

1. Q: Should submissions be detailed to a level that would be required for construction? Should the energy system be well thought out with regard to technical concerns? Or is the expectation more about an idea/concept? In other words, what level of detail is expected of submitted designs, especially as it pertains to energy systems?

A: The call to artist teams is to conceive of designs that are detailed to a conceptual level. This means that you should have a good working understanding of the functional aspects of the renewable energy systems that you employ in your design. You should have worked through the design to a point at which you believe strongly in the reliability of their practical operation and can provide a reasonable estimate of the amount of electricity in kilowatt-hours that the artwork will produce over the course of an average year.

On the other side of the coin, "detailed to a conceptual level" means that you do not need to provide simulations or models. You do not need to have detailed physical calculations, but rather you may rely on best-practice "rules-of-thumb" and reasonable estimates. You can refer to case studies of applications of similar technology in order to provide a reasonable assessment of your working design. And where there are differences in scale and context to these precedents, you can rely on your own best judgment to accommodate these differences when determining your electrical generation potential and feasibility.

Keep in mind that you are designing to inspire and to show what is possible. There is no guarantee of construction of the winning proposal. At the same time, we hope to see pragmatic and constructible proposals submitted to the 2012 competition so that the City of New York will pay serious attention and give due consideration to the potential of construction. Should that come to pass, detailed design and engineering would be an additional stage towards implementation (a stage in which you would be involved, but not required to provide full services towards). Therefore, while constructability should be of some consideration in your concept design, it is not within the scope of this call to provide drawings for construction.

Please take some time to look through the designs that were submitted in 2010 <<http://www.landartgenerator.org/blagi/archives/category/artpost>>. At the end of each blog post is a link to a low-resolution version of the submitted boards. These might serve to provide you with additional reference as to the level of detail to provide for your 2012 submission.

2. Q: Is the project to include precise engineering calculations of how much energy is to be produced or just approximate calculations?

A: Approximate calculations and concept diagrams shall suffice.

3. Q: Can you elaborate on the standards that will be used to evaluate the submissions during the shortlisting process?

A: The shortlisting criteria are the same as the jury criteria. Shortlisting is also a process through which submissions will be reviewed for completion and for adherence to the requirements of the design brief.

4. Q: Is the collection of the landfill gas already solved? If so, is it true that we should not concern the design submission with this type of energy, but instead focus on other renewable technologies, such as the sun and wind?

A: Yes, the landfill gas collection infrastructure is already in place and should not be disturbed or altered in any way that impacts the smooth operation and maintenance access to the existing system. Proposals should focus on other natural energies that exist or could exist on the site. Refer to the section diagram on page 9 of the design brief for more information about the final engineered condition of the well heads.

5. Q: Since this site will be built over an important landfill, can you describe the current systems in place to manage these emanations. Specifically, any control facilities, measurement systems, membranes/covers and collection systems in place or planned. Any statistics and forecasts on methane production for these sites will be appreciable to scope the extents of the project.

A: Additional information pertaining to the landfill infrastructure was posted on the competition site, available for download on January 14, 2012. The additional information includes PDF and AutoCad versions of the relevant as-built construction drawings and digital-only versions of orthographic and topographic maps. At such point in time as additional information is posted at the competition site, LAGI will send further email announcements. Registering your team on the competition site will ensure that you will be informed of all updates.

As stated in the design brief, the infrastructure shown on the drawings will remain in place and cannot be changed. Changes to the in-place infrastructure would require extensive engineering, review, and regulatory approval.

Regarding the amount of methane (from the Freshkills Park website) "This methane, enough to heat approximately 22,000 homes, is sold to National Grid and the city generates approximately \$12 million in annual revenue from the sale of that gas. Gas recovery and sale will continue until the amount of gas produced by the landfill is small enough as to no longer be economically viable, at which point it will be burned off at flare stations onsite."

6. Q: Which entity will manage these infrastructures once the project completes - private / federal / state / city? With the project focusing on 100 acres of landfill area, is it also possible to propose adaptations to the waterfront.

A: More information about what entities are managing the site now and in the future (DSNY and NYCDPR) can be obtained at:

**<http://www.nycgovparks.org/park-features/freshkills-park/about-the-site>, and
<http://www.nycgovparks.org/park-features/freshkills-park/about-the-site#healthSafety>.**

From the design guidelines document: "The installation may engage with the water in the area of Main Creek included in the site boundary area, but such engagement must not significantly impact the natural water flow or tidal action." Any proposed adaptations to the waterfront would need to be limited to the area within the project boundary and should be well considered for their environmental impact.

7. Q: I would like to lead a group of competitors for a site visit. I would like to know if the site visits on March 28th and 31st would have special preparation for the competitors (particular routes, specific information, etc.). In other words, will there be a difference if we take one of those visits or go independently by normal bus any other day?

**A: More information about tours of Freshkills Park can be found by visiting:
http://www.nycgovparks.org/park-features/freshkills-park/tours-and-events#public_tours**

Because of safety considerations due to ongoing closure construction, the park is not open to the public outside of a scheduled tour.

The visits that are scheduled for March 28th and March 31st will not provide any special content or guidance related to the 2012 LAGI design competition, but rather they are meant solely to provide access to those participants who desire to visit the site as a part of their design process.

LAGI is grateful to the NYC Department of Parks & Recreation for offering to lead these public tours.

8. Q: I was wondering if there was any GIS data available for the site and, if so, would it be possible for me to obtain it?

A: Unfortunately, we are unable to provide GIS data. As new documents become available, we will post them to the design competition site and send an email announcement regarding their availability. Registering your team on the competition site will ensure that you will be informed of all updates.

End of Q+A posted as of January 18, 2012-----

9. Q: Could you clarify the vertical distance that is covered by each topography line in the drawing?

A: More accurate information is now available as of January 14, 2012.

10. Q: Is there any section of the topographic survey of the site?

A: Teams will need to create their own site sections from the site contours.

11. Q: Is there any required specific list of plans to present, or any number of renders, etc

A: It is up to the design teams to determine the best methods and visual strategies for conveying the information about their design submission.

12. Q: What paper size should we use, and how many papers should we present? Should we send it in PDF? What should be the orientation?

A: Please refer to the submission requirements in the Design Guidelines document.

13. Q: In a small area (an area not over 1000 m²) is it possible to make a foundation with deep piles or caissons?

A: While LAGI acknowledges the engineering feasibility of landfill cap modification for deep foundations and that there exist precedents for this, it is requested that foundations remain above the landfill cap and do not penetrate it. Modifications to the landfill cap system would require extensive engineering, review, and regulatory approval.

14. Q: I am an employee of one of the jurors, and would like to know if I am eligible to submit for the Land Art Generator competition.

A: Direct employees of Competition jurors are not eligible to submit.

15. Q: Is there information available as to the water quality of Main Creek?

A: Some information related to storm water and measures to safeguard water quality can be found in the Freshkills Park GEIS and FGEIS documents:

http://www.nycgovparks.org/sub_your_park/fresh_kills_park/pdf/References_StormwaterManagementPlan.pdf

http://www.nycgovparks.org/sub_your_park/fresh_kills_park/pdf/FGEIS/Vol1/12_Waterfront.pdf

http://www.nycgovparks.org/sub_your_park/fresh_kills_park/pdf/FGEIS/Vol1/10_Natural_Resources.pdf

The water in Main Creek is non-potable.

16. Q: How much energy should we produce?

A: That is up to you to decide.

17. Q: I am interested in taking a closer look at the twelve month shading analysis diagrams by Columbia University and presented in the Freshkills-SolarResources.pdf. Is there are high resolution PDF or CAD drawing available that represents this study?

A: LAGI does not have access to higher resolution data.

End of Q+A posted as of January 20, 2012-----

18. Q: Can the artwork be located on the water? If yes, what are the requirements?

A: Yes, as long as the artwork remains within the project boundaries (there is a small area of the project site that crosses over Main Creek). The requirements are the same as for artwork located on land. We would like to stress that submissions should be respectful of the natural ecosystem and the safe use of the park. The water of Main Creek is used recreationally for kayaking and is home to birds, tortoises, fish and other wildlife.

Additional response from New York City Department of Sanitation:

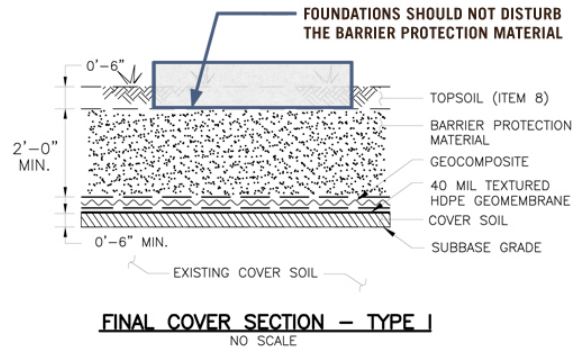
There are also New York State regulations that will need to be factored in with respect to Tidal wetlands, Freshwater wetlands, stormwater basins and stormwater discharges to the creeks. This link will direct participating design teams to the NYSDEC (Division of Water) website:

<http://www.dec.ny.gov/regs/2485.html>, and help establish the parameters to consider.

19. Q: In the diagram "Landfill Cap Generic Representation," which layers are allowed to be penetrated?

A: The only layer that should be penetrated is the 6" topsoil layer.

These conditions are similar to those found in engineered landfills around the world. The opportunity exists with this Freshkills Park design competition to present innovative solutions that will work within these common constraints for application in aesthetic and permanent renewable energy installations on reclaimed landfill sites.



Additional response from New York City Department of Sanitation:

The barrier protection layer is the most critical layer of the final cover system, in that it creates a barrier that protects the geomembrane and other infrastructure below from elements that could harm and undermine the functioning of the final cover system. Among other functions, it protects the pipes from exposure, promotes positive drainage, and prevents burrowing animals from gnawing at the geomembrane and other materials that comprise the system, or from building underground homes that would interfere with the operation of the environmental systems (leachate, landfill gas) that are integrated into the layers of final cover (it is described in the article by McDonald et al as the 'reclamation layer' [<http://landartgenerator.org/designcomp/downloads/PDF/LandfillCappingSystems-BasicEngineering.pdf>]).

Therefore, the barrier protection layer cannot be excavated and replaced, nor should the footings penetrate it. Deeper penetration for the footings will have to be achieved by overlaying the top soil layer with additional soil, as long as the loading is safe [refer to Q #20 below].

Footings are typically placed below the frost barrier. However, there are two points to note about landfills in general, and Section 6/7-East Park – in particular. They are: (1) landfill soils have thermal subsidy, that is, higher than normal temperatures of 140F (60C) or higher; and (2) Section 6/7 has excellent draining material, which means that the soils have the best chance to drain before the water can freeze (and all the more reason to leave the barrier protection layer as is).

20. Q: Is it possible to add fill where it is required in order to maintain proper soil coverage of footings?

A: Yes. Re-graded areas (those with additional fill) should not exceed 40% grade (1:2.5 ratio) and the grading design should always address the need to maintain positive drainage. Please refer to the following documents available in the "supplemental downloads" section:

<http://landartgenerator.org/designcomp/downloads/PDF/SolarOnClosedLandfills-Gabriel Sampson-UCSantaBarbara.pdf>

<http://landartgenerator.org/designcomp/downloads/PDF/LandfillCappingSystems-BasicEngineering.pdf>

Please note: While it is important to make proper considerations of substructure conditions and requirements, it is far more important to focus on the above-grade design proposal. Because LAGI 2012

is intended to serve as an ideas competition for innovative and aesthetic concept designs, considerations of foundation engineering requirements should not unnecessarily hinder the presentation of unique design solutions. At the same time, design solutions that would require extremely expensive foundations may not be considered to be the most pragmatic.

21. Q: What is the recommended load bearing capacity of the landfill?

A: Specific geotechnical data is not available. The landfill has been well engineered to minimize settlement. However it is inevitable that some settlement, both total and differential, will continue to occur over time as the contents of the landfill continue to decompose.

Additional response from New York City Department of Sanitation:

Based on previous alternative energy studies at Fresh Kills (focusing on the feasibility of installing wind turbines or solar panels), DSNY has determined that a safe bearing capacity should not exceed 500 PSF [2,440 Kg/m²] on top of the cover (not on the membrane). The location and bearing capacity should also avoid placing any stress on the gas pipes.

Please refer to the following documents available in the "supplemental downloads" section:

<http://landartgenerator.org/designcomp/downloads/PDF/SolarOnClosedLandfills-Gabriel Sampson-UCSantaBarbara.pdf>

<http://landartgenerator.org/designcomp/downloads/PDF/LandfillCappingSystems-BasicEngineering.pdf>

22. Q: Is it necessary to create a team so as to participate in the LAGI design competition? Is it possible for an individual to take part as a single candidate?

A: Individuals may take part in the LAGI design competition as single candidates. The recommendation to gather an interdisciplinary team is a suggestion only, not a requirement. The jury process is entirely anonymous with jurors having no access to information regarding the size and makeup of the team. Therefore, the number of persons on the team will have no bearing at all on evaluation of the submissions.

23. Q: Looking (for example) at the DWG file "XR-2001topo34", is 2 feet the vertical distance that is covered by each topography line in the drawing?

A: Yes. Please refer to 2012_01_DSNY.pdf for reference (a PDF set of the 2012_01_DSNY.dwg files). There you will find the contours annotated with elevation information. Many of the DWG files are designed to be used as XREFs and therefore may contain partial information.

End of Q+A posted as of January 27, 2012-----

24. Q: We have heard that there is a rest area for Freshkills Park on Rt. 440. Is this true?

A: There is not a rest area on Rt. 440 that coincides with views of Freshkills Park. There are two videos available on youtube that are simple windshield recordings of the drive along Westside Highway (Rt. 440). In these videos, you will catch glimpses of the Northpark area of Freshkills Park as seen from the highway:

<http://www.youtube.com/watch?v=LlkAZ9zXPqo> (southbound, see minute 2:25)

<http://www.youtube.com/watch?v=0lqH79gpNeg> (northbound, see minute 4:10)

25. Q: What is the soil composition and bearing capacity outside the solid waste boundary and at what distance is it to solid rock?

A: There are limited areas in which the 2012 plot boundary extends beyond the landfill cap leachate liner (SWMU boundary). We have created a new drawing that is available for download at <http://landartgenerator.org/designcomp/> in the Supplemental Downloads section under the names "BoundaryLimitOverlay.pdf" and "BoundaryLimitOverlay.dwg":

<http://landartgenerator.org/designcomp/downloads/CAD/BoundaryLimitOverlay.dwg>

<http://landartgenerator.org/designcomp/downloads/CAD/BoundaryLimitOverlay.pdf>

In this new drawing you will see these limited areas with a cross hatch. Care should be given in these areas to respect the Right of Ways of existing and planned roads. Because there is no landfill cap in these areas, the restrictions discussed in Question #19 do not apply.

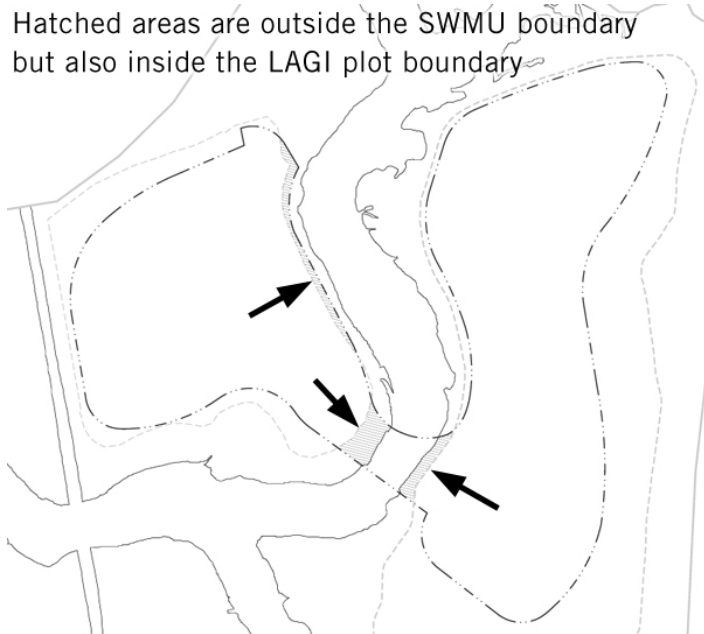
However, please note the following as received from NYC Department of Sanitation:

You need to not only be aware of the SWMU boundary, but also any leachate/monitoring wells/etc. in these areas. For example, looking at the drawings provided, Basin E is in this area of 3/4 as are the leachate collection drain, force main, and groundwater monitoring wells.

Also, once you go outside (or "outboard") of the leachate collection drain, you will have to deal with tidal wetland and adjacent area permits and, probably, constructability issues.

Specific geotechnical data and distance to bedrock is not available at this time.

Hatched areas are outside the SWMU boundary but also inside the LAGI plot boundary



This image is available as a DWG and PDF at the LAGI competition site.

26. Q: What is the source of water around Freshkills Park?

A: Please refer to the following files for more information about the water in Main Creek:

http://www.nycgovparks.org/sub_your_park/fresh_kills_park/pdf/References_StormwaterManagementPlan.pdf

http://www.nycgovparks.org/sub_your_park/fresh_kills_park/pdf/FGEIS/Vol1/12_Waterfront.pdf

http://www.nycgovparks.org/sub_your_park/fresh_kills_park/pdf/FGEIS/Vol1/10_Natural_Resources.pdf

27. Q: Is there any restriction from New York City regarding urbanism or architecture?

A: Please refer to <http://www2.iccsafe.org/states/newyorkcity/Building/Building-Frameset.html> for information about the New York City building code.

28. Q: We were wondering if we are going to be provided with a CAD site boundary line for the competition. We can see that one has been drawn in the brief documents, but are unable to see it in the layers in the CAD files?

A: There are two CAD files in the 'downloads' section. The most recent CAD file is from NYC Department of Sanitation and provides detailed information about the as-built conditions of the landfill infrastructure. This file does not contain site boundary information.

However, the other CAD file (<http://landartgenerator.org/designcomp/downloads/CAD/LAGI2012-CAD-FreshkillsPark.dwg>) is a more general overview of the site with embedded satellite and USGS maps. In this file you will find the site boundary layer ("LAGI_Plot Limits").

29. Q: I have been studying the Freshkills Park site on Google Earth and I have a couple of questions. Is there a reason why the gas release valve caps are only visible on the future site of East Park and not in North Park? What is the logic behind the seemingly irregular placement of these caps? Where could I obtain more information about the engineered systems located below grade on the site?

A: The answers to many of your questions can be found by downloading the as-built CAD and/or PDF document that has been provided by the New York City Department of Sanitation:

http://landartgenerator.org/designcomp/downloads/CAD/2012_01_DSNY.zip
(DWG files)

http://landartgenerator.org/designcomp/downloads/PDF/2012_01_DSNY.pdf
(printed version of the same set of drawings)

The reason that the valve positions are not as visible in North Park via Google Earth is likely because the amount of vegetation that has taken root there camouflages them somewhat at that resolution.

End of Q+A posted as of February 28, 2012-----

30. Q: Can we submit physical models with our official submission?

A: Physical models will not be accepted as a part of your official submission. However, we encourage you to work with physical models as a part of your process if you are accustomed to doing so. Photographs of physical models can be incorporated into the layout of your PDF boards (which are to be submitted electronically per the instructions in the design brief), in which case the photographic representations of the model will be accepted as a part of the official submission.

31. Q: Can we use plant material for our pieces?

A: Yes. If plant material is incorporated into the piece, we encourage considerations related to species suitability and maintenance requirements.

32. Q: Do I need to register for the competition now, or when I upload my submission?

A: By registering now, you will be informed by email of all updates as they occur. Only registered participants can access the upload section of the website. Please refer to the design guidelines document for complete submission requirements and procedures.

33. Q: Do I include my environmental impact assessment as a part of the written description file, or is it separate?

A: Your EIA (same as EIS for the purposes of this competition; "statement" and "assessment" can be used interchangeably) should be included as a part of your 1500 word DOC file written description. You can only submit one DOC file. Also, please refer to the statement within the design guidelines: *"Please note that LAGI 2012 does not require a lengthy EIS, but rather only asks for a paragraph that explains the design team's approach at a conceptual design level."*

34. Q: How polluted is the water?

A: We don't have access to detailed specifications regarding current levels of contaminants in the water. Main Creek, Richmond Creek, and Fresh Kills are all used for recreational purposes such as kayaking and canoeing.

Additional information related to water and measures to safeguard water quality can be found in the Freshkills Park GEIS and FGEIS documents (<http://www.nycgovparks.org/park-features/freshkills-park/public-review#geis>):

http://www.nycgovparks.org/sub_your_park/fresh_kills_park/pdf/VOLUME%2011_Hazmat.pdf

http://www.nycgovparks.org/sub_your_park/fresh_kills_park/pdf/References_StormwaterManagementPlan.pdf

http://www.nycgovparks.org/sub_your_park/fresh_kills_park/pdf/FGEIS/Vol1/12_Waterfront.pdf

http://www.nycgovparks.org/sub_your_park/fresh_kills_park/pdf/FGEIS/Vol1/10_Natural_Resources.pdf

There is additional information in the section on geology and topography in the "About Fresh Kills" document in the supplemental downloads section of the LAGI competition site:

<http://landartgenerator.org/designcomp/downloads/PDF/2001-AboutFreshkills.pdf>

Some more information can be found at the following links:

http://library.fws.gov/pubs5/web_link/text/akc_form.htm
http://www.fws.gov/wetlands/_documents/gOther/WetlandsStatenIsland.pdf

See also the 1994 book "Before & After and Oil Spill: The Arthur Kill" by Joanna Burger (ISBN 978-0813520957, link: <http://amzn.to/GUvWsk>). It has some more information about the ecology of the salt water marshes of Staten Island.

35. Q: How long will it take until it is clean again?

A: We can't provide a definitive answer on this.

36. Q: How deep and wide are the Kills?

A: For width information, please refer to the reference drawings at the competition website. Depths vary between areas and are influenced by tides. The water within the area of the site boundary is not very deep—probably no more than 10 feet depth.

37. Q: There seems to be a problem with the graphic scale in the "LAGI2012-CAD-FreshkillsPark.dwg" file.

A: The scale of the actual drawing has always been correct. The graphic scale in the CAD file on the layer "LAGI_Scale" was inaccurately sized. This has been corrected as of March 24, 2012. Additionally, a packaged ZIP file is now available that contains raster images as references, including a USGS map with a second graphic scale.

End of Q+A posted as of March 24, 2012-----

38. Q: What is the average flow rate for the water system? How much does it fluctuate with tidal flow/ stormwater runoff?

A: We do not have access to that data. The most comprehensive overview of existing site conditions related to water can be found in the Freshkills Park GEIS and FGEIS documents. A full index of GEIS and FGEIS documents can be found at: <http://www.nycgovparks.org/park-features/freshkills-park/public-review#geis>

39. Q: Is it true that an additional two feet of residential soil can be add on the North ¾ Section, making it possible for manhole to cover the LFG duct vent and extraction?

A: Yes. Please refer to Question #20 for additional information regarding adding fill to the site. Also see the section diagram (on page 9 of the design guidelines document and in more detail on sheet 34-6 of 2012_01_DSNY.pdf , "LFG Extraction Wellhead Detail") for the intended relationship of manhole covers to landfill infrastructure that they provide access to.

40. Q: Do we only have until April 15th to register, or is that deadline only for the Q&A?

A: April 15 is only the deadline for Q+A. Registration may continue up through the submission deadline (July 1, 2012). By registering now, you will be made aware of any updates by email. It is encouraged that just one member of each participating team be selected to register (multiple registrations from one team are not necessary). You will need to be logged into your account in order to access the upload section of the design competition site.

41. Q: In the cad drawing provided, it is 5m contours or 1 m contours?

A: Please refer to the drawings within this set:

http://landartgenerator.org/designcomp/downloads/CAD/2012_01_DSNY.zip.

The same file is in PDF format at: http://landartgenerator.org/designcomp/downloads/CAD/2012_01_DSNY.pdf.

In this set of drawings, provided by the New York City Department of Sanitation, contours are expressed in feet, and there are 2 feet separating each topographic line.

42. Q: Please explain the "Windrose" diagram in relation to our site. Does the "gust of wind" blow from the south towards the northwest? What is the highest and lowest wind force (at the existing North and East Mounds)?

A: The wind rose shows the frequency of winds blowing from particular directions (percent of time that wind is blowing from that cardinal direction). The length of each "spoke" around the circle is related to the frequency that the wind blows from a particular direction per unit time. Each "spoke" is broken down into segments. The size of each segment is proportional to the frequency of each wind speed class coming from that direction. The "spoke" that exists outside of the rose as a key shows the frequency of each wind speed class for the entire location (non-directional speed measurement).

The chart that is shown at <http://landartgenerator.org/designcomp/downloads/PDF/FreshkillsWindRose.pdf> makes it clear that wind blows most frequently from the northwest (wind is blowing from this direction 13% of the time). The speed of that northwesterly wind is measured at between 12.1 and 19.0 miles per hour about 20% of the time it blows from this direction, between 7.5 and 12.1 miles per hour about 40% of the time it blows from this direction, between 4.0 and 7.5 miles per hour about 25% of the time it blows from this direction, is below 4.0 miles per hour about 12% of the time it blows from this direction, and gusts over 19.0 miles per hour about 3% of the time it blows from this direction. These speed percentages are "guesstimated" from the relative sizes of the bands within the "spoke".

For more information about wind at Freshkills Park, please see:

<http://landartgenerator.org/designcomp/downloads/PDF/Freshkills-WindResources.pdf>

43. Q: Do you have a shadow study on the existing mounds?

A: Yes. For more information about solar at Freshkills Park, please see:

<http://landartgenerator.org/designcomp/downloads/PDF/Freshkills-SolarResources.pdf>

44. Q: What is the heat gain like at the mounds during the summer? Does the landfill hold more heat than a typical soil mound?

A: The landfill actually generates its own heat as a process of the decomposition of the landfill material. Please refer to Question #19, which gives information about the “thermal subsidy” of the landfill. It is not known whether the effect of the sun on the heat gain of the soil or the ability of the soil to hold heat is any different than that of non-landfill sites.

45. Q: Do you have a diagram/section of the types of garbage that were buried to speculate the subtle differences in the settlements of the existing mound? Is the garbage "stacked" in layers, or is it all jumbled and mixed up? If there's a timeline of the garbage burial, please provide.

A: We do not have a diagram/section of the types of garbage buried and we cannot speculate on the differential settlement. DSNY has employed best engineering practices to limit differential settlement. We do not have a timeline of garbage burial and cannot comment on whether it is “stacked” or “jumbled.”

46. Q: On the 'boundarylimitoverlay', the hatched area continues along the west edge of the river as a thin patch that becomes disconnected where the existing bridge is currently located. Is that patch usable for the 'piece of artwork' we design or are we only supposed to occupy the site where one crosses over the water?

A: More information about the “BoundaryLimitOverlay.pdf” can be found in Question #25. Your artwork can exist anywhere within the plot boundary (dash, double-dot, dash line), including those areas that are hatched. So the answer to your question is: yes, the hatched area is usable for the piece of artwork you design. Also usable are the other two hatched areas and the area of water that lies within the plot boundary. Also useable is any area within the plot boundary that is not hatched.

The only reason to note these hatched areas is to make participants aware that there are some limited areas where the landfill cap infrastructure does not exist. In other words, the limitations to foundations that are presented by the cap do not apply in these hatched areas. Other restrictions may come into effect in the hatched areas, such as planned roads, and other landfill monitoring infrastructure.

Refer to the drawings provided by DSNY (http://landartgenerator.org/designcomp/downloads/CAD/2012_01_DSNY.zip) for more information about what exists in these areas.

47. Q: What are the maximum, minimum and average tidal water heights? Is it possible to get a tidal scheme of the creek, with water heights and time / day information?

A: We do not have access to this information. The most comprehensive overview of existing site conditions related to water can be found in the Freshkills Park GEIS and FGEIS documents. A full index of GEIS and FGEIS documents can be found at: <http://www.nycgovparks.org/park-features/freshkills-park/public-review#geis>

48. Q: Is there an updated version available of the field guide to renewable energy? In the one which I have downloaded from the competition website there was a note at the end of the 'about this guide' section: "this is a first edition..."

A: As of April 2012, there has only been one edition released of *A Field Guide to Renewable Energy Technologies*. We plan to release an expanded second edition in early 2013.

End of Q+A posted as of April 15, 2012-----

49. Q: Is the landfill "sealed" - i.e. is it possible for contaminants to enter groundwater or soils from any part of the landfill?

A: The landfill is sealed. For more information about the engineering and about soil standards, please see the following link: <http://www.nycgovparks.org/park-features/freshkills-park/about-the-site#landfill>

50. Q: Are the maintenance vehicles fueled using the methane generated on site?

A: Use in motor vehicles would require a Landfill Gas (LFG) to Liquefied Natural Gas (LNG) plant, which does not presently exist on the site.

From the Freshkills Park website:

"The Department of Sanitation collects approximately 10 million cubic feet of landfill gas (LFG) daily. This gas is purified at an onsite facility, and approximately 5 million cubic feet of pipeline-quality gas is sold daily to the local gas utility, National Grid. National Grid, in turn, distributes the gas to Staten Island residential and commercial customers, at a quantity capable of heating approximately 20,000 homes."

51. Q: Is there more specific parameters available regarding the stability of the landfill surface in terms of how much potential movement of the terrain may take place over time from settlement...apart from a standard landfill estimation of 10 to 15% over 20 years?

A: Specific information is not available and would be variable across the site. Keep in mind that the areas in the site boundary have been settling already for the better part of two decades and the capping has been completed. Most of the settlement has therefore already taken place.

From "LandfillCappingSystems-BasicEngineering.pdf" (available as a supplemental download at the LAGI competition website):

"The stage at which a capping system is applied, relative to the state of degradation and consolidation of the waste, is critical. To provide a stable sub-grade, biological activity should have subsided to a point where the waste body exhibits a predictable and limited settlement behavior. [...] For long-term stability, residual settlement after installation of the capping must not be such as to exceed allowable strains in its sealer materials."

52. Q: Is the construction cost of the design an important consideration?

A: When making design decisions, please refer to the judging criteria (below). These are the only considerations that will be made by the jury.

- Adherence to the Design Brief and Submission Requirements
- The integration of the work into the surrounding environment, landscape, and the approved Draft Master Plan for Freshkills Park
- The sensitivity of the work to the environment, to local and regional ecosystems, and to the integrity of the landfill cap and underground infrastructure
- The estimated amount of clean energy that can be produced by the work
- The way in which the work engages the public
- The embodied energy required to construct the work (this criterion relates also to the pragmatism of the proposal and to its return on construction investment period)
- The originality and social relevance of the concept

Embodied energy is related to constructability.

53. Q: How will competition entry boards be viewed by the jurors? Will the boards be printed or digitally projected? Will they be viewed as a group, or as a series of individual boards? Will they be arranged as a horizontal strip, a vertical bar, or in a 2 x 2 rectangle?

A: Competition entries will be viewed by jurors digitally on individual screens. In the initial viewing, the boards (layout pages) will be seen in a vertical bar (width = 1000px, with vertical scroll bar), with the boards in sequential order from top to bottom and the written description in full at the bottom. Jurors will have the ability to view each board full-screen and to easily zoom and pan within it. There will also be a thumbnail index of entries within which each submission will be represented by a 200px wide image of board #1.

Should the boards be printed at A1 size for any reason, including the potential of a gallery exhibit of selected works, the boards would be horizontally positioned in relation to one another, and the project description would be reformatted and printed on an accompanying placard along with artist credits.

PLEASE NOTE: All boards MUST be submitted in LANDSCAPE orientation. Any reference to “vertical” in the preceding paragraphs relates only to the position of the boards in relation to the other boards.

54. Q: To what extent must our submission address the boundary between public space and restricted space? Is this just at the flare stations, or at the perimeter of the competition boundary as well?

A: As per the design brief, “the submission must be safe to on-site viewers. Consideration must be made for viewing areas as well as boundaries between public and restricted areas.” Restricted areas should be considered as any area that could present a danger to the safety of the public.

Included in this definition are the two flare stations that are within the site boundary, as well as any electrical transformer equipment and high voltage transmission lines that are a part of your design concept.

The perimeter of the competition boundary is not included in this definition. You should assume that your design will fit within the Draft Master Plan of the park ("2006-FreshkillsDraftMasterPlan.pdf") and that the Draft Master Plan has made all necessary considerations for control of the perimeter of the park. The LAGI 2012 design competition boundary is not in any way a physical boundary, but rather is meant to provide a constraint on where your proposed design can be placed.

55. Q: To what extent must our submission address the enclosure of transformers for converting energy to electricity and connection to the grid? Are we expected to design the outer shell of these structures, foundation, etc. or just cladding of the facade?

A: Equipment required for electrical conversion and transmission of the electricity that your design generates and the structures that house the same should be considered as an integral part of your design concept.

56. Q: Will submissions that break the impermeable membrane still be considered by the jury? Would it be possible for us to propose a solution for resealing the waterproof cap after penetration and still be considered a viable entry?

A: Submissions will be reviewed on their merit based on the judging criteria listed in question #52. Each criterion there listed has equal weight. Please also refer to question #19 for more information on the landfill cap.

57. Q: Is agriculture possible on the site?

A: Yes.

58. Q: Is there additional information available with regards to the leachate treatment plant, system and its operations?

A: No. We do not have access to that additional information.

59. Q: Is the Fresh Kills Landfill Post-Closure Monitoring and Maintenance Operations Manual available?

A: No. We do not have access to that manual.

60. Q: Would it be possible to receive additional information of site surrounding sewage system?

A: No. We do not have access to that information.

61. Q: Is there information available on the current waste management system of New York?

A: You would have to contact DSNY directly for this information.

End of Q+A posted as of April 18, 2012-----

Period for questions is now closed. Thank you.

The Land Art Generator Initiative 2012 Design Competition for Freshkills Park, NYC.

For more information, please go to <http://landartgenerator.org/designcomp>