-Fly-Ranch.zip>. See also the "food" page of the LAGI 2020 Fly Ranch Reference Guide (<https://landartgenerator.org/lagi2020/LAGI2020-ReferenceGuide.pdf>).
71. Q: Is it possible and feasible to purify groundwater that comes from geysers? What are the physicochemical characteristics of the water? And on the other hand, in the floodable areas of the land, at what level does the water reach?
- A. All of the information that we have on the water in the hot springs is available on the supplemental materials page of the LAGI 2020 Fly Ranch website: <https://lagi2020flyranch.org/supplemental-materials.html>. See pages 13-15 of this report: <https://landartgenerator.org/lagi2020/FlyRanch-Microbial-Biogeochemistry.pdf>. See also the Environment section of the Fly Ranch Roadmap: <https://flyranch.burningman.org/2019roadmap/>. Yes, technically it is possible to purify the groundwater either by reverse osmosis, other conventional means, or solar distillation. During times of peak runoff and precipitation (in the spring) many parts of Fly Ranch experience saturated soil and some flowing and standing water. The depth of the seasonal flood waters is shallow, but in the non-vegetated areas (such as on the Hualapai Flat) the soil turns to a thick and deep mud in the spring that can even be dangerous for people walking there. See <https://landartgenerator.org/lagi2020/LAGI2020-WeatherDataSummary.pdf>. Also the design site photographs available for download on the Supplemental Materials page were taken during the later period of spring runoff (June 11) and you can get a sense from the images how the site looks at that time of year and where the washes fill up: <https://landartgenerator.org/lagi2020/LAGI2020-PhotoReferenceGuide.pdf>.



72. Q: In the green areas marked by the Low-Impact Site Boundary project, can you build reservoirs or warehouses for solar panel energy? Because some construction we will have to do in this area to help the Energy or reservoir to collect water.

A. No reservoirs or permanent buildings that require a foundation can be proposed in the low-impact site boundary. With 185 acres (75 hectares) in the primary boundary area we hope that you will be able to find a suitable location for the infrastructure you describe.

73. Q: Is Spencer Tracey's movie Bad Day at Black Rock referring to this particular area or is it by chance? I say if it is set in this area or State of Nevada.

A. The answer is sadly no. From Wikipedia: "While location scouting in Arizona, Kaufman came upon a post office and gas station collectively known as Black Rock. Kaufman telephoned Dore Schary to ask, "Why don't we call it Black Rock? And do it in California?"

74. Q: Can you get a high-resolution image of the entire area? Or at least from the top from Gerlach to Black Rock Station? Or from the Hualapai area to Black Rock Station? In other words, a high-resolution image. Not by parts, but a complete one.

A. We are unable to gather more photographic content. There are a great many photographs and images available in the 3D Land Mapping section of the Supplemental Materials page. See this link for example: <https://landartgenerator.org/lagi2020/Aerial-Panoramas.zip>.

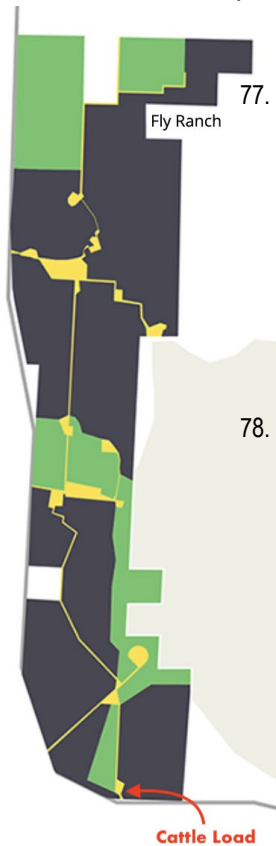
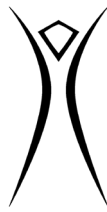
75. Q: Tell me, please, may two teams from the same organization participate in the competition? Each team will have different participants.

A. The answer to your question is yes, it is OK for two teams from the same organization to participate in the competition as long as each team has a unique set of participants and no one is on more than one team.

76. Q: Will the three boards be viewed on a television screen or computer screen? Will they be looked at continuously or separately? Will the three boards (assuming they are looked at separately) be scrolled left to right or top to bottom?

A. Computer screen, separately, and top to bottom.

The way the boards will be viewed is similar to how they are displayed in the Land Art Generator online portfolio of projects. See <https://landartgenerator.org/LAGI-2019/starlit-stratus/> for an example.



77. Q: Can you please provide more information on the cattle ranching on site? I am researching biodigesters and my project could benefit from using manure on site to produce fertilizer and methane (biofuel) to the benefit of the environment. If there are currently cattle on site, it would be helpful to know where they range and how many in order as it will influence the location of the project and the biodigester sizing.

A. There are cattle that graze Fly Ranch each winter (approximately Oct - April). Roughly 120 head and they are loaded/unloaded in the southern portion of the property. See the graphic to the left for the location in relation to the LAGI 2020 Fly Ranch site plan.

78. Q: I have networks within the Burning Man and Burning Man regionals communities. I want to bring people together around this challenge, but if I am reading all the rules correctly our team will only be able to submit one entry? I envision getting ideas from not only my collective, but from other creatives who can assist with various systems they are expert in. Are people considered being part of our team if we work with multiple collectives?

A. You are correct. Individuals can be only on one team and a team can only submit one entry. That rule would not preclude multiple entries coming from the networks around the regional and Burning Man theme camps who you introduce LAGI 2020 Fly Ranch to. Each of the teams would simply need to be composed of unique sets of people.

End of q+a.pdf document posted on April 17, 2020

79. Q: Does it snow in Fly Ranch during the winter months? Do the reservoirs ever freeze over when the temperatures drop below 0 degrees?

A. It does snow in the winter at Fly Ranch, which can make travel to the site difficult without a 4WD vehicle. We attempted to get there and take site photos last year during a snowstorm (the landscape of Northern Nevada is beautiful covered in snow), but we had to turn around before we made it to Fly Ranch. While air temperatures do stay below freezing for significant durations, the reservoirs do not completely freeze over.

From Lisa Schile-Beers, wetland ecologist and Burning Man Project Land Fellow:

"The large reservoirs largely don't freeze during the winter. Sometimes I observed ice along the edge of the southernmost reservoir where it is most shallow, but it wasn't thick (no more than an inch) and didn't last very long. The smaller, shallower ponds can freeze over completely, as can surface water in the wetlands."



80. Q: When uploading my proposal, I was only allowed to provide 8 high resolution JPEG images. The Design Guidelines say "up to 12" images. Can you modify this parameter on the web application?

A. Thank you for bringing this to our attention. As of May 28, 2020, this oversight has been fixed.

81. Q: I was wondering if, in the event that a team's submission is chosen to be prototyped, can that team give up their spot? I ask because I would like to participate in the design challenge and contribute but would not be able to create a prototype in 2021.

A. We encourage you to participate even if you are unable to develop a prototype in 2021. 50 submissions will be included in a book and there will be multiple exhibitions featuring submissions, so the world would still have an opportunity to be inspired by your vision for Fly Ranch.

82. Q: I'm wondering what access to the various water supplies that are there that projects can have access to, and if there is a supply of hot water from a hot spring that could be accessed to supply water to a hot tub?

A. There are many sources of water across Fly Ranch. There are two large but shallow reservoirs that were created by a past owner of the land. There are water hoses where trucks can fill up. Between 17 and 18 million gallons of water is taken from Fly Ranch each year in this way during the Burning Man event for Black Rock City dust abatement. For more about this please see the following Google Document: <https://tinyurl.com/vcfrvby>.

You can see the location of the water hoses here:

https://www.google.com/maps/d/u/0/edit?mid=14R218fDOVgkMuCa_pdXpfvkeUduasx_B&ll=40.855888338692694%2C-119.33340956690623&z=19

There are several springs and wells all over the site in various states of repair. There is a layer called "water features" on the site map:

https://www.google.com/maps/d/u/0/edit?mid=14R218fDOVgkMuCa_pdXpfvkeUduasx_B&ll=40.839002834682255%2C-119.33055605920792&z=19

Lastly, vast quantities of stormwater flow across and through the site, especially in the spring as the snow melts on the adjacent Granite range.

You will find information about the ecology of the hot springs here:

<https://landartgenerator.org/lagi2020/FlyRanch-Microbial-Biogeochemistry.pdf>. There is also this study: http://data.nbmq.unr.edu/public/Geothermal/GreyLiterature/Grose_Gerlach-Hualapai_Geology_1978.pdf and http://data.nbmq.unr.edu/public/Geothermal/GreyLiterature/Matlick_GerlachGeoSystem_1995.pdf



The following questions were asked during the Spring BWB Virtual Summit. You can find a recording of that event here: <https://www.youtube.com/watch?v=VTadnJD6TAK>. It's a great introduction to the challenge!

83. Q: What is/are the relative qualities of soil across the site.
- A. The best information we have to provide is the PDF you'll find in this link (from the supplemental materials page of the website): <https://landartgenerator.org/lagi2020/Soil-General-Quality-and-Temperature.zip>**
84. Q: I am curious to learn how important it is to build on Fly Ranch vs assemble or deploy to Fly Ranch?
- A. You may propose deployable infrastructure solutions to LAGI 2020 Fly Ranch.**
85. Q: How much water does Fly Ranch get annually?
- A. Please see the meteorological data on the supplemental materials page for annual rainfall quantities. Additionally, water flows across the site from the adjacent Granite range. <https://landartgenerator.org/lagi2020/LAGI2020-WeatherDataSummary.pdf>**
86. Q: Is geothermal an option / are there rights to develop a new geothermal drilling site at Fly?
- A. Geothermal is an option. The geysers (artesian wells to be precise) are a consequence of mid-20th century explorative drilling activities on the site by those who were looking to generate power. While the interested parties at the time decided there was insufficient geothermal energy for utility-scale power generation, the use of geothermal locally for power, heating, and other purposes is quite practical.**
87. Q: Are the (yellow) "Primary site boundaries" on the LAGI map steadfastly defined? Specifically, can teams recommend slight adjustment of the path through the Geyser area, to work well with Proposals?
- A. One of the intentions of the site boundary lines is to ensure that sensitive natural areas and habitats are preserved. We ask that you respect the boundaries, and if you feel you must modify them slightly, please provide a good reason in your written narrative as to why you felt that you must. By providing a thoughtful explanation you will not be disqualified for making a slight adjustment.**
88. Q: What are the key items to be aware when it comes to building materials?
- A. Please consider the lifecycle carbon and environmental footprint of materials. How much energy does it take to make the building material (its embodied energy)? Are they rapidly renewable? Biodegradable? Do they use post-consumer recycled content? Are they local? Natural? Do they support the regional economy?**



89. Q: What about Water harvesting From Air? How humid / dry can it get?

A. Atmospheric water generation technology is getting more efficient and it could provide an interesting solution for water conservation. Below find the relative humidity readings from the nearby weather station. You can access this data yourself and get more granular information by going to <https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?nvnhua>. Once there, click on daily or monthly summary *time series* in the left sidebar, input the type of data you would like and click submit info.

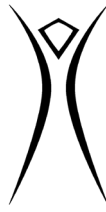
	Average Relative Humidity		
Date	%		
mm/yyyy	Ave.	Max.	Min.
01/2018	67.01	92.5	14.22
02/2018	49.42	91.3	12.61
03/2018	52.62	89.9	9.9
04/2018	44.54	93.2	11.08
05/2018	50.48	91	10.3
06/2018	32.73	81.3	9.07
07/2018	23.82	61.11	7.407
08/2018	26.95	62.55	9.16
09/2018	27.56	59.68	9.8
10/2018	43.2	91.3	8.95
11/2018	49.59	90.3	11.1
12/2018	72.42	92.1	29.53

90. Q: How important is it to be able to duplicate the structure so that it can easily be implemented in multiple locations.

A. It is up to you how site specific your solution is. Some proposals will be strong because they respond deeply to the unique characteristics and language of Fly Ranch. Others will be strong because they could be easily adapted to other places.

91. Q: Do you do any Grey water utilization?

A. Greywater recycling will be an important component of Fly Ranch infrastructure and it crosses over into two of the five systems, water, and regeneration.



92. Q: How exactly can the hot water be tapped in a minimally invasive manner, and one that minimizes distance of piping?

A. Anything is possible. Perhaps you can find an engineer to join your team. If not, make your best proposal based on the information you know, and we can help you figure out the details in the next stage if your project is selected for prototyping.

93. Q: How do we best engage with relevant experts regarding tapping heat from hot water?

A. Maybe invite one onto your team! If that is not possible, do some research on your own and propose the solution you think is best from a conceptual level. We can help you work out the details in the next stage if your project is selected for prototyping.

94. Q: Are we to provide guidance regarding the desired/expected design life of proposed projects?

A. It would be helpful if you can talk about design life and lifecycle of materials within your written narrative, although it is not an explicit requirement of the design brief.

End of q+a.pdf document posted on June 10, 2020

95. Q: Is there currently pressurized water on the property in any form? I'm trying to determine whether a water tower and its pressurized water would be a beneficial addition to Fly Ranch infrastructure.

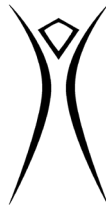
A. There are several springs and wells all over the site in various states of repair. There is a layer called "water features" on the site map. Clicking through them will take you to each location where existing water infrastructure can be interfaced with. Any of these could be pressurized. The one at 40.83818, -119.32859 flows at a constant rate into a trough. There is another like this to the south: <https://tinyurl.com/LAGI2020>

The hot artesian wells commonly referred to as geysers on the north of the site are under natural geothermal pressure and also in constant flow.

A water tower is time-tested technology for creating water pressure, and water is one of the five LAGI 2020 Fly Ranch system categories.

96. Q: What software can we use to make the plan three-dimensional?

A. The DWG file (AutoCAD) provided on the supplemental materials page (<https://landartgenerator.org/lagi2020/Design-Site-Boundary.zip>) is two-dimensional. It can be opened in any CAD software or 3D modeling software (AutoCAD, Sketchup, 3D Studio, Maya, Rino, etc.) and you can 3D model on top of it.



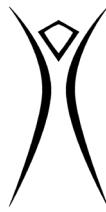
There is 3D mapping information available, including contour lines in DXF format in the “3D Mapping section” of that same page.

The files are rather large, so please be patient when downloading. Take a look at the Aerial Data Reference Guide first so that you know which files to download based on the site areas. Each area will give you a ZIP file with subfolders.

The DXF contour files in the Elevation folder will be three dimensional and can be opened in any CAD software. The OBJ files in the 3D Model folder can be opened from a number of applications, including Microsoft 3D Viewer and Meshlab, which are both free. The LAS files can be opened in Meshlab, which is probably the best free software for manipulation and conversion. The JPG and TIF files can be opened in any image software. The KLM files can be opened in Google Earth

There are a number of other applications available for opening and working with OBJ and LAS files and software that can convert those 3D mapping files into other formats such as DWG and 3DS.

97. Q: The objects we propose are meant to be permanent or to be temporary?
- A. The goal is to provide sustainable "infrastructure" so that Fly Ranch can be a year-round place for gathering and experimentation. *Infrastructure implies permanence*, but there are some kinds of infrastructure systems that can be mobile or modular, or seasonal (plant based, for example).
98. Q: Do we need to propose an urban intervention/master plan with distribution of different functions/buildings, a homogeneous sculptural form that encompasses all the functions or just a sculpture on a part of the site?
- A. The LAGI 2020 Fly Ranch Design Challenge is not a call for a master plan. You are free to propose one single infrastructural artwork in one discreet location of Fly Ranch. You are also welcome to propose an interconnected network of infrastructural artworks throughout the site and in keeping with the requirements of the design brief.
99. Q: Can we propose a transit system or a canopy throughout the yellow stretch of land, which is linear, and covering a wide span?
- A. You may propose a system of multi-functional transportation/interconnection between various parts of the primary boundary area (yellow). This is not a requirement. Please weigh the impact on the natural landscape when making decisions regarding permanent linear connections.



100. Q: Is our area considered in a rural zone or what norms we should follow within the Washoe County development code? Do we need to consider the maximum height of our installation to be 35 feet as per the limits of the General Rural use classification?

Part One: Density/Intensity Standards										
	LDR	MDR	HDR	LDS	LDS 2	MDS	MDS 4	HDS	LDU	MDU
Dwelling Unit Per Acre (du/ac)	0.1	0.2	0.4	1	2	3h	4h	7a	10b	21c
Height (feet)	35	35	35	35	35	35	35	35	40	70

Part One: Density/Intensity Standards (continued)										
	HDU	GC	NC	TC	I	PSP	PR	OS	GR	GRA
Dwelling Unit Per Acre (du/ac)	42c	n/a	5	n/a	n/a	n/a	n/a	n/a	0.025	0.025
Height (feet)	70	80	60	45	65	65	65	n/a	35	35

- A. You can use the General Rural (GR) zone as a standard while keeping in mind the following:
- A variance may be successfully applied for if there are convincing reasons, for example a functional chimney or collector for a solar thermal installation.
 - When considering height, think first about the beauty of the natural landscape and the contextual nature of your proposal.
 - We do not want the Washoe County development code to be too much of a restriction on your creativity. If you have a good reason for exceeding the "by right" code height restrictions, please provide your reasons in your written narrative.
 - Note that the development code already provides some exceptions to height restrictions. Refer to the sections on communications towers and wind machines, and to the structures listed in Section 110.402.10 "Heights: Special Provisions" (pg. 292 of the Washoe County development code PDF):
 - (a) The maximum height standards do not apply to the following:
 - (1) Church spires, belfries, cupolas, domes, chimneys, flues, antennas, satellite dishes, or water towers, silos, windmills and wind machines, provided that measured height of the structure is limited or the structure is placed on the property to avoid falling across any property line; ...
 - (b) Public and quasi-public buildings

101. Q: What is the maximum excavation allowed in the yellow zone?

- A. Within the primary boundary (yellow) there is no restriction on excavation depth. Please consider the environmental impact of your proposed excavation.



102. Q: Our team would like to know exactly what kind of clay is prevalent at Fly Ranch. Would it be possible to get a clay sample to test from the site?

A. **What information we have to offer on soils will be found in the following links:**

<https://landartgenerator.org/lagi2020/Soil-General-Quality-and-Temperature.zip>

<https://landartgenerator.org/lagi2020/Desert-Research-Institute-Fly-Ranch-Part1.zip>

Here you will find a geological history of the area (Geology of the Gerlach- Hualapai Flat Geothermal Area, Northwestern Nevada), which may point to certain soil formations. There is a mention of "Lahontan lacustrine clays" that formed at the bottom of ancient sea beds. In a 1963 report on ground water resources (GW appraisal 1963) there are soil borings taken in the region (not at Fly Ranch) and there are listed clays of various types. See page 25 of the document.

We are unfortunately not able to provide a soil sample to teams.

103. Q: How much of the property is covered in [sedges](#) and where? We'd also like to know the specific genus of sedges at Fly Ranch.

A. **We recommend that you spend some time with the interactive plant map and species list if you've not yet done so already.**

Interactive plant map:

<https://www.google.com/maps/d/u/0/viewer?mid=1ah1MAnDpG0sJAI6wwRUCbnbJ9ZN2sUiq&ll=40.82575420707214%2C-119.33025728641823&z=18>

Species list:

<https://docs.google.com/spreadsheets/d/1knaFteXLUz7RKtLVFMHiTwNmhu4NMMbHTTWCdbPt7HA/edit#gid=0>

104. Q: As we are researching on site conditions, we noticed the dramatic temperature change from day and night in Fly Ranch. We are wondering, does this change induce the occurrence of fog in early mornings? If it does, what is the frequency of fog days in Fly Ranch.

A. **Please see below the response from two people who have lived year-round on site and have studied its ecology and climate.**

Lisa Beers wrote:

I rarely experienced fog at Fly, if at all. Sometimes Fly geyser would create a small fog layer when it was really cold, but it was very local to the geyser.



Matt Sundquist wrote:

Same here. I'm not sure if I've ever seen it.

105. Q: Do you have some other statistics about the geothermal resources?

A. All the information that we have regarding the geothermal resources at the site is what is available on the supplemental materials page of the design competition website.

106. Q: Can we assume the area near Geyser has much shallower underground geothermal resources that we can use?

A. The geothermal resources around Fly Geyser are shallow and low temperature (relative to what would be ideal for a utility geothermal power plant), around 65C max at the surface.

A HOBO water temperature logger has been used in shallow waters around the site. It provides some information about the temperatures near the surface. Coordinates are available to locate where measurements were taken.

Excel files of the HOBO temperature logs can be found in the [Black Rock and Hualapai Science Literature](#) section of the Supplemental Materials page of the LAGI 2020 Fly Ranch Design Challenge website.

107. Q: How deep should we dig if we want to install structures reaching the hot underground water level in the site? Can we use estimated statistics based on geothermal common knowledge if we don't know the exact data?

A. Yes, please use your best judgement based on what information is available combined with common knowledge of geothermal energy systems. In subsequent stages in the process and as required to bring concepts forward to on-site prototypes and then eventually to full-scale installations, more formal investigations and test borings can be undertaken to provide the site-specific data and subsurface information required for detailed design and engineering.

Here are a few more quick links for all the information that we have related to geothermal:
http://data.nbmq.unr.edu/public/Geothermal/GreyLiterature/Matlick_GerlachGeoSystem_1995.pdf

http://data.nbmq.unr.edu/public/Geothermal/GreyLiterature/Grose_Gerlach-Hualapai_Geology_1978.pdf

<https://flyranch.burningman.org/2019roadmap/>

End of q+a.pdf document posted on August 31, 2020



108. Q: Is it permissible to include some tables or diagrams to convey design concepts if all words used in the table are counted toward the 1500? (Versus all standard sentences/paragraphs).

A. Absolutely, you can include tables to convey your concept within your narrative.

109. Q: We are working with, pee, poo, and graywater. There are some solutions that are available for the prototype we want to make, but first we need to figure out what would be legal or not. Would be sad to make a great design only to be stopped by regulation.

A. Please do not limit on your creativity and innovation on this front. Fly Ranch is too remote to be able to rely on public sanitation services now or any time in the near future. All blackwater and greywater solutions will be on site, and all possible solutions are welcome. When it comes time for implementation, Burning Man Project will assist with the approval process with the Washoe County authorities.

110. Q: If an entry gets chosen to be built, can the original design team expand to include more people during the prototyping phase?

B. Yes.

END OF Q+A DOCUMENT (September 22, 2020)